THE PROBLEM OF INTERNATIONAL VALUES:
MAINLY FROM A HUNGARIAN AND
JAPANESE PERSPECTIVE

GABOR BAKOS

Abstract

The international valuation of national labor was, and is, always a central problem for less developed countries: can they also gain from trade with the developed countries in making use of current comparative advantages or must they first increase their productivity to prevent being exploited? Following the Second World War, both Eastern Europe and Japan were forced to recover and catch up with the developed Western nations but each adopted a different stand regarding comparative advantages. However, theoretical foundation based on the labor value theory is not sufficient to explain why less developed countries can only emerge as losers in international exchange. On the other hand, the developed countries can easily acquire foreign markets and gain from trade, due to high productivity and labor skills. The theory of international values also has actual relevance in explaining why the price level of the developed countries is higher, and is determining the real value of the exchange rate.

Introduction

Marx’s comments on international values and unequal exchange are interesting not only because they gave rise to various theoretical understandings and discussions, but also because of their practical implications for the less developed countries. After World War II both Eastern Europe and Japan faced the challenge of recovering and catching up with the developed, industrialized West. It is worth noting how differently the same theoretical points were treated in these two parts of the world.

In Eastern European countries during their socialist period Marx’s comments were used to prevent the development of a market economy. Marx, so runs the general understanding, had pointed out the main weakness of Ricardo’s theory by stressing that the more advanced country exploits the less developed one and the gap between them widens. Hence, free trade and a market economy should not be allowed. In order to help backward countries catch up, central planning, strong industrialization and preferential prices were needed. Capitalist market prices were not acceptable, so the enormous task of creating “the socialist own price base” was started.

In Japan the discussion on international values tried to provide a theoretical analysis for Japan’s relatively low wages and productivity and to suggest a course for the dynamic
increase in the productivity of key industries. This conclusion was then widely used in economic policy making. Unlike Eastern Europe, the market economy in Japan was not questioned, although in attaining “dynamic comparative advantages” strong governmental guidance and trade measures were applied, which were similar to those adopted in Eastern Europe.¹

In the history of economic thought the understanding of comparative advantages as gains in terms of labor has faded and lost importance since Ricardo. Later authors, following Mill’s idea, investigated the impact of supply and demand, and in neoclassical theories we would search in vain for international implications of labor value.² Western textbooks on the theory of international trade make no mention of Marx. Marx, when making his plan for a detailed analysis of capitalist production, intended to include foreign trade as well,³ but in his main work, the Capital he neglected it for the reason that foreign trade, although an organic part of capitalist production, would complicate the analysis if included. As he never again returned to the subject of a systematic analysis of foreign trade, his remarks remained fragmentary, but they represent a coherent idea.

In this assessment we shall proceed by discussing the main problems which are as follows:

—A commodity is usually exported because its foreign price is higher than on the domestic market. That is, the national labor has a higher international value. Here, the value of national labor as a whole is determined, including general productivity, intensity, and secondly, the labor embodied in one single commodity should be distinguished.

—As trade continues, the higher valuation of labor in the relatively more productive nation begins to affect domestic prices as well, so the price level will be higher than in other countries. Especially, in the case where countries obtain bullion for currency purposes from a third, gold producing country, the more productive country will acquire more gold for the same expenditure of labor time, so the relative value of money will be lower and the general price level be higher. Here a problem arises: if domestic prices become higher, how can it be profitable for the producer to export? Stated another way, how do we explain this higher price level in the developed country?

—When a developed country exchanges 1 day of labor against 3 days in the less developed country, is this really an unequal exchange?

¹ I would like to thank Prof. Kiriro Morita, Tokyo University, who drew my attention to the discussion in Japan, and Prof. Yoshiaki Nishimura, The Institute of Economic Research, Hitotsubashi University who helped me in understanding the Japanese texts and provided the conditions for research. In this text, of course, all the errors are mine.

² For instance, G. Haberler in his book devotes a whole chapter to expel the labor value approach (“Eliminierung der Arbeitswertlehre”). His main argument is that it is technically impossible to bring the manifold production means to one common denominator, that is to express them in elementary unskilled labour. He maintains that the exchange ratio in labor costs is the same as in opportunity costs: “Das Austauschverhältnis auf dem Markte ist gleich dem Verhältnis der Grenzkosten” and hence he concludes: “Nun leuchtet es von selbst ein, dass wir der Arbeitswertlehre gar nicht mehr bedürfen.” G. Haberler: Der internationale Handel (reprint, Springer-Verlag, Berlin-Heidelberg-New York 1970, p. 133.

In regard to these issues there is ample discussion in the literature, including the problem of whether national labor expenditures really form an average on the world market or are exchanged only between the two trading countries involved, and also the debate on unequal exchange. In the following, however, we shall focus on understanding Marx’s conception, using mainly contributions from Hungarian and Japanese published works.

I. *The International Valuation of National Labor*

Most difficulties in understanding Marx’s remarks on foreign trade arise from Chapter 20 (“National Differences of Wages”) of the first volume of the *Capital*, which is due mainly to the very concise character of the text. In this text Marx states that internationally the law of value will be modified for two reasons, compared to the way it functions within a given country:

a) within one country the value of a commodity does not include the labor below the general intensity (the difference between the mean labor intensity and the lower labor intensity), or the labor over the nationally necessary labor time, but is included in determining international values: “In every country there is a certain average intensity of labor, below which the labour for the production of a commodity requires more than the socially necessary time, and therefore does not reckon as labour of normal quality. Only a degree of intensity above the national average affects, in a given country, the measure of value by the mere duration of the working-time. This is not the case on the universal market, whose integral parts are the individual countries. The average intensity of labour changes from country to country; here it is greater, there less. These national averages form a scale, whose unit of measure is the average unit of universal labour. The more intense national labour, therefore, as compared with the less intense, produces in the same time more value, which expresses itself in more money.”

b) within one country the value of a commodity is determined by the labor expended under general conditions, and by average productivity, so that when labor productivity increases the value of the commodity decreases. But, in forming the international value of a commodity the labor productivities of all the countries present in the market participate, and further, internationally the relation between value and labor productivity is reversed, because on the world market national labor will carry a higher value in proportion to its productivity:

“But the law of value in its international application is yet more modified by this, that on the world-market the more productive national labour reckons also as the more intense, so long as the more productive nation is not compelled by competition to lower the selling price of its commodities to the level of their value.

---

4 *Capital I.*, Foreign Languages Publishing House, Moscow 1959, pp. 559–560. In G. Kohlmey’s understanding this would mean that “the magnitude of the international value . . . is being formed as a weighed average of all the potential national intensity-grades” (G. Kohlmey: Karl Marx’ Theorie von den internationalen Werten, Probleme der Politischen Ökonomie, Berlin 1962, p. 44).
In proportion as capitalist production is developed in a country, in the same proportion do the national intensity and productivity of labour there rise above the international level. The different quantities of commodities of the same kind, produced in different countries in the same working-time, have, therefore, unequal international values, which are expressed in different prices, i.e., in sums of money varying according to international values.\textsuperscript{5}

From these two modifications of the law of value on international markets G. Kohlmey comes to the conclusion that countries with different levels of labor productivity and intensity exchange through the world market national values of different magnitudes. At the end of his example he concludes, that

\textquote{... the more productive national economy enjoys an advantage over the less productive one. In our case it gives 30 hours in exchange for 50 hours. ... in the exchange at international values the more productive (richer) country possesses an absolute advantage over the less productive (the poorer) country.}\textsuperscript{6}

Here, actually, the absolute advantage relates to another remark of Marx stating that the advanced country exploits the less developed one even if the latter gains in comparative advantages.

Looking at the text containing these quotations in the Capital, it becomes obvious that Marx’s main point was above all the international valuation of national labor (and in connection with this the national levels of prices and wages), and not directly the international value of a given commodity. The last sentence especially deserves special attention: “The different quantities of commodities of the same kind, produced in different countries in the same working-time, have, therefore, unequal international values, which are expressed in different prices, i.e., in sums of money varying according to international values.”

Let us look at the possible meaning of this sentence.

a) Valuation of One Commodity

The sentence might be understood as pointing to the difference between the domestic price and foreign market price of the same commodity. Thus, the sentence might be an explanation for the magnitude of price gain on a single commodity. It is in this sense that the sentence is perceived by P. Erdős, and related to different prices of the same commodity, while he deems the main problem would be to determine where the commodity will be priced higher, in the domestic country or abroad.\textsuperscript{7}

But, in the sentence under discussion the relative pronoun “which” is clearly related not to a single commodity, but to a quantity of commodities of the same kind, and these dif-

\textsuperscript{5} Capital I, p. 560.
\textsuperscript{6} G. Kohlmey op. cit., pp. 45-46.
\textsuperscript{7} P. Erdős: Gondolatok a nemzeti árszintekről, klasszikus szövegek nyomán (Thoughts on national price levels, when reading classical texts), Közgazdasági Szemle 1978, p. 1436.

The question of how to relate this is answered by Marx: “in a country ... the national intensity and productivity of labour rise above the international level,” therefore “on the world market the more productive national labour reckons also as the more intensive,” that is on the world market the commodity will be priced higher.
different quantities of commodities have "unequal international values, which are expressed in different prices." "Prices" here means a price sum (quantity multiplied by piece price), a sum of money, which implies that national labor of the same duration in the two countries with different rates of productivity will produce different quantities of outputs, and these different quantities will have different price sums.

Price sums might be understood if not only the quantities produced but also the prices (piece price) be included as variables, so the dynamics of price sums (quantity times piece price) would not necessarily follow the differences in productivity of national labor, contradicting thereby the main idea of Marx, which is to grasp the differences in the productivity of national labor.

From the price sum, of course, one could calculate the piece price. The price sum would be proportionate to productivity even if we assume the same piece price for different rates of productivity, and also a higher piece price for the commodity produced by the more productive labor force.

b) The Volume of Price Gain

It might be also supposed that the text is telling us about the volume of price gain, that is the difference between the domestic and foreign prices of the same commodity, multiplied by the quantity produced during the unit of working-time.

It is in this way that the text is understood by S. Ausch: "Marx modified Ricardo's theorem by proving that the international value of the mass of goods produced in an advanced country with greater intensity and productivity of labour was greater than its national value, whereas in a less developed country it is the other way around." His conclusion, though with different reasoning, is identical with Kohlmeys exploitation-understanding (absolute advantage): "The less advanced country will thus always have to sacrifice a greater amount of its national labour-time in exchange for a smaller amount of the labour-time of its advanced partner, as long as it transacts foreign trade on the grounds of its existing production pattern and the set of comparative advantages stemming from it. The situation may be changed only by modifying the structure of national production, by gradually increasing the intensity of national labour and by systematically approaching the world level in national efficiency, which is a requirement often neglected." (Ausch ibid., italics in original)

Marx's text here is not dealing with the international exchange of different kinds of commodities, therefore the restructuring of production pattern, etc. ought not to be related to here. Marx compares national labors of different intensity and productivity in the production of one specific commodity.

It should be added, for the sake of fairness, that in spite of his ambiguous understanding, Ausch was positive about the application of the comparative costs principle, that is using real market prices in socialist international cooperation (op. cit., p. 76).

In the following, within the concept of the price sum we shall, first, take the price of one commodity to be constant (same) and shall thus understand how national labors of the same length are valued internationally. Secondly, we shall examine the international

---

valuation of national labor embodied in one commodity. Finally, we shall attempt to provide a complex understanding (taking different piece prices within the price sum).

The main idea of Marx is to compare the average productivity and intensity of different national labors, and therefore, even if the text is open to different interpretations, the different quantities of the same commodity are here stressed (and not the price gain on one commodity). The proof for this is that the text quoted refers to international values by which Marx meant the international valuation of national labors of different intensity and productivity, not one international value.

How, then, can we come to understand the different international valuation of national labors of the same length (e.g. 1 hour) according to their different productivity and intensity? It simply means that if the more productive country produces two units of cloth in one hour, while the less productive produces only one unit per hour, and if one unit of cloth is priced at £5, then the one hour’s labor of the more productive country will be expressed internationally in monetary terms (sum of money) as being worth twice that of the less productive country, that is £10 (£5 x 2).

In this comparison it is true, of course, that the law of value is internationally modified, because the labor productivities and intensities of the two countries will not reach an average, but will “change from country to country” and “form a scale.” Further, the advantage of the more productive country (characterized by Kohlme as “absolute,” and by Marx in a thesis on exploitation) holds true. This statement will not change even if the price of one unit of cloth is £6, 7 or even £36. But, surely, Marx is not referring to the world market price of a single commodity, nor how the national labors of nations exporting the same commodity should be valued internationally when determining the price. What Marx clearly states here is, that taking equally long working times as a base, the value of the labor of a country will be higher in proportion to its productivity and intensity over that of another country (or the “international level”).

How is it possible then to deduct from the comparison of national labors which are valued differently the absolute advantage of the advanced country that it gains through exchange? To continue our example, where the price of one unit of cloth is £5, it may be supposed according to Marx’s text that in the more productive country (A) one hour will be valued at £10, because here during one hour 2 units are produced, and since in one unit 1/2 hour’s labor is embodied, the price of one unit will be £5. In the less productive

---

9 This is actually the different market shares of price incomes of different countries on the market for similar commodities.
10 “. . . so long as the more productive nation is not compelled by competition to lower the selling price of its commodities to the level of their value”—“value,” that is: their national value, it might be understood, or rather: the “more productive nation” sells its commodity usually over the price corresponding to its national value, and competition can compel it at the best to sell it at the price corresponding to its national value. Still, in the longer run, as a result of competition between several nations, what will determine the price of a commodity? In our opinion the assumption goes too far by claiming that Marx might have meant by the international value of a commodity the weighed average of the national labors expended.

A similar meaning might be attached to “the average unit of universal labour,” but Marx used this category to compare the average labor intensities of different nations (in the “scale” this is the “grade”) but not to bring them to an average. A considerable step forward would have been if Marx had explained the value base of the price being formed on the world market, that is how he understands “universal labour” in this sense.

11 The question should be asked in such a form, because the advanced country is developing more rapidly even if it has no trade with the less developed one.
country (B) during one hour wine is produced of a value equal to the cloth, which will have a price £5 per unit (since one hour is valued at £5).

<table>
<thead>
<tr>
<th>Country</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>value of 1 hour labor</td>
<td>£10</td>
<td>£5</td>
</tr>
<tr>
<td>price of 1 unit of cloth</td>
<td>£5</td>
<td></td>
</tr>
<tr>
<td>price of 1 unit of wine</td>
<td></td>
<td>£5</td>
</tr>
</tbody>
</table>

Kohlmey states that country A exchanges one of the two units of cloth for one unit of wine, while it consumes the second one at home (or the second one will either not be produced, or something else will be). The second unit of cloth (or something of equivalent value) will represent the absolute advantage. However, it is quite obvious that country A will produce the second unit of cloth (or something else instead) even if it does not engage in trade, the absolute advantage (and the related exploitation) has nothing to do with the exchange. Moreover, if country B also produces cloth instead of wine with an expenditure of labor two times greater than that of country A, country A would not be willing by any means to acquire 1 hour's labor of country B by giving its 1/2 hour's labor unless it could get the cloth less expensively (in price) from B than it would cost at home. From comparing or confronting the average levels of national labor productivities and intensities it is not possible to conclude exploitation by the advanced country or the relevance of comparative advantages. If any similarity with the cloth versus wine example of Ricardo is permitted, then Marx's concept provides us with a clue that such an exchange is generally possible, because labors of the same length between nations with different levels of development are relative and are exchanged in proportion to the level of their productivity and intensity. While Marx provides no hint as to why international trade would be advantageous (neither in terms of labor value, nor in prices), Ricardo claims that trade is advantageous because less labor is needed and because of the price gain, but is unable to prove how labor differences manifest themselves in price differences.

The text in its setting does not aim at proving international exploitation, either. The sequence of thoughts progresses as follows: “The relative value of money will, therefore, be less in the nation with more developed capitalist mode of production than in the nation with less developed. It follows, then, that the nominal wages, the equivalent of labour-power expressed in money, will also be higher in the first nation than in the second; which does not at all prove that this holds also for the real wages, i.e., for the means of subsistence placed at the disposal of the labourer.”
II. The Valuation of National Labor Embodied in One Commodity: the Price Gain

We can get closer to an understanding of these passages through Marx's comments from volume III of *Capital*. Here Marx turns to explain several influences counteracting the tendency of the falling rate of profit. One of them is the higher profit of capital invested in foreign trade, this profit corresponding to the price gain. This section of the text is also important because it explains how the national labor embodied in *one piece* of commodity is valued internationally and, further, what happens to the difference (price gain):

"Capitals invested in foreign trade can yield a higher rate of profit, because, in the first-place, there is competition with commodities produced in other countries with inferior production facilities, so that the more advanced country sells its goods above their value even though cheaper than the competing countries. In so far as the labour of the more advanced country is here realized as labour of a higher specific weight, the rate of profit rises, because labour which has not been paid as being of a higher quality is sold as such... Just as a manufacturer who employs a new invention before it becomes generally used, undersells his competitors and yet sells his commodity above its individual value, that is, realizes the specifically higher productiveness of the labour he employs as surplus-labour. He thus secures a surplus-profit."12

From the text it becomes clear that the world market or the markets of other countries *valuates* the given national labor *higher*. Due to this price gain the rate of profit increases "because labour which has not been paid as being of a higher quality is sold as such," that is, the capitalist does not pay this price gain to his workers as higher wage. This is why a situation arises where "The favoured country recovers more labour in exchange for less labour, although this difference, this excess is pocketed, as in any exchange between labour and capital, by a certain class."13

"recovers more labour in exchange for less labour," that is for less labor paid; "this difference, this excess" means *price gain*, resulting from the fact that the "labour which has not been paid as being a higher quality is sold as such."

This sentence is generally understood to mean that one country (advanced) would get more labor in the exchange from the other country (less developed) and hence a parallel is drawn with the exploitation-thesis ("three days of labor of one country can be exchanged against one of another country"),—for example, G. Kohlmey (op. cit., p. 23).

Rybalkin similarly thinks the sentence means the countries' gain because their monopolies force high export prices upon developing countries while buying from them at depressed prices. (Rybalkin, V.E.: Mezhdunarodny rynok SEV (International market of CMEA), Mysl, Moscow 1978, p. 78.

The quotation from Marx says nothing more than that the labor of the exporting

country embodied in a given commodity is valued at a price higher than the domestic price and this price difference (price gain) is returned to the capitalists as surplus-profit.

Since Marx examined advantage according to social classes, it might seem that the advanced country as a whole, or at least its capitalists, benefit to the disadvantage of the less developed country. In reality, this connection is not that direct. The national labor embodied in a commodity will first appreciate in a foreign market only in a given export commodity, and this is true since "the more advanced country sells its goods above their value." However, for those goods of the advanced country which are exposed to the competition of lower priced imported goods, the national labor embodied in the commodity will be depreciated, and if the capitalist pays labor as before, his profits will fall below normal levels. The appreciation or depreciation of the sold national labor occurs in concrete goods (branches producing them), while the paid national labor (by the capitalist) relates to national labor as a whole; that is to national labor used in all branches. Thus foreign trade results mainly in a differentiation of the profits of individual capitalists and a differentiation in the development of branches. Yet, Marx correctly perceived the advantages which England gained from foreign trade at that time: the English labor embodied in export goods was valued abroad at higher rates but the labor costs paid by the capitalist reflected the domestic rate (in fact, wages hardly increased), and so the English capitalists gained a surplus profit. English industry, whose products ruled the world's markets, was hardly confronted on the domestic market with competition from foreign goods, therefore the opposite influence, the depreciation of national labor, could have been neglected.

The question of who benefits from a higher rate of profit can be answered in several ways as described in the text. Taking the statement that "capitals invested in foreign trade can yield a higher rate of profit" we can assume that it refers to capitalists engaged in trade. Thus, it would seem according to Marx, that the traders bought up the manufactured goods to export them (and imported the raw material), and that the difference between the domestic price (buying price) and the export selling price of the commodity yielded a profit larger than the average domestic profit for the trader. Leaving aside the trade costs, the difference between the domestic and foreign prices of the commodity would be comprised of the average profit + surplus profit. Marx later writes of the rate of profit related to a country as a whole, where the tendency of profits to fall is retarded, slowed down,14 and here the industrial capitalist ought to also be included (indirectly, as his profit is also "pulled up" by the higher profit from foreign trade). Taking the comment that "this excess is pocketed . . . by a certain class" and this excess arises "because labor which has not been paid as being of a higher quality is sold as such," the industrial capitalist is also a beneficiary of the price gain, moreover it is mainly he who receives this because the labor embodied in the commodity is paid first of all by him.15

This section can be concluded by noting that in this text Marx does not describe the degree to which national labor will be valued higher internationally.

14 "A levelling takes place but not a levelling to the old level," he writes, that is: as an effect of the higher profits from foreign trade the rates of profit within a country will level to a higher level (Capital III, p. 233).
15 C. Bettelheim takes notice of this remark of Marx, agreeing that it is the capitalist who benefits, but he does not identify this with international exploitation. (in: A. Emmanuel: Unequal Exchange, MRP, New York, London, 1972, p. 320).
III. An Attempt Towards a Complex Understanding

3.1 Logical Understanding

After having discussed the international valuation of the national labor embodied in a commodity, let us now return to the section in Volume I. of Capital concerning the international valuation of national labors of different productivity and of same length. The text includes several movements which can be interpreted as a process: the starting point of the exchange (export) is the higher international valuation of the labor embodied in the export item of the more productive country,—that is the price gain, surplus profit,—which then lowers the relative value of money, i.e. the price level increases in that country. Let us examine these two phases.

Phase I: International Valuation of National Labor

Let the more productive country (A) produce during 1/2 hour of labor 1 unit of linen, and let its price be £1, further let it produce during 1 hour 1 liter of wine and let its price be £2. Thus, in that country in both cases 1 hour of labor is valued at £2. The productivity of linen in country B is two times lower than in country A, that is, it uses 1 hour to produce 1 unit of cloth. Country A exports the linen to country B where the price of linen should be higher (according to Capital III), and let us suppose that the labor of country A included in the linen will be appreciated as many times higher, as many times that this labor’s productivity exceeds that of the labor in linen of country B (Capital I), the price of one unit of linen will then be two times higher in country B: £2. In other words, the ratio of domestic and foreign prices of the commodity is in opposite proportion to the ratio of levels in productivity. Wine is produced in country B with 1 hour’s labor, 1 liter costs £2, so here too, in both branches 1 hour is valued at £2.16

<table>
<thead>
<tr>
<th>Country A</th>
<th>Country B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor time</td>
<td>Price</td>
</tr>
<tr>
<td>1 unit linen</td>
<td>1/2 hour</td>
</tr>
<tr>
<td>1 liter wine</td>
<td>1 hour</td>
</tr>
</tbody>
</table>

The capitalist exports the linen to country B and enjoys a price gain: a surplus profit of £1.17 The 1/2 hour’s national labor embodied in this linen will be valued in country

---

16 The valuation of labor hour in £ regards the total labor included in the product, thus it is not identical with the wage per labor unit.

17 S. Ausch constructs the following example:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor time</td>
<td>Price</td>
</tr>
<tr>
<td>Product x</td>
<td>10 h</td>
</tr>
<tr>
<td>Product y</td>
<td>20 h</td>
</tr>
</tbody>
</table>

Then he writes: "it will be advantageous for country B to export the product x to A and import from there product y even if it spends more man-hours on a ton of x than A" (op. cit., p. 79). Unless trade is barter, country B will not export the product x, because it would suffer a price loss of 2 units of currency.
B, that is internationally, at a rate two times higher (£2 instead of £1), so that the international appreciation of national labor embodied in one commodity in proportion to its productivity is realized. At the same time the different quantities of commodities of the same kind, produced in different countries (A and B) in the same working time have different price sums, since the income of country A

during 1 hour 2 units of linen $2 \times \mathcal{L}2 = \mathcal{L}4$,
while the income of country B

during 1 hour 1 unit of linen $1 \times \mathcal{L}2 = \mathcal{L}2$,
that is, the doubly productive labor of country A is also expressed in a sum of money that is two times greater. The difference between the national and international valuations of the labor of country A (£2) is pocketed by the linen producer and capitalist exporter.

Phase 2: The Raising of the Price Level

The linen producer does not import any goods but rather expands export production. Let us suppose, he brings home all surplus profits earned from exports (£2) and invests it in his own country. The balance surplus from linen exports, or the income brought home by the capitalist, corresponding to the surplus balance, is usually more than the surplus profit.¹⁸

The surplus money flowing into the country from exports and turned into investment is to be considered as a higher valuation (appreciation) of domestic labor, spreading gradually to an appreciation of labor used in the production of goods other than export goods;

¹⁸ If country A when exporting does not import, or does import, but less than it exports, then the balance of payment indicates a surplus. In terms of labor value the surplus will equal the surplus profit of the capitalist gained in the export if the sum expressing the national value (in the case of one unit linen £1) is deducted from the total export earning, that is if imports are realized in this value. At that time in England not all the components of $c+v$ needed to be replaced by imports, but of $c$ only the raw material (imported cotton), of $v$ only the imported grain in some cases. Therefore, the balance surplus will exceed the surplus profit.¹⁹

¹⁹ "...it leads to price increase, when somebody takes gold into the country, exchanging it for goods there, further, when he employs and pays workers in order to construct and equip a factory for him. The surplus gold will in this case verily raise the prices." P. Erdős op. cit., p. 1446.

Marx describes the process itself starting from another point: the starting place is a gold producing country where gold is exchanged for goods of a foreign country. If the productivity of the labor producing gold increases, the price of the commodity exchanged for gold will increase. Therefore in the country exporting goods for gold in the beginning "there is in reality an increase only in the prices of exported commodities which are exchanged for gold and silver as commodities and not as means of circulation. The price of those commodities, which are measured in gold and silver of reduced value, thus rises in relation to all other commodities whose exchange value continues to be measured in gold and silver in accordance with the scale of their former production costs. Such a dual evaluation of exchange values of commodities in a given country can of course occur only temporarily; gold and silver prices must be adjusted to correspond with the exchange values themselves, so that finally the exchange values of all commodities are assessed in accordance with the new value of monetary material." (Marx: Grundrisse, Collected Works, Vol. 29, p. 392). And he adds: "in the early stages of the evolution of the bourgeois mode of production, such adjustment proceeds only very gradually, extending over long periods, and does not by any means keep in step with the increase of ready money in circulation" (ibid.). Later, in the chapter on money of the Capital Marx repeats this thought (Capital I., p. 118), but here again, he treats it in context with place and time: the change in the intrinsic value of money is responsible for the price revolution in the revolution in the 16th century, and prices began to increase not because gold and silver exceeding the necessary amount were pumped into the circulation (as it was maintained by Hume, Ricardo and others arguing with the quantity theory of money).
that is it raises the domestic price level. The process may proceed directly when the capitalist producer buys new machines, and this increasing demand directly drives up the prices for machines, or, provided there is no free labor force, the capitalist can acquire new workers by offering them higher wages or by paying more to workers presently employed to induce them to work more intensively. The process may take an indirect form as well; as was the case in England at that time, when there was considerable free labor available. In this case demand will raise not the average wage but the total volume of wages, and thus drive up the demand for consumer goods, for example grain, and so lead to a price increase for grain.

Let us now continue our example. As we previously stated, 1 hour of labor of country A which was valued at £2 for the production of export (linen) was valued internationally (in country B) at £4. If in country A the capitalist is going to expand production, the labor used in other branches through their connection with the export item will also appreciate in value. The labor included in other goods, of course, will not appreciate internationally in a direct way because they are not exported. So, the appreciation of 1 hour's labor in producing linen in country A to £4 will lead to the appreciation of 1 hour's labor from £2 to £4 for wine production, and the price for 1 liter of wine will increase from £2 to £4:

<table>
<thead>
<tr>
<th>Labor time</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 hour</td>
<td>£1</td>
</tr>
<tr>
<td>1 hour</td>
<td>£4</td>
</tr>
</tbody>
</table>

In this phase of the process it is true that as regards the price level of the other goods (wine), the price level of the advanced country is higher in proportion to its labor productivity.

If the production of other goods is inelastic in adjusting to the increased demand generated by the expansion of export production, their price will not fall, and the main-

---

For his own time Marx assumed that a part of the money inflow is going into circulation, another part is replacing coins, further, it will flow into reserve funds and used to luxury goods and treasure (Capital I, pp. 131–133, p. 144). Now, considering several countries exporting goods to the gold producing country, provided that the productivity of labor in gold production remains the same, the national labors of different productivity will be related through the exports of goods to the productivity of the gold producing labor, and as a result, the relative value of money that is the price level of goods will differ from country to country, in accordance with the productivity of their national labor. As Marx puts it:

"The current of the stream of gold and silver is a double one. On the one hand, it spreads itself from its sources over all the markets of the world, in order to become absorbed, to various extents, into the different national spheres of circulation, to fill the conduits of currency, to replace abraded gold and silver coins, to supply the material of articles of luxury, and to petrify into hoards. This first current is started by the countries that exchange their labour, realised in commodities, for the labour embodied in the previous metals by gold and silver-producing countries. On the other hand, there is a continual flowing backwards and forwards of gold and silver between the different national spheres of circulation, a current whose motion depends on the ceaseless fluctuations in the course of exchange" (Capital I, pp. 144–145).

It proves, then, that the parts of the Capital written on money, on the one hand, and on international valuation of the national labors, on the other, are in accordance.

Marx considers the case to be typical, when in the advanced country even in spite of higher nominal wages the real wages are not higher." P. Erdős, op. cit., p. 1447.

According to data, at that time in England wages stagnated, therefore increasing food prices meant a decrease in real wages.

---
tenance of production will cost the exporter capitalist more. Thus, finally, the price increase for the other goods will have a reverse effect on the domestic price (or costs of production) of the exported commodity, pulling it up:

<table>
<thead>
<tr>
<th>Country A</th>
<th>Country B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor time</td>
<td>Price</td>
</tr>
<tr>
<td>1 unit linen</td>
<td>1/2 hour</td>
</tr>
<tr>
<td>1 liter wine</td>
<td>1 hour</td>
</tr>
</tbody>
</table>

The increase of domestic prices now affects the exported commodity as the price level in country A increases, and except for the exported commodity, the price level for other goods (wine) will be higher in country A than in B (provided that earlier the price levels in the two countries were more or less the same). The domestic price level increase may occur in an opposite sequence as well: the international appreciation of labor in the export commodity may first induce an increase of the domestic price if domestic consumers cannot obtain at home a product priced less than its export price. Thus the capitalist gains a surplus profit also on the domestic market as long as the prices of other goods increase.

3.2 Historical Understanding

In the example presented we expressed the prices of country A and B in the same currency, tacitly supposing gold coins of a certain weight. If, as a result of the previously described process the price level of country A becomes higher, then it will be advantageous for country B to export its goods to country A. If in country A and B there are differently named gold coins in circulation, then, because of the growing demand for the currency of country B and in order to prevent the outflow of gold from country A, the currency of country A will be depreciated (its gold content will be lowered).

T. Báthi bases his theory of the formation of the parity of currencies from the proportion of purchasing power between the two countries. In the starting equilibrium situation the parity equals the ratio of gold contents of the currencies times the ratio of labor intensity rates in the countries, and the currency parity is the same as the purchasing power parity, that is, the two countries have equal price levels expressed in the same currency. Now, if in country A the labor intensity (productivity) of producing certain goods will increase then their price in country A will fall and their export becomes advantageous. As a result of exporting, the demand for A's currency will increase, its exchange rate will increase (while the supply of B's currency will increase and its rate of exchange drop). The increasing rate of exchange gradually decreases the exports from country A, the new rate of exchange moves closer to the purchasing power parity determined by the new prices. If the new rate of exchange is out of the gold-point, country B will pay with gold and sooner or later will deprecate its currency (decrease the gold content, and thereby the correspondence

---

21 Báthi draws the following formula, following Marx's remark on the international valuation of national labors in the proportion to their intensity and productivity:

\[
\frac{\text{Currency of country A}}{\text{Currency of country B}} = \frac{\text{Gold content of A's currency}}{\text{Gold content of B's currency}} \times \frac{\text{Degree of labor intensity in B}}{\text{Degree of labor intensity in A}}
\]

between the parity of currency and the parity of purchasing power will be restored. Therefore, expressed in the same currency, the price levels in the two countries become equal again. From this process T. Bánfi comes to two important conclusions: "the change in the productivity of the labor producing gold, that is, the change in its value, does not effect the parity of currency"; and "gold parity is following the change in purchase power parity, consequently purchase power parity determines the gold parity."²²

Between our example and that of Bánfi there are substantial discrepancies. The primary reason for exporting, which is the increase in the productivity in country A leading to a price gain, is in both examples the same. But, in our example, in country A the price level became higher as a result of exporting, which will be favourable for country B until finally A's currency will be depreciated, while in Bánfi's example the lower price level of country A does not change even during the time of exporting, but instead, the rate of exchange will increase until finally B's currency will be depreciated, that is to say the price level in country A during this process will not increase even temporarily. Bánfi considers this type of formation of the exchange rate to be historically the first phase.²³

Marx, when writing on the international valuation of national labors, clearly states that in the advanced country (A) the level of prices is higher than in the less developed country. He adds, however, that the prices in the advanced country are not equally higher for every commodity.²⁴ Thus, it seems, the starting situation indicated by Marx, as a result of the international valuation of the national labor will be reversed: at the beginning the national labor of the advanced country was valued at a higher rate on the world market—the domestic price was lower than the foreign price—but by now the price level of the advanced country has increased.²⁵ In our opinion, these two different situations are not contradictory, and this abstract description is actually relating to a historical development which had taken place earlier.

This development is known in economic history as the price revolution. Marx in his remarks quoted earlier, describes the two sides of this development. One side of this development is: the productivity of labor in producing gold and silver increases in comparison with that of other ordinary goods and the price level in the country producing precious metals will increase. For other countries it becomes advantageous to export goods there in exchange for gold and silver, the higher prices as commodity values measured in gold and silver of reduced value will then penetrate into the economies of the exporting countries. Their price level will increase and simultaneously flows of precious metals will spread from the country producing precious metals to the countries producing goods. (Grundrisse, Marx-Engels Coll. Works Vol. 29, p. 392, Capital I, p. 118). The other side

²² T. Bánfi, inid.
²³ T. Bánfi, op. cit., p. 164.
²⁴ "The relative value of money will, therefore, be less in the nation with more developed capitalist mode of production than in the nation with less developed. It follows, then, that the nominal wages, the equivalent of labour-power expressed in money, will also be higher in the first nation than in the second; which does not at all prove that this holds also for the real wages, i.e. for the means of subsistence placed at the disposal of the labourer," (Capital I, p. 560).
²⁵ A. Emmanuel expressed disbelief at this development: "... that, under certain conditions of the world market, countries that are poor and that have low real wages would have a general price level and a general rate of money wages higher than those prevailing in countries that are rich and have high real wages. To my knowledge there has never been such a case since the world market came into being." (Op. cit., p. 68).
is: how much of this flow of precious metals will be absorbed by the different exporting countries and in what proportion will their price level increase. The more productive the export labor of a country is over that of the other, the more income it will earn through exports in proportion to its own productivity, and so the more gold will be the expression of the national labor of the first country over the second. Therefore, the relative value of money will be less, and the price level will be higher in the first country than in the less developed one (Capital I, p. 560). Let us examine this development in more detail.

a) The Spread of Price Level Increase

The phenomenon known as the price revolution lasted in Europe from 1500 to the mid 1600's. Its cause was the treasures of precious metals brought by the Spanish conquistadors which were thrown into circulation, and the steep increase of productivity in silver production, respectively. The precious metals coming from America reached Europe via Spain where they were spent to expand colonization and state administration. The Spanish economy was unable to meet the suddenly increased demand and domestic prices began to increase considerably. Therefore, it was reasonable to meet the demand through imports from other countries. The balance of payments of Spain suffered from chronic deficit which was paid for in precious metals. The price increase then spread to the other countries maintaining trade with Spain:

<table>
<thead>
<tr>
<th>Rates of Change in Prices (percent per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prices In silver</td>
</tr>
<tr>
<td>Spain 1501-10 to 1601-10</td>
</tr>
<tr>
<td>France 1501-25 to 1570-1600</td>
</tr>
<tr>
<td>England 1501-10 to 1593-1602</td>
</tr>
<tr>
<td>1501-10 to 1581-90</td>
</tr>
<tr>
<td>Saxony 1476-1500 to 1591-99</td>
</tr>
</tbody>
</table>

Source: See 36.

b) The Valuation of National Labors

Let us suppose that in Spain the price for one unit of cloth has increased to 2 Escudo and thus it will become advantageous for England and France to export cloth to Spain. In England 1 unit is produced in 1 hour, the domestic price is £1. In France, 1 unit is pro-

---


The interpretation of the process as we described is generally accepted, although several authors express their doubts because of the lack of detailed data (e.g. balance of payments, export prices). On the spreading of the price increase A.J. Schwartz writes: "In recent centuries, the price episodes occurred at approximately the same dates in numerous countries. The mechanism for the diffusion of an episode was the mutual adjustment of price levels between countries by international trade and the redistribution of the world stock of monetary reserves." (op. cit., p. 265) However, the author fails to explain the mechanism for this spreading. She simply connects the change in price levels with the flow of money between the countries, with the change of the quantity of the money within a country and thus she is following the quantity money theory.
duced in 1 hour, its domestic price is 1 Sovereign (S). Both countries sell the cloth at a price of 2 Escudo (E) per unit of cloth on the Spanish market. Assuming further that the gold content of the currencies be equally 0.5 gr of pure gold, the rate of exchange of France and England to the Spanish currency will be 1:1.

<table>
<thead>
<tr>
<th>Spain</th>
<th>1 unit of cloth = E2</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>Productivity</td>
</tr>
<tr>
<td></td>
<td>4 units/hour</td>
</tr>
<tr>
<td>France</td>
<td>Productivity</td>
</tr>
<tr>
<td></td>
<td>1 unit/hour</td>
</tr>
</tbody>
</table>

Now, England and France begin exporting. At the beginning in both countries 1 hour of labor is valued at £1, or S1 respectively. How will their labour be valued internationally, that is, on the Spanish market?

England's export earnings for 1 hour of labor \(4 \times E2 = E8 = £8\)

France's export earnings for 1 hour of labor \(1 \times E2 = E2 = £2\)

England's labor, which is four times more productive than France, will be expressed in a sum of money being four times greater than that of France.

The new valuation of export labor will spread to the labor in other fields within the countries. Thus, in England 1 hour will be valued at £8 instead of the former £1, and in France at S2 instead of S1. Finally, the general increase of prices will amount to 8 times in England (compared to the starting level) and 2 times in France, while between the two countries there will be a price level difference of 4 times, according to the 4:1 proportion in productivity:

<table>
<thead>
<tr>
<th>England</th>
<th>5 pounds of tea = 1 coat = 3 chairs = £1 → £8</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>5 pounds of tea = 1 coat = 3 chairs = S1 → S2 = £2</td>
</tr>
</tbody>
</table>

At this point we have arrived at one result of the process described in Capital I., when the national labors of the countries (England and France) are valued in proportion to the productivity of their labor, and when in the advanced country the relative value of money will be lower; that is, the price level will be higher.

The price revolution which took place during almost one century can be considered as a form of "primitive" money accumulation, when countries lacking their own production of precious metals acquired reserves of precious metals in proportion to their productivity. One can characterize this period as a time of amassing absolute gains. This period is also characterized by the one-way trade with Spain. From the 1600's onward this trade gradually declined and the trade among countries which previously conducted one-way trade with Spain, increased. In the production of precious metals the next big change appeared in the mid 1800's when gold mines in America and Australia were discovered. During the one and half centuries in between a two-way process had commenced: these impacts spread from the countries directly affected by the price revolution to other countries (secondary-circle) with which they had contacts, on the one hand; and the developing trade among
the countries primarily affected by the price revolution sought to settle the differences between price levels and the problem of purchasing power parity.

If, due to the primitive money accumulation goods would generally cost 4 times more in England than in France, then in their mutual trade France would be strongly interested in developing its exports. Then the balance of payments in England would turn into a deficit, the exchange rate of the Sovereign would rise, the Pound would be depreciated (its gold content lowered to one quarter), and the harmony between currency parity (gold parity) and purchase power parity would be restored. The parity between the Pound and the Sovereign would be 4:1, indicating also the ratio of productivity of the two countries.

The currency parity would be modified by the productivity of labor in the production of tradeable goods (or by other activities influencing the costs of export production).

Historically, it probably would not be correct to assume that prior to the price revolution between the countries the difference in the price level for the overwhelming part of the goods would have been of the same magnitude, similarly, as the appreciation of national labor embodied in the export goods does not equally affect the valuation of labor used in other branches. Consequently, after every adjustment of the currency parity, there would be relatively cheap and relatively expensive goods in both countries, which means that it would be advantageous to export the former and to import the latter. The relationship between the general productivity levels of national labors and the specific productivity of given products is nothing other, than the comparative advantage itself.

IV. International Exploitation

In another section Marx writes on comparative advantages:

"Profit can also be made by cheating, one person gaining what the other loses. Loss and gain within a single country cancel each other out. But not so with trade between different countries. And even according to Ricardo’s theory, three days of labour of one country can be exchanged against one of another country . . . Here the law of value undergoes essential modification. The relationship between labour days of different countries may be similar to that existing between skilled, complex labour and unskilled, simple labour within a country. In this case, the richer country exploits the poorer one, even where the latter gains by exchange . . . "

This remark of Marx was the basic reason why later authors almost without exception, when analysing the exchange between developed and less developed countries from the viewpoint of labor value, consider this exchange as international exploitation.

The first author to adopt Marx’s thesis was probably E. Varga (1921):

"Just as the share that comes to the individual worker during the period of dictatorship is calculated not in relation to his needs but to the output of his labor, it is also

---


The authors who argue with this quotation, take into consideration only the comparison between the different number of working days and the conclusion in the last sentence.
necessary to take account of higher output of labor in international commodity exchange."  

In 1924 the quotation was used by Buharin in rebuttal against Boris, where he accepts the thesis of international exploitation, but adds:

"Marx, however, starts here from the presupposition—and only presupposition—that there is a peaceful trade among the countries. He does not speak of real exploitation, of those results which appear as a consequence of the direct pressure from state administration etc."  

Kohlmey considers international trade to be advantageous for the developed country (which gains absolute advantages). In connection with socialist world market prices and the forming of the socialist own price base—a question which was being addressed at the time he wrote his work—he draws from Marx's thesis the practical conclusion that in the trade between socialist countries with different productivities the developed (more productive) country should grant preferential prices for the less developed one in order to avoid exploitation.

Some years ago a Hungarian author wrote: "If in the Ricardian example Portugal stops producing cloth with 90 labor hours and exchanges the wine produced with 80 hours for cloth with England where it costs 100 hours, . . . then in actuality in international trade Portugal sells wine produced with 80 hours of labor to England, and England sells cloth produced with 100 hours. But these 100 hours must be paid for by Portugal, and in the strict sense of the law of value, the comparative advantages cannot be realized."  

But, in fact, Marx did not mean in this remark and elsewhere either the exchange between the advanced country and its colonies, which would be a plausible relation indicating international exploitation. He was aware of this and made a clear distinction:

"As concerns capitals invested in colonies, etc., on the other hand, they may yield higher rates of profit for the simple reason that the rate of profit is higher there due to backward development, and likewise the exploitation of labour, because of the use of slaves, coolies, etc."  

It is important to mention that the same distinction was made by Ricardo when he

---

A. Emmanuel misunderstands Kohlmey, assuming that Kohlmey would have rehabilitated Ricardo's comparative cost theory by saying that international trade involves relative advantages for all the countries but absolute disadvantages and absolute advantages, respectively, for the weak countries and the advanced ones. (Op. cit., p. 92) In fact, there is no doubt that Kohlmey disapproved of the comparative cost theory.
From an earlier book, here is the text of I. Vajda: " . . . in competition, the developed capitalist countries are generally superior to the less developed one. This is caused by the fact, that in the developed countries less average labor time is necessary for the production of goods than in the less developed countries. Consequently, the national value of goods produced by the developed industrial countries can be lower than the international value of the same goods, that is their world market prices." (International trade, textbook; KJK, 1959, p. 59).
32 Capital III, p. 233.
wrote a special chapter on trade with colonies in his *Principles*, exempting it from the general formula of comparative costs theory.

There is, actually, nothing wrong with Marx's remark. As we pointed out in the previous chapter, the international comparison or confrontation of national labors (when relating 3 days of labor to 1 day of labor) is realized practically in the rate of exchange. It is because of the rate of exchange that prices (general price levels) in the two countries expressed in the same currency will come to the same level. That is, through the rate of exchange national labors will be appreciated or depreciated internationally according to their different productivity, and brought to an equal denominator. To put it in another way, they will be neutralized. No trade can take place so long as the labors embodied in a concrete product in the two countries have the same proportionality in which the national general labors are relating to each other (3:1). If the labor ratio for concrete products exceeds that of the general levels, then there will be a difference in prices for those products, which is, of course, the expression of comparative advantage.

Following the considerations above, a less widely held understanding of Marx's remark is that it finds no exploitation when comparing the different numbers of working days. This is also in harmony with an earlier remark of Marx (in *Capital I*, p. 560) where he states that national labors are related to each other in proportion to their degrees of productivity, intensity: the labor time of the advanced country (1 day) being 3 times more productive will equal the labor time (3 days) of the less advanced which is 3 times less productive. In order to explain how one country can still gain a continuously greater advantage even under the condition where different national labors (length of labors) are modified so that they are formally equivalent, another remark of Marx from the *Grundrisse* is usually recalled:

"From the fact that the profit may be less than the surplus value, and hence that capital may exchange at a profit without being valorised in the strict sense, it follows that not only individual capitalists, but nations too may continuously exchange with one another, and continuously repeat the exchange on an ever-growing scale, without gaining equally thereby. One nation may continuously appropriate part of the surplus labour of the other and give nothing in exchange for it, except that here the measure is not as in the exchange between capitalist and worker."34

Basically the same stand is taken by A. Emmanuel. He considers the difference in wages between different countries to be responsible for unequal exchange. According to him, capital is mobile between countries but labor is immobile, hence profits between regions will be equalized, leading to equilibrium prices (for the same commodities) while the rates of surplus value remain different in the regions, causing unequal exchange through the proportion between equilibrium prices. That is, the exchange is unequal because the less developed country cannot get its surplus value fully realized, except the profit, which is less than its surplus value.35

---

33 1 day will be valued internationally for 3 times more, that is its value will be 1 day × 3 = 3 days.
34 *Grundrisse*, Coll. Works 29, p. 244.
35 "Inequality of wages as such, all other things being equal, is alone the cause of the inequality of exchange."
"Regardless of any alteration in prices resulting from imperfect competition on the commodity market, unequal exchange is the proportion between equilibrium prices that is established through the equalization
Now, coming back to Marx again, according to him a country would lose its national labor (a part of surplus labor) if it exports, as a rule, at a price in which the profit is below the surplus value. Suppose countries A and B exchange two different commodities, the export price of both is exactly £5; the commodity exported by A is produced or could be produced in B for a higher price than this and vice versa. What is important is how the surplus value of a country is realized in the export price. Let us suppose that the export price of country A with surplus value is £5.5, whereas with profit, according to the quotation, is lower than that: £4.5; further the export price which should yield, according to the earlier remark of Marx (Capital III, pp. 232-233), surplus profit for the capitalist, be higher than the price with profit but lower than the price with surplus value, that is £5. For the sake of convenience let the price of B with surplus value and with profit be equally £4.5, while the export price is £5. That is:

<table>
<thead>
<tr>
<th>Country</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export price</td>
<td>£5</td>
<td>£5</td>
</tr>
<tr>
<td>Price with surplus value</td>
<td>£5.5</td>
<td>£4.5</td>
</tr>
<tr>
<td>Price with profit</td>
<td>£4.5</td>
<td>£4.5</td>
</tr>
</tbody>
</table>

Clearly enough, if in the export price of £5 of country A £0.5 of the national value (£5.5) were not realized, this amount of labor is lost by the country, while B receives in the export price not only the national value but an excess value in addition.

The main shortcoming of this interpretation is that there is no need to assume prices with surplus value and to measure the deflection, that is the difference between surplus value and profit. Once within a country (country A) the realization of national total value is not distorted because some commodities have prices lower than their value, that is prices with profit only, it cannot be comprehended why it should be a loss of national labor (of one part of the surplus labor) if the commodities are sold in exports at the same price (with profit) or even higher price (surplus profit from exporting). This would be the case if the export did not include some degree of profit, but then, obviously, the capitalist would not be willing to export either. It might be guessed also that the country is deprived of that surplus value which is being realized on the buyer's side, because the product is sold not to domestic but to foreign buyers. This way of thinking is not acceptable since the country's buyers get in exchange for the exported product another one, and the imported product will be priced less than the domestic product.

The example could be understood in still another way. We suppose that in countries A and B the branches producing for export are independent from other areas of the domestic economy. Thus, in country A the total surplus value of export production cannot be realized in the prices of other branches, nor in the export price because it cannot be raised of profits between regions in which the rate of surplus value is "institutionally" different—the term "institutionally" meaning that these rates are, for whatever reason, safeguarded from competitive equalization on the factors market and are independent of relative price.” A. Emmanuel: Unequal exchange, MRP New York, London 1972, p. 61 and p. 64. The loss of the less developed country is the difference between the higher surplus value and the lower profit (e.g. table on p. 57)." 

"the general rate of profit can fall in one or another branch of business, because competition, etc., forces the capitalist to sell below value, i.e. to realize a part of surplus labour not for himself but for the buyers of his product.” Marx: Grundrisse, Coll. Works 28, p. 363.
above £5. This circumstance, however, does not bother the capitalist because he receives in the export price (£5) a higher profit than usual. How do the labors expended in the countries correspond in this case? If country B earns £5 in exports, it buys £5 of labor from A which does not contain its surplus labor of £0.5. But country B must give its full surplus labor in order to get £5 of foreign labor.

If this exchange is continuously repeated, it might be assumed that country A would not give the total of its surplus labor while country B would have to give the total of its surplus labor. The shortcoming of this understanding is that in country A the surplus value produced in the export branch, which is separated from other branches of the economy, cannot be measured against the surplus value produced in other branches. In the isolated production branch the magnitude of the value, including that of the surplus value, too, becomes an individual one, and if the amount of surplus value which is over and above the profit cannot be realized in the prices of other branches because of the isolation, then the price with profit is to be considered as an expression of the value produced in the export branch. In other words, here profit is identical with surplus value, so that country A also gives its total surplus labor in the exchange.

In order to determine labor gains and losses between countries, it would be more appropriate to return to the remark in Capital III, and to compare the labor appreciations and labor depreciations of the trading countries. The labor contained in the product of the exporting country will be valued higher in the other country, this difference is labor gain but in the other country the imported cheaper commodity does not make it possible to realize the national labor contained in a domestic product of the same kind, and this is labor loss. In the same commodity the labor of the exporting country will not be necessarily appreciated in the same proportion as will the labor of the importer country be depreciated. That is, the price gain of the exporter country does not necessarily equal the price loss of the country importing that commodity.

A modernized understanding of Marx maintains that the international value of a certain commodity is formed on the world market in the same way as within one country, so that different national labor quantities would come to an average. This international value, similar to that of the domestic value, would represent the amount of labor necessary for the production of the commodity under average international conditions. Now, if countries exchange goods at such international values, the exchange should be considered as equal, even though it covers different amounts of national labors. This understanding has been adopted by O. Bogomolov, who, in answer to the request of developing countries to give them price preferences, adds, that unequal exchange has nothing to do with the international valuation of national labors, but rather, it takes place because prices in international trade are distorted by the multinationals and monopolies of developed countries to the detriment of developing countries.

Therefore, unequal exchange does not necessarily imply exploitation. Exploitation exists even under full equivalence of labor values since capitalist exploitation does not come

---

87 Kulikov, V.: Tovarnye otnoshenia v mirovom sotsialisticheskom khoziaistve (Commodity relations in socialist world economy), Moscow 1972, pp. 112–113.
Bogomolov, O.T.: Strany sotsializma v mezhdunarodnom razdelenii truda (Socialist countries in international division of labor), Nauka, Moscow 1986, p. 185.
simply from exchange relations. "In this sense the hasty remark of Marx on the exchange of different national labor quantities... ought to be corrected, and be understood as un-equality in international capitalist relations being beyond the exchange."—as T. Szentes maintains. J. Schumpeter thinks similarly of the problem: "It would obviously not suffice to recognize that the lure of gain played a role in motivating colonial expansion. Nor is it sufficient to stress the fact that each country actually did "exploit" its colonies. For that was exploitation of a country as a whole by a country as a whole (of all classes by all classes) and has nothing to do with the specifically Marxian kind of exploitation."40

Although Marx's remarks were used in socialist countries for rejecting the comparative costs principle and thereby the market economy, in economic thought still there was a slow positive development favoring that principle from the mid 1950s.41 Authors who held a positive attitude towards comparative costs started from the practical side by reasoning that isolation of the domestic prices from world market prices causes losses for the state, it is disorienting for enterprises and retards structural adjustment to the world market. At the same time, too, the enormous attempt, which has consumed the energy of thousands of scholars and specialists, to create the so-called own price base for socialist countries, has failed. Development of this price base was undertaken to establish fair prices for exploitation-free trade and to introduce the management of socialist economies according to a single plan. As efficiency problems increased as a result of economic reforms, voices demanding the inclusion of the comparative principle and free market began to be heard more loudly. This other line of the discussion generated important momentum in restoring a market economy and to opening up of domestic economies of the socialist countries to the world market.

V. The Discussion in Japan

The discussion in Japan began with T. Nawa's article published in 1937, in which he formulated his concept on unequal exchange and attempted to clarify and develop Marx's remarks. His idea was taken up and discussed later in the late 40s and early 50s. First, we shall review Nawa's basic concept and then proceed to the discussion.

5.1 Nawa's Understanding

Nawa starts his investigation with the interpretation of intensive, simple and complicated kinds of labor.42 This distinction, as we shall see, will become his main explanation for...

---

40 See for details: G. Bakos: Komparatív előnyök és szocialista külkereskedelem (A komparatív elv a magyar közgazdasági gondolkodás fejlődésében) /Comparative advantages and socialist foreign trade—The comparative cost principle in Hungarian economic thought/, Egyetemi Szemle, June 1987 (Budapest).

42 If not indicated otherwise, the following work is used: T. Nawa: Kokusai kachiron kenkyu (Research on International Value), Nippon Hyoronsha 1949. The original article, which is included in this book and which was the base of the discussion, was first published in 1937.
unequal exchange between developed and undeveloped countries and also for international exploitation.

In the domestic economy, if a producer within one branch of production implements a relatively more advanced technology and reduces thereby his own expenses for a production unit, he will obtain extra profit, since market price is formed by the average necessary labor. This well known point of Marx is extended by Nawa to the world market, where he claims that the more advanced nation receives extra profit.

Before moving to develop this argument, however, Nawa describes two cases when trade might not be considered as unequal.

1. If country A imports a commodity from country B, because production conditions in country A are not favourable for producing that commodity, trade would not be unequal. Because, the commodity is socially necessary for country A, and so, even if B's productivity in that commodity would be lower than that of country A, there would be no unequal exchange.

2. Recalling Ricardo's example where Portugal exchanges wine for cloth with England, that is the production of 80 workers is exchanged for that of 100 workers, Nawa maintains that this is quite normal, and there is no reason to suppose unequal exchange, provided that the value difference is due to the difference in labor intensity between the two countries (pp. 147-148 and 154).

In a later article, however, he includes the much discussed thesis from Marx regarding the exchanging of 1 day labor for 3 days of labor between the developed and undeveloped countries. Nawa says, this exchange should be considered as equal, provided that the former's labor complexity is correspondingly higher. That is, if complicated labor is exchanged for more simple labor, the exchange is equal.43

Problems of unequal exchange occur on the world market when the simple work of the less developed country is compared with the complicated work of the developed country. Then, as Nawa says, the complicated work is valued wholly as such but the less developed country's work only as a simple one. Marx's remark on free trade, that historically the developed countries imposed the international division of labor upon the less developed ones, provides the grounds for Nawa to declare that in order to prove the existence of international exploitation it is sufficient just to point out that the productivity level of labor differs from country to country (p. 158).

The central part of his work where Nawa illustrates the unequal exchange, runs as follows. In a two country, two commodity model, country A produces with one labor day a unit of commodity P, and with the same amount of work a unit of commodity Q. To produce them in B requires 12 days for P and 2 days for Q.

<table>
<thead>
<tr>
<th></th>
<th>P</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country A</td>
<td>1 day</td>
<td>1 day</td>
</tr>
<tr>
<td>Country B</td>
<td>12 days</td>
<td>2 days</td>
</tr>
</tbody>
</table>

Now, country B will export commodity Q to A. If B directs its labor engaged in pro-

---

43 T. Nawa: Kokusai boeki ni okeru futoka kokan no mondai (The Problem of Unequal Exchange in International Trade), Keizai Shicho No. 7, 1948, April.
duct P into the production of Q, it will be able to produce 6 pieces of Q. These 6 pieces of Q then embody 12 days of B's labor, but require in A only 6 days. Therefore, in the exchange A takes, in its own terms, 6 days' value from country B, when importing commodity Q from it, and gives only 1 day by exporting P. The mechanism is such that country A exports its P product, for instance an industrial product, to B at a lower price than B's domestic price and thus destroys in B the branch P. On the other hand, B is unable to market its commodity (for instance an agrarian product) at its value, because of its less developed status, it is in a subordinated position in trade. Therefore, the exchange is unequal, Nawa concludes. As support, he draws from Marx's comments on the valuation of the labor embodied in one commodity the sentence "The favoured country recovers more labour in exchange for less labour."

At this point we cannot help making an important observation. The correct interpretation of the example taken up by Nawa would require us to also show country B's gain. Correctly, when country B stops producing P, and commands labor to produce Q, it gets back from A, through exchange with A, 6 pieces of P, and this is beneficial for country B, because with the same labor through trade it now receives 6 pieces of P while without trade it would only have 1 piece. So, in its own terms, country B provides 12 days labor but receives 72 days, that is a 1:6 ratio which is the same result as for country A. Strictly speaking, the example does not support Nawa's evidence.

Continuing with this example, Tessa Morris-Suzuki's mistaken interpretation should be mentioned, the more so because through her English-language book many foreign readers will be misled. Her incorrect paragraph reads as follows: "But, Nawa argues, if A and B trade along the lines of comparative advantage, A will be exchanging an item that required only a single day's labour for an item that required six days of B's labour: hence exchange is unequal." In fact, however, the exchange is unequal not because of the 1:6 days ratio, but, as Nawa says, because the backward country, due to its subordinated position, cannot sell its relatively more productive commodity at its value-price but must sell it for less. This is the very special point developed by Nawa, who was aware that his numerical example was insufficient to prove unequal exchange.

Nawa then extends the model to the world market, where in one key (important) commodity the national labors of the exporting countries are being valued in relation to each other. Here the labor expended in the relatively more productive branch of the developed country is valued accordingly higher, and, through its domestic value-system, its labor in the relatively less productive branches is also valued higher. In contrast, for the less developed country, the labor of its relatively more productive branch will not be so valued, but will be undervalued (p. 169).

To understand why the labor in the relatively less productive branch of the developed country would also be valued surprisingly high, Nawa includes the relative value of money. In accordance with Marx, Nawa explains that when countries export goods to the gold producing country in order to obtain bullion for their domestic money purposes, then the advanced country will obtain with the same length of labor expenditure more bullion than the less developed one. The higher foreign valuation of labor of the relatively more produc-

ative export branch in the advanced country will spread to the other, relatively less productive branches so that finally the general price level will be higher in the advanced country (pp. 178–185).

In order to change the subordinated position of the less developed country, it should develop the productivity of its backward branches (industry) and to compete with the developed countries, Nawa suggests. Then the different national labor productivities will come to the same level. But this is rather difficult since the (colonial) policies of the developed countries prevent the less developed ones from doing so.

In the final section Nawa concludes that unequal exchange is rooted in capitalist production relationships and it is beyond visible price relations. Therefore, he suggests, one should abandon prices and the law of value when proving unequal exchange (p. 188). Thus, we arrive at an explanation for his incomplete example interpretation which was mentioned before. It should be also admitted that his final conclusion about the necessity of development strategy in the backward country can be considered as correct (it is called in the literature "dynamic comparative advantages").

In the following section we shall attempt to outline the discussion around Nawa's theory. From the ample discussion we shall confine ourselves to these points:

— the beginning of the debate
— the problem of whether national labors form an average
— complicated versus simple labor
— universal labor and the value of money

5.2 Beginning of the Debate

The discussion started with the article of M. Hirase who pointed out some contradictions in Nawa's theory.45 First, Hirase separates himself from Nawa in the main point of unequal exchange by saying that internationally unequal exchange does not exist except for some special cases. This remark gives rise in the forthcoming contributions to developing arguments around the problem of equality, though Nawa himself in his original article stressed his conclusion of unequal exchange. Secondly, Hirase maintains that on the world market prices are clearly different, because of the different production conditions in the countries involved, therefore it is not necessary to include the relative value of money to explain the price differences. Rather, the involving of money-value is confusing. In his opinion, the world gold market provides money with only one international value, therefore it is also erroneous to suppose unequal exchange when different countries acquire gold. Thirdly, on the world market for one kind of commodity the different national labor values will come to reflect a single international value, but the rate of profit will remain different.

Although published many years after Hirase's work, E. Kinoshita identified similar contradictions.46 First, different national labors will be valued internationally in different sums of money. Secondly, at the same time, the relative value of money also varies by

45 M. Hirase: Gaikoku boeki to futoka kokan (Foreign Trade and Unequal Exchange), Kikan Shakai Kagaku No. 2, 1949 April.
46 E. Kinoshita (ed.): Ronso, Kokusai kachiron (Discussion on International Value), Kobundo 1960, p. 296.
countries. Thirdly, Nawa introduces the key commodity in order to have a fixed value-point in international exchange. Hence the problem arises: if national labors are compared through the key commodity then this key commodity will be the value-measurer, but not the money itself.

5.3 Averaging National Labors

The problem of averaging national labors is actually the search for a universal value-unit. Had such a universal measure unit been defined by Marx, later scholars would not have had problems when comparing national labor-values, and in fact, the entire discussion would probably not have arisen. But, since a universal value-meter was not developed, the problem remains.

K. Matsui states that within one country the value of a commodity is an average value and similarly on the world market there exists an average world market value of the commodities. He categorically refutes Nawa's statement according to which one production branch's average value would become the international value. Of course, he continues, if there is no single world market but a world composed of separate markets, then the national values do not reach an average.

M. Machida, more theoretically, contends that Hirase has not provided enough reasons as to why the law of production prices should not be applied internationally. Using this law, the modification of the value could be understood as a value problem only.

E. Kinoshita does not take a clear stand on this point, but considers rather the nature of national labor and the productivity of different branches. As to the national labor, its general productivity manifests itself in the quantity of money it earns on the world market, and this also assumes that in the developed country the wage will be also higher. In explaining the effect of the internationally varying productivity of branches, Kinoshita uses the example of the domestic market, where a producer employing machines of an above average productivity gains extra profit. In the same way, a branch with a higher than average level of productivity of the country sells its goods above its value, while wages do not increase.

This is a very important point, though Kinoshita does not specify whether "productivity higher than average" suggests that an average of exporting countries implies tacitly that he would accept an average world market value. The remark is still important because it grasps the essence of comparative costs advantages which comes from the branch productivity ratio exceeding the general (national) productivity labor ratio between countries. From here, it would have required only one step to recognize that the productivity ratio of national labors is reflected in the exchange rate, while the higher productivity of a branch results in extra profit. It is regrettable that other authors have not further developed

47 K. Matsui: Kokusai kachironso ni tsuite (To the Discussion on International Value), Sekai Keizai Vol. 5, No. 2, 1950 January; and: Futatabi boeki riron ni tsuite (Again on Foreign Trade Theory), Keizai Hyoron, 1951, 5.
Kinoshita's ideas.

Later in the discussion, Kinoshita comes back to the point by saying that the way values are being formed on national markets cannot be applied in understanding world market value formation because national values and differencies in profit rates continue to exist. Still, as a result of competition on the world market national prices tend to move toward a single price.50

A. Ono also supports the averaging theory, but makes a distinction. In the basic commodities and gold national labors directly reach an average, while all other goods have false or apparent international values. In this latter case averaging proceeds indirectly.51 M. Yoshimura is basically of the same opinion: if on the world market there is only one branch in which free competition can work, then in that one commodity national labors will come to an average. Then, this value-unit will spread to other branches and will provide the measure for the value of other goods.52 Kinoshita, addressing his criticism to Ono, says that it is meaningless to distinguish between direct and indirect averaging once national labors reach an international average for gold, because commodities will then be priced according to this value of gold and there is no reason to suppose a false international value for them.53

5.4 Complicated Versus Simple Labor

As we recall, when presenting his reasoning for unequal exchange, Nawa stressed that on the world market the labor of the developed country is valued accordingly higher, while the backward country's labor will be undervalued.

This thesis is attacked by K. Akamatsu who admitted, that on the world market such a situation might occur and then unequal exchange takes place. This would be the case if prices were forceably distorted. But, he contends, unless there is such a distortion of terms of trade, the higher price for the developed country's labor on the world market will be due to its labor's higher complexity and intensity.54

Nawa defended his position, saying that the labor of the developed country is valued over its real degree of complexity because the industrially developed country is using modern machinery and advanced technology in production. In other words, the degree of skill of the workers in the developed country by itself does not justify such a high price. Therefore, the labor of the developed country is valued artificially higher.55 If so we can add that there is nothing artificial about the situation, rather it is the higher labor productivity which is responsible for the higher valuation.

In comparing expended labor in different countries the discussion uses two criteria,
complicated versus simple labor, and labor productivity. This implies that because complicated labor may be reduced to a more simple form of labor, the shorter but more complicated labor of a developed country equals the longer simple labor of the less developed country. In productivity, similarly, shorter labor time for more productive work is equal to the longer but less productive work.

F. Yamamoto deals with the problem of how to relate complicated labor to simple labor. When comparing the labors of different nations, he says, the degree of complexity should be considered. Thus, if complicated labor is exchanged for simple labor, the exchange of different quantities of labor is actually an equal exchange. He criticizes Nawa for considering the exchange of unequal labor quantities for unequal exchange without examining the complexity of the labor involved.56

Yoshimura also agrees with this thesis, adding only that within the domestic economy exploitation is taking place under an exchange of equal values, and internationally the case would be the same.57

Nawa also continued with the discussion, making two main points, the first concerning the complexity of labor, and the second concerning the valuation of one commodity.

As to the first point, he starts from Marx's comments on the valuation of labor in one commodity: "In so far as the labour of the more advanced country is here realized as labour of a higher specific weight, the rate of profit rises, because labor which has not been paid as being of a higher quality is sold as such." Now, Nawa understands the phrase "labour which has not been paid as being of a higher quality is sold as such" in the sense that the labor of the developed country is sold as more complicated labor, that is, its labor is only apparently, fictiously complicated, but in reality it is not. Therefore, he concludes, the exchange of unequal labor quantities is unequal exchange. Quite interestingly, with this point Nawa contradicts his earlier thesis, where he accepted as equal the exchange of 1 working day's labor in one country to be equal to 3 working days in the other country, provided it is determined by considering the different complexity of labors. Nawa, however, does not realize the contradiction here.

In his second point Nawa starts also with a comment by Marx: "The different quantities of commodities of the same kind produced in different countries in the same working-time, have, therefore, unequal international values, which are expressed in different prices, i.e., in sums of money varying according to international values." (This is the same, complicated sentence about the valuation of the general, national labor, which we analyzed in paragraph 1.b.) Nawa asks the question: for what commodity is this statement true? For every commodity or for some? He understands that "the same commodity has the same price" holds true only for industrial goods, because these are directly exported to the world market. On the contrary, other goods having no direct access to the world market, will not reach the same price. The international value is nothing other than the selling price of the commodity produced by the exporting country, he concludes.58

As we can see, Nawa maintained his basic concept concerning the key commodity and international exploitation, but at the same time he threw more ambiguity upon the 1 working day versus 3 working days exchange.

5.5 Universal Labor and the Value of Money

This point is, of course, also connected with the previous ones, but its special feature is the focusing on the universal labor value or a value unit through which the labor values of different nations could be compared. As we may remember, Marx did not clarify what should be understood by this.

Y. Kihara holds that national labor cannot be reduced to universal labor, because national labor finds its expression in money prices, and these prices range widely from nation to nation. In regard to Nawa, Kihara says it is also absurd to consider one nation’s labor to be universal.58

H. Okakura puts forth an idea on the difficulty between labor reduction and the relative value of money. He states that if national labors are compared and explained solely in terms of the relative value of money, then the reduction of the national labor itself will be lost sight of. In other words, it is not sufficient to suppose that national price levels differ only because the relative value of money is different in the countries involved. Regardless, he offers no proposal for solving the problem.60

In addressing this problem M. Yoshimura offers a compromise: the relative value of money is changing together with the price levels, but the difference between the general price levels of countries is due to the time lag of conjuncture (he does not use the term “more or less developed country”). He maintains that the difference in general price levels is based on the relationship of national labors which then manifests itself in the relative value of money.61

Nawa enters the discussion for the third time, offering his opinion on the relative money value problem. According to him, the relative value of money has to do with the original price level in the countries, hence the price level in the developed country will be higher than in the backward country. But, he admits, applying this understanding to a single commodity presents a problem. In his conclusion, based on Marx, he says that general price levels of countries differ mainly because of the different relative value of the money in those countries.62

5.6 Conclusion

Nawa’s theory and the discussion can be considered as an important contribution to the understanding of Marx’s conception and the problem of unequal exchange.

60 H. Okakura: Kokusai kachiron no mondaiten (The Problem of International Value Theory), Yamaguchi Keizaigaku Zasshi, Vol. 6, Nos. 3-4, 1955 August.
61 M. Yoshimura: Kokusai kachiron josetsu, ibid.
Nawa concretely formulated his thesis in relation to one key commodity produced by the developed country. He reasoned that due to its stronger position on the world market, its labor embodied in that key commodity and also in the goods of its relatively less productive branches will be valued higher. On the contrary, the labor of the relatively more productive branch of the backward country will be undervalued. Thus, international exchange is unequal. A. Noguchi claims, that Nawa's key commodity doctrine would mean that "it is the productivity differentials in the key commodity which determine the conversion ratio (exchange ratio) of national labors embodied in the products in trade," that is in the other products, too. Nawa actually stated that in the key commodity the average national labor productivities are reflected most accurately and their "relative weights determined" ("kokusai-teki rodo no hiju ga kettei sareru," Nawa 1948, p. 169, see also p. 164). This might be interpreted as a conversion ratio, although Nawa has never defined how national labors would figure in the world market price of the key commodity. Rather, his concern was to point out that in products other than key, industrial ones—that is in agrarian products produced by backward countries—national labor is depreciated. Hence for these commodities the labor conversion ratio in the key commodity, and between the key and non-key commodities, does not hold.

In his later contribution Nawa adds new momentum to his main concept: the labor of the more developed country is artificially valued higher than justified by the complexity of its labor, and this overvaluation is due to modern machinery and technology. With this remark, however, his understanding about the complexity and productivity of labor becomes ambiguous.

Even if Nawa's explanation sometimes remains unclear, his conclusion is empirically right, because, the industrially developed countries flooded the world market with their mass products. They were the "price leaders," gaining extra profit from the export.

The discussion provided a new insight into Marx's understanding. This new point is the relation between simple and complicated labor, which could also be a reasonable explanation for the exchange of 1 working day of the more developed country with 3 working days of the less developed country. However, when Marx examined national labor in an international context, he mentioned only its intensity and productivity. According to Marx's sense, of course, the complexity might not be excluded. Noguchi in his appraisal found mainly that it provided through the national productivity differentials the criterion for the valuation of national labor (op. cit., p. 5).

As to the basic theoretical questions, neither Nawa nor the discussion provided an answer for the dilemma of the price level of the developed country being lower than moving higher. Both approached the answer, but in the end could not reveal how countries historically acquired money and how they arrived at the exchange rate. Also, they did not clearly distinguish the international valuation of national labor in general and of the labor embodied in one commodity.

Historically, both Nawa's theory and the discussion bear strong practical relevance. At that time, namely from the late 1930's when Nawa's article appeared and also around the late 1940's and into the 1950's when the discussion continued, Japan's productivity and

wages were lagging well behind the developed industrialized countries. Therefore, leading economists tried to provide a theoretical analysis of the situation and to find the solution for catching up with those developed countries. To achieve this a good starting point was Marx's theory of the valuation of national labor and unequal exchange. The discussion's practical conclusion, to catch up through an increase in productivity, was widely used in economic policy.

Later, the discussion inspired economists to develop practical applications. Of these the work of K. Yukizawa who used Nawa's concept about relating national labors in the key commodity for computing the justified dollar/yen exchange rate must be mentioned. Once in the key commodity the different national labor productivities are related to each other, as Nawa said, then the purchasing power parity of the currencies between the two nations should correspond with this ratio. Accordingly, Yukizawa first calculated the ratio of average national productivities of the US and Japan. For the year 1977 he found that this ratio was 1.23. Second, assuming that the general price levels are best represented in wages, he compared the wages per hour using the actual exchange rate of $1=¥268.5. Here the result was 1.74. He then equated this with the labor productivity ratio, that is, with 1.23 and derived for the justified equilibrium exchange rate $1=¥190. Actual developments supported this calculation since the dollar rate actually fell thereafter.64

Hitotsubashi University

---