

# AUTO-ADMINISTRATION VIA VALUE OF THE URBAN TRANSPORTATION

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## ABSTRACT.

A practical example of “regulator agency”, where “market value” and the “necessary connection” establish the price attached to its value, generates the “self-government”. This example is linked to the urban transportation sector, and the unique tariff for different routes are eliminated, reducing the social cost. This practical example can be adjusted to the telephony, some communication sector and others bureaucratic spaces. The objective is to instigate philosophical implications about the relation between Conventional Economic Theory (CET) and Marxist Economic Theory (MET) and/or both logics — formal and dialectical.

Considering each capital (I, II, and III) as an enterprise or transportation unity (*Tu*; bus, micro-bus, etc.); the organic composition of capital I is higher. That means capital I detains the most modern *Tu* (higher *Cc*) and employs lesser than average (lower *Vc*). Capital III is the opposite, “underdeveloped”.<sup>1</sup> These three capitals present the *uneven development* that this paper will show how to *combine* them to progress. The *uneven and combined development* brings simultaneous determination of income distribution and growth, and also new tools / links for empirical investigations / Social Sciences.

The organic composition of all three capitals is described in the Table 1. Column *Sv* represents *Surplus value* and it is supposed a *rate of surplus value* equivalent to 100% ( $Vc=Sv$ ). Although in selling their commodities capitals may recover the value consumed in their production, or may not. Transferences and absorptions of wealth prevail when market determines prices.

**Table 1. Transformation of the values into prices of production**

Tu	Cc	Vc	Sv	Value			Price		Part. on dem.(%)
				Cc+Vc+Sv	Rate of P	Profit	Cc+Vc+P	Transf.	
I	9	0,1	0,1	9,2	12,281	1,1	10,218	1,018	0,64
II	3	0,7	0,7	4,4	12,281	0,5	4,154	-0,246	0,26
III	0,5	0,95	0,95	2,4	12,281	0,2	1,628	-0,772	0,10
<b>Total</b>	<b>12,5</b>	<b>1,75</b>	<b>1,75</b>	<b>16</b>		<b>1,75</b>	<b>16</b>	<b>0</b>	<b>1</b>

Cc - Constant capital

Vc - Variable capital

Sv - surplus value

Average rate of profit -  $S_T / (C_C \text{ Total} + V_C \text{ Total})$

Production

Competition

Offer

[in]

Appropriation/consump.

Demand

]out[

(Marx, K. *Capital*. Volume III, part II)

If we aim the integrated participation of all three capital and at the same time to promote: the reduction of social cost or value to the consumers; the elimination of unique tariff for different routes or courses; the elimination of governmental subsidy; the improvement of the services offered; and the progress; all we need is to turn the *hidden regulator*<sup>2</sup> revealed as an *agency*, “flotilla” or module as Peter F. Drucker has called it (Drucker, 1995).

<sup>1</sup> “The transport industry forms on the one hand an independent Branco of production and tus a separate sphere of investment of productive capital. On the other hand its distinguishing feature is that it appears as a continuation of a process of production **within** the process of circulation and **for** the process of circulation” (Marx, 1986, tomo II, p. 155).

<sup>2</sup> “It is therefore imposible for capital to be produced by circulation, and it is equally imposible for it to originate apart from circulation. It must have its origin in circulation and yet not in circulation” Note n° 1: “The continual oscillations in prices, their rising and falling, compensate each other, and reduce themselves to an average price, which is their **hidden regulator**. It forms the guiding star of the merchant...” (Marx, 1986, tomo I, p. 163 y note 1).

How do we build it so? It is easier than keeping it hidden; it surely instigates our thoughts because we will find out that market is not that typhoon conventional economics preach about.

In order that we include capitals into the Linear Programming problem as *restrictions* ( $Cc_i + Vc_i + Pp_i \leq b_i$ ), where  $Pp = Presumed\ profit$  (let us suppose it being 10% of  $Cc$  or investment of capital; this way there is no transference / absorption of wealth) and  $b$  should be the invoicing corresponding to the sum of all three variables. The *objective function* must be the sum of each variable ( $Cc_1 + Cc_2 + \dots = Cc_{Total}$ ;

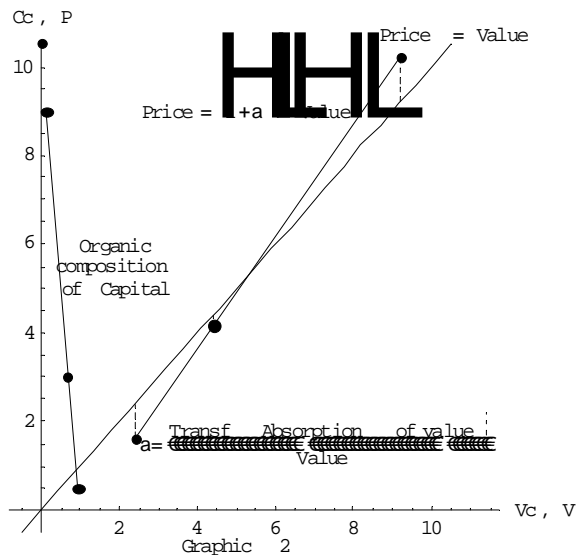
$Z_{Max} = Cc_{Total} + Vc_{Total} + Pp_{Total}$ ). The solution of this problem makes *primal* (production maximization) equal the *dual* (cost minimization). Conventional economic theorists would call it "Pareto's optimum" and/or "fixed-point"; we just call it "value".

Maximized the *objective function* we obtain the *optimum value* ( $Z_{Max} = 15,501$ ;  $Cc = Vc = Pp = 1$ ); if we divide it by the total kilometers routed by all passengers, we obtain the price of the kilometer traveled. This must be multiplied by the quantity of kilometers coursed by the passenger and paid through magnetic card at the moment this passenger get off the bus. The *agency*, based on a software that receives data about the moment passengers get on the bus, issues the price to be paid. This *agency* also broadcast data about the number of waiting passengers at the bus stop and also advertisings, notices, etc.

Of course this *agency* need not any bureaucracy because the appraisal or valuation of all data feeding the software must be made by all enterprisers integrating the *agency*. By the other side government and society may observe what is decided there by the internet and utmost throughout prices, which are now attached to the value, paid by the clients. This price (attached to value) generate "value index" and precise "Gross Setorial Product" (GSP — part of Gross National Product, GNP; on line, on real time).

In resume, the present proposal turns constant the social cost and presumes the profit to make flexible the price which now must oscillate attached to value (social cost).<sup>3</sup> This way we can affirm that prices will oscillate strictly attached to demand, if the latter increases, prices decrease.

The software must bear an upper limit to prices because someone may neglect the bus stop and keep traveling beyond it. This upper limit should be equivalent to the longest route. The present proposal also implies stronger reversals at the academic world than the priced-world-of-commodities because we shall not forget that the latter tend to a plethora of



$$Z_{max} = 12,5Cc + 1,75Vc + 1,251Pp$$

S.a

$$9Cc + 0,1Vc + 0,9Pp \leq 10$$

$$3Cc + 0,7Vc + 0,3Pp \leq 4$$

$$0,5Cc + 0,95Vc + 0,051Pp \leq 1,501$$

Where,  $Cc, Vc, Pp$  e  $b_i$  (last column)

are non-negatives

"Tableau" Simplex and the matrix

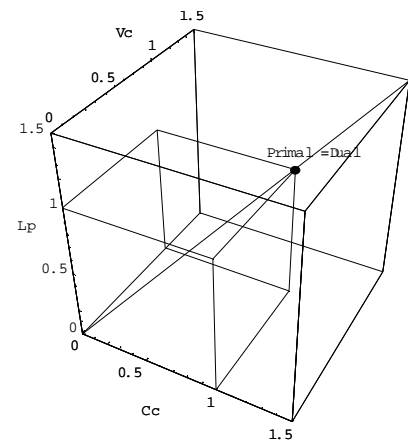
	Cc	Vc	Pp	S <sub>1</sub>	S <sub>2</sub>	S <sub>3</sub>	b <sub>i</sub>
	<b>B</b>			<b>N</b>			<b>b</b>
S <sub>1</sub>	9	0,1	0,9	1	0	0	10
S <sub>2</sub>	3	0,7	0,3	0	1	0	4
S <sub>3</sub>	0,5	0,95	0,051	0	0	1	1,501
	<b>C<sup>B</sup></b>			<b>C<sup>N</sup></b>			<b>C<sup>B</sup> · B<sup>-1</sup> · b</b>
	-12,5	-1,75	-1,25	<b>C<sup>N</sup> - C<sup>B</sup> · B<sup>-1</sup> · N</b>			<b>Z</b>

<sup>3</sup> Aquí se fase la "conexión interna" y también el "valor de mercado" (Marx, 1988, tomo III, 212 y 225).

commodities Today a simple hand-shake is being replaced by a commodity (*tele-message*, for example); and every relations between men / women tend to be priced, that is, mediated by commodities.

The same way conventional price system produces “asymmetrical informations”, that is, commodity may carry more or less value than represented by its price; into the immaterial world the “asymmetrical representations” prevail generating ambiguities underlying most epistemological debates. We have shown the way out of this kind of difficulties at the material world (purchasing an specific commodity by price attached to its value; *market-value*; exchange of equivalents; the *business ethic foundation*); by the other side the philosophical implications may be handled using arguments already worked by Stephen Toulmin — *The uses of argument* (analytical and substantial arguments) (Toulmin, 1999). That is what we have attempted to do in our — *Marxism as the science of thought* — “to think out of the box”.

Just to finish it, the practical proposal here presented can be adjusted to the telephony, part of communication sector of the economy and to some others bureaucratic spaces.



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