

RELATIONS BETWEEN THE TWO DEPARTMENTS OF PRODUCTION AND THE PROBLEM OF THE SO-CALLED "MOTIVE IMPULSES"

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Abstract

Certain growth and macroeconomic theories support the popular perception that there is a primacy of the Dept. I over the Dept. II, both in actual historical reality as well as in the Marxian theory. Among the newer theories, the Regulation Approach is a well known representative of this case. The paper reviews the theoretical foundations of this thesis and argues that it is erroneous both on theoretical and empirical grounds.

1. Introduction

One of the fundamental theoretical tenets of the Regulation Approach is based on the misty dictum that the "motive impulses" in the transformation of the forces of production derive from Dept. I. Aglietta advanced, in his first work (Aglietta (1979)) the initial theorisation which was constructed around the concept of the *norm of consumption*¹. It is the only detailed analysis of this area provided by Regulation. And, although it lays the background for the construction of its major concepts, it does not belong to the set of articles of faith of Regulation usually repeated in every paper. Nevertheless, this limits neither its content nor its importance.

He begins with the law of accumulation (organised through the wage-relation), which he defines as based on the increasing significance of relative surplus-value². The latter is mainly effected via the transformation of the conditions of production (and, fundamentally, through technological changes affecting the levels of labour productivity). He combines this process with the valorisation process, which is defined as:

$$C + VA = VE$$

where:

C = constant capital

VA = total abstract labour

VE = total value of product

This leads him to distinguish between the combination of production processes that forms the departments producing means of production (Dept. I) and hence those commodities that are elements of constant capital, and the combination of production processes that produces means of consumption (Dept. II)³. He argues that this distinction is of fundamental importance since the *motive impulses* in the transformation of the forces of production derive from Dept. I (Aglietta (1979), p. 56). There is, therefore, a tendency for the two departments to develop unevenly as a result of the internal accumulation of Dept. I, which is inscribed into the structure of social capital via the increase in the organic composition of capital (OCC). However, because relatively surplus-value is effected through a reduction in the time needed to reconstitute social labour-power, it can only be produced by transforming the conditions of production of the commodities produced in Dept. II. This requires that Dept. II must be able to absorb the commodities produced in Dept. I and incorporate them as constant capital in those production processes that lower the value of means of consumption. If this condition is not met then the uneven development of Dept. II exercises a depressing influence on the accumulation of capital. It is only by revolutionising the conditions of existence of the wage-earning class that this barrier, which is always latent, can be raised and, hence, a harmonious development of the two departments can be achieved, at least tendentially⁴. This requires both a domination of commodity goods over non-commodity goods in wage-earners' consumption and the mass production of these commodities to lower their value and, hence, to lower the cost of reproduction of labour power. The growing social demand for consumer goods, previously considered as luxuries, assures that these can now be produced by capital and, therefore, move from sub-Dept. IIa to Dept. II as a whole (Aglietta (1979), p. 88). This leads to a qualitative change: all technological progress can now be deployed in the transformation of the social conditions of production, advances in productivity in Dept. I find their outlets in the expansion of Dept. II, and the fall in unit exchange-value of Dept. II sufficiently increases the production of relative surplus-value to enable real wage to rise. Accumulation can, thus, proceed rapidly in both departments and commodity production invades the entire life of society (all social relations become commodity relations).

The predominantly *extensive* regime of accumulation is that in which the two departments are not organically integrated. By contrary, in the regime of *intensive* accumulation, the mode of life of the wage-earning class comes under the absolute control of capitalism and the co-ordinated development of the two departments is accomplished. Actually, the whole passage from the extensive to the intensive regime is effected when the accumulation of capital finds its content no longer simply in a transformation of the reproduction of the labour process, but above all in a transformation of the reproduction of labour-power (Aglietta (1979), p. 80).

It is evident that all this thesis is based on a very vague assumption since no one has been bothered to elaborate on what exactly is meant by those "motive impulses" and furthermore to explain why these are the driving force. It is something usually taken for granted by both the regulationists and many of their critics⁵. This is not inexplicable since it is a very popular assumption. Notwithstanding, it is an erroneous hypothesis on both theoretical and empirical grounds. With regards to the former, it lays claim to a certain Marxian pedigree; however, Marx did not make that assumption. On the empirical ground, many of the industries that were instrumental in the birth, and for the first steps, of capitalism belonged to Dept. II and many of the crucial technological changes thereafter originated in it. Despite these criticisms, it is indeed a very widespread hypothesis and has, though in different forms and contexts, a quite a long history behind it.

2. The debate of the '20s

Luxemburg (1971, p. 127) has given a wider version of this argument by suggesting that Marx's schemes of reproduction implied that "accumulation in Department II is completely determined and dominated by accumulation in Department I ... that Department I has taken the initiative and actively carries out the whole process of accumulation while Department II is merely a passive appendage". She begins by examining the first scheme of expanded reproduction where she maintains that:

Accumulation in Department II appears only as a consequence of accumulation in Department I: absorbing, in the first place, the other's surplus means of production and supplying it, secondly, with the necessary surplus of consumer goods for its additional labour. Department I retains the initiative all the time, Department II being merely a passive follower.

(Luxemburg (1971), p. 122)

As a result, accumulation in Dept. II takes an erratic course, without maintaining a constant ratio. In any case, Luxemburg argues, accumulation in Dept. II lags behind that in Dept. I. She even disputes Marx's (1978, p. 588) pointing out at some stage of the first scheme that "if things are to proceed normally, accumulation in department II must take place quicker than in department I, since the part of I ($v+s$) that has to be exchanged for commodities He would otherwise grow more quickly than IIc, which is all that it can be exchanged for". So, she concludes that "those precise logical rules that lay down the relations of accumulation in Department I, seem to have been gained at the cost of any kind of principle in construing these relations for Department II" (Luxemburg (1971), p. 122). Then she goes over to the second scheme where she admits that "in contrast to the previous example, the capital of both departments is here seen to have the same composition, i.e. constant and variable capital are in a ratio of 5 to 1" (Luxemburg (1971), p. 123). Hence, she is obliged to accept that:

Accumulation in both departments here proceeds uniformly, in marked difference from the first example. From the second year onwards, both departments capitalise half their surplus value and consume the other half. A bad choice of figures in the first example thus seems to be responsible for its arbitrary appearance.

(Luxemburg (1971), p. 124-5)

But then she returns by widening her argument and insisting that what matters is not the arithmetic but the structure of the models. So the fact that, for her, Marx's general rule of accumulation is that Dept. II must always enlarge its constant capital by precisely the amount by which Dept. I increases (a) the proportion of surplus value for consumption and (b) its variable capital proves that accumulation in Dept. II is always subservient to that in Dept. I (Luxemburg (1971), p. 127) justifies her accusation of Dept. II being sacrificed to Dept. I.

Rosdolsky (1977, p. 448)⁶, answering Luxemburg's criticism, has correctly pointed out that there is no reason why the impulse to accumulation should come primarily from Dept. I and also that Marx had not suggested so. Robinson, in her introduction to Luxemburg's "Accumulation of Capital" (Luxemburg (1971), p. 19) argues that the arithmetic in Marx's second scheme of reproduction is perfectly neutral between the two departments. Rosdolsky (1977, p. 448-9) goes further and shows that even her criticism of the first paradigm is unjustified and based on a mathematical error. He proves that accumulation is not so erratic as Luxemburg maintained. If the first year is disregarded, it can be

seen that Dept. I constantly accumulates 50% of the surplus-value and Dept. II 30%. This divergence in the rates of accumulation is the necessary result of the difference in the OCC in each of the departments. However, it can be algebraically shown that - if the rate of surplus-value is the same in both departments and does not change in the course of reproduction - the necessary condition for equilibrium in expanded reproduction

$$cII + bcII = vI + aI + bvI$$

where:

c: constant capital

v: variable capital

bv: part of s-v capitalised as variable capital

bc: part of s-v capitalised as constant capital

a: part of s-v for personal consumption of capitalists

s: surplus-value

requires a strict correlation between the rate of accumulation and the OCC. Moreover, if it is assumed - following Marx - that the OCC and the rate of accumulation remain the same in succeeding periods of production, then the rates of accumulation in both departments must move in inverse proportion to the rates of OCC:

$$bI/sI : bII/sII = vII / (cII + vII) : vI / (cI + vI)$$

Then he shows that this condition is being upheld in the first scheme (Rosedsky (1977), p. 449). Therefore, accumulation in Dept. II is not variable nor completely dominated by accumulation in Dept. I, but it follows a regular pattern⁷.

Luxemburg's assertions on this subject are only one of many versions of the popular belief of the dominance of accumulation in Dept. I over that in Dept. II. Many of her critics, either from the "neo-harmonist" reformist or from the Bolshevik side resorted to some formula based on this belief. For example, Otto Bauer but also Bukharin (following Lenin) made that error. There was, however, a significant change in the underlying assumptions. Whereas Marx's schemes of reproduction are based on the assumption of constant conditions of production and constant OCC, rate of surplus-value and rate of accumulation --hence, consciously abstracting from technical changes and increases in labour productivity -- almost all the subsequent formulations presuppose the changeability of these conditions. However, since Marx's strict assumptions are relaxed it is

obvious, as Rosdolsky (1977, p. 495) argues that the formula $c_{II}+bc_{II} = v_{I}+a_{I}+bv_{I}$ does no longer hold and the conditions of equilibrium are disturbed.

Otto Bauer, setting out to prove the possibility of an undisturbed process of accumulation even with a constantly rising OCC, allows Dept. II, which is left with an undisposable remainder of commodities as a result of the technical changes caused by the rising OCC, to "invest" each year a sum of money corresponding to the value of this remainder in Dept. I. In order to accomplish this, he drops (like Tugan-Baranovsky) one of the basic underlying assumptions of the Marxian schemes: namely the one that the only relation between the two departments is the mutual exchange of their respective commodities. This leads him to assume --contrary to Marx-- that the rate of growth of constant capital is much higher than that of variable capital and that accumulation in Dept. I grows faster than Dept. II, which moreover subsidises and depends upon the former. Henryk Grossmann has shown that an extension of his scheme after the initial time horizon of four years results in a breakdown in the 35th year, since the relation of surplus-value to capital employed would have fallen so much that capitalists could no longer accumulate.

Bukharin (1972), on the other hand, in his wide-ranging critique of Luxemburg not only fails to confront her position about the relations between the two departments but even reasserts it by referring to an excerpt from Lenin (1968, p. 58-59):

In actual fact, the analysis of realization showed that the formation of a home market for capitalism owes less to articles of consumption than to means of production. From this it follows that Dept. I of social production (the production of means of production) can and must develop more rapidly than Dept. II (the production of articles of consumption). Obviously, it does not follow from this that the production of means of production can develop in complete independence of the production of articles of consumption and outside of all connexion with it.

Lenin, aiming to prove the possibility of the realisation of surplus-value (as analysed in Vol. II), connects it with the law of the increasing composition of capital (as expounded in Vol. III): "... according to the general law of capitalist production constant capital grows faster than variable... Consequently the department of social production which makes the means of production must grow faster than the one which produces the means of consumption. Thus, for capitalism, the growth of the internal market is to a certain extent "independent"

of the growth of individual consumption" (Lenin (1960-70, vol. 3, p. 56). Rosdolsky proved that Marx has not made this assumption and he attributes Lenin's fault to two factors:

a) The fact that his views were formed in the context of the specific situation in Russia during the early period of capitalism in which the industrialisation of the still semi-feudal country seemed to provide an unlimited market for the means of production, since it was building its industrial base. In the case of such countries, passing the stage of initial industrialisation, Lenin's conception is correct (Rosdolsky (1977), p. 476).

b) When Lenin formulated his position on the realisation problem neither the "Theories of Surplus-Value" nor the "Grundrisse" were known to him. Consequently, he ignored important methodological aspects of Marx's theory and tended to consider the analysis of the schemes of reproduction (the Part III of Vol. II) as Marx's final word on the reproduction of capitalism. However, we now know that Marx planned the first two volumes as the analysis of "capital in general" and that their conclusions had to be concretised and supplemented at a later stage by the analysis of "capital in concrete reality". The confusion between these two levels of analysis leads him to attempt to incorporate within the schemes of reproduction —i.e. Marx's investigation of the relations of equilibrium of capitalist reproduction under constant conditions of production, and, therefore, in abstraction from all the elements which alter these conditions—factors that introduce changes in these conditions. Marx's schemes were not supposed to be a "true reflection" of the concrete capitalist world. If one attempts to incorporate within Marx's model of expanded reproduction as many factors as possible from capitalist reality, he will very soon come up against the barriers which are set to capitalist production by the nature of capitalism itself and, therefore, the possibility of unhindered reproduction will be refuted in the long-run since capitalism is a crisis-ridden system. In this sense, technical change and the increase in the OCC cannot be integrated within these schemes. A misunderstanding of this Marxian position and its methodological pre-suppositions and implications lies behind Luxemburg's critique, the "neo-Harmonist" formulations but also Lenin's position.

3. Mandel on the relations between the two departments of production

More recently, Mandel (1978, p. 62-69) adopted an eclecticist and but equally erroneous position. On the one hand, he accepts Bauer's analysis, which he also attributes to Marx:

It follows that the reproduction schemas which imply competition assume *as a rule* the existence of *different, rather than equal* rates of accumulation in the two departments, only occasionally leading to equalization of the rate of profit. This corresponds to the real *modus operandi* of the capitalist system. It also points the way to a solution of the technical problem seen by Luxemburg in the fact that the "unsaleable" portion of commodities of department II embodies part of the surplus-value created in that department. As a matter of fact, Luxemburg dismissed out of hand Marx's convincing solution, which was later developed in length by Otto Bauer. Part of the surplus-value produced in department II is periodically transferred to department I, precisely when (and because) department exhibits, over a considerable length of time, a higher organic composition of capital than that of department II.

(Mandel (1978), p. 64-65)

In order to facilitate this formulation, he maintains wrongly that while Marx assumed an equal rate of exploitation in both departments, he did not assume either that the OCC will remain the same or that the rate of surplus-value will stay the same (Mandel (1978), p. 68). Rosdolsky proved that this a misconception of Marx's position. Therefore, for Mandel --and despite his admission of the fact that Marx's equilibrium formula of expanded reproduction ($vI+aI+bvI = cII+bcII$) implies an identity of the rate of growth of demand for consumer goods generated by Dept. I and the rate of growth of constant capital in Dept. II-- the rise in the OCC entails that the demand for consumer good generated in Dept. I will normally grow more slowly than constant capital in that sector. As a result, the precondition of equilibrium is a rate of growth of constant capital in Dept. II lower than that in Dept. I (Mandel (1978), p. 67).

On the other hand, he maintains that "it does not follow at all from the evident truth that department I is the *primum movens* of the accumulation process, that department II is somehow "sacrificed to" or "dependent upon" department I, in contradiction to the laws of private property and competition" (Mandel (1978), p. 64). A rate of growth of constant capital in Dept. II which is permanently lower than that in Dept. I is incompatible with these mysterious "laws", since there is no reason why the capitalists of Dep. II should forever abstain from employing modernised technology and machinery and reducing their costs of production (Mandel (1978), p. 67). He is at least cavalier in the way he introduces those "laws of private property and competition" as a *deus ex machina* which brings his assertions closer to reality. However, the Marxian

schemes are constructed at the level of "capital in general" and in abstraction from the competition among capitals. Furthermore, this should take into account the evolution of the rate of profit in each department. Why should the capitalists of Dept. II invest (i.e. transfer) a part of their surplus-value in Dept. I, since its higher OCC implies a lower rate of profit? The only possible explanation is that the fall in the rate of profit is compensated for by the increase in relative surplus-value (a factor not considered in Bauer's model). However, there are two objections. First, that there is no reason why the increase in relative surplus-value cannot take place also in Dept. II and therefore nullify any differential with Dept. I. Second, as Rosdolsky argues for Bauer's scheme (Rosdolsky (1977), p. 503), Marx in the "Grundrisse" showed that the increase of relative surplus-value cannot extend indefinitely, since technical progress implies a fall of the paid portion of the working day and of the relation of total living labour to the labour objectified in the means of production and, therefore, a fall in the rate of profit is inevitable:

The larger the surplus-value of capital *before the increase of productive force*, the larger the amount of presupposed surplus labour, or surplus-value of capital; or the smaller the fractional part of the working day which forms the equivalent of the worker, which expresses necessary labour, the smaller is the increase in surplus-value which capital obtains from the increase of productive force. Its surplus-value rises, but in an ever smaller relation to the development of productive force. Thus the more developed capital already is ... the more terribly must it develop the productive force in order to valorise itself, i.e. to add surplus-value to itself, even to a slight degree — because its barrier always remains the relation between the fractional part of the day which expresses *necessary labour*, and the entire working day. It can move only within these boundaries.

(Marx (1981), p. 340)

It is difficult to see how expanded reproduction can be sustained, under Mandel's contradictory assumptions; although he somehow transforms the context of the problem from that of the Marxian schemes (the ability of capitalism to reproduce itself under unchanged conditions of production) to that of actual realisation of capital within concrete historical reality. Obviously, Bauer's scheme does not hold. Furthermore, if Mandel wanted to incorporate these periodic transfers of surplus-value from Dept. II to Dept. I and the consequent erratic movement of the rate of accumulation in each department as an integral element, and not as an exogenous (?) variable, in a model of unhindered and

sustained reproduction of capitalism he should have proposed a regulating mechanism (perhaps the rate of profit?). However, he does not do so and also Grossmann has proved that Bauer's model results in a breakdown of capitalism because of the collapse in the rate of profit. Instead of this, Mandel patches together his argument by saying that because of these periodic transfers of surplus-value from Dept.II to Dept. I and the consequent fluctuations in the rate of accumulation in each department it is impossible to avoid periodic crises (Mandel (1978), p. 67-68). Of course; but this is no longer a scheme of reproduction. Essentially, his errors derive from the same methodological misconceptions that characterised many of his predecessors. He understands Marx's method as a "successive approximation to the 'appearances' of day-to-day capitalist economy" (Mandel (1978), p. 68); a view that differs very little (only for this reference to "appearances" and hence a hint of dialectics of form and essence) from Sweezy's identification of the Marxian dialectical method with the successive approximation method of orthodox economics⁸. He, therefore, understands the Marxian schemes of reproduction not as an identical reflection of actual capitalist reality but as an abstraction from it. So far, so good. But he is not clear at all with regards to the level of this abstraction. Consequently, he commits the same mistake for which he correctly accuses Luxemburg: he confuses the levels of abstraction. Their difference lays in the specific form of their misconceptions. Luxemburg rejects the Marxian schemes as a poor and erroneous representation of actual capitalist reality, whereas Mandel believes that, although they do not incorporate the "laws of motion" of capital (i.e. the rising OCC, technological change etc.), they could be made to incorporate them (Mandel (1978), p. 63). The result is a highly eclectic mix which neither represents a scheme of reproduction (in the sense of the Marxian analysis) nor solves the problem of realisation and responds to Luxemburg's incorrect formulations.

4. Again on Regulation and the "motive impulses"

Confronted with the theoretical grandeur and structural coherence of the contributions of those implicated in the debates around the Marxian schemes of reproduction, despite their shortcomings, Regulation Approach shows a poor record. Not only it is a "middle-range" theory, its performance is also of a middle-brow rating. If a central problem of most of the older contributors was the misconception of the methodological aspect of the problem Marx set out to solve with his schemes, Aglietta makes a mess of it. If his predecessors have ill-defined levels of abstraction, he is almost totally unable to distinguish and define these levels properly. It is, therefore, not clear at all at what level he constructs his theory of departments of production and their interrelationship.

Obviously, it is not that highly abstract level of the Marxian schemes. Is it then the actual, concrete historical reality of capitalist development? His "middle-range" method points to some middle-of-the-road methodological choice, the constitutive assumptions of which are not clear at all. He introduces technical change, increase in the OCC and relative surplus-value and bases all these on the dominance of Dept. I over Dept. II, during the regimes of accumulation prior to Fordism. His position in a nutshell is the following:

The Marxist theory of accumulation is thus indeed a theory of the contradictory development of capitalist relations of production. It is quite contrary to any dialectical procedure to seek a general formal law of evolution of the rate of return¹⁰. Capitalist accumulation necessarily comes up against obstacles. It derives its impulse from the uneven development of Department I. But this uneven development meets a barrier in the course of accumulation. This barrier, which is always latent, can only be raised if capitalist production revolutionizes the conditions of existence of the wage-earning class. It is only by this social transformation that commodity production can achieve a rhythm of expansion which permits at least a tendential realization of that harmonious development of the two departments which is a necessary condition for a regular rhythm of accumulation. As we shall show later on, this gives us a theoretical basis for characterizing the historical epoch that has arisen since the First World War as a new stage in the development of capitalism. It also gives us an analytical instrument for interpreting the cyclical crises of capitalist accumulation.

(Aglietta (1979), p. 60-1)

Aglietta begins with a caricature of the Marxist theory of accumulation, which at that initial stage was supposed to provide the general theory behind Regulation Approach's intermediate formulations. It is trivial to say that the Marxist theory of accumulation is a theory of the contradictory development of capitalist relations of production. However, it is not at all contrary to dialectics to formulate an analysis of the general tendency of the rate of profit. On the contrary, Marx provides such an analysis with his theory of the Tendency of the Rate of Profit to Fall (TRPF). On the other hand, we have shown that Marx does not assume that the uneven development of capitalism is based on the faster development of Dept. I (and especially at the expense of Dept. II). Then, Aglietta constructs a model which claims to represent, at the same time and at the same level of abstraction, a general theory of capitalist accumulation and a characterisation of the historical trends and development of capitalism. However, it is difficult to see how on this ground can be justified the hypothesis of the

dominance of Dept. I over Dept. II. If this is not correct within the highly abstract and very strict framework of the Marxian schemes of reproduction, obviously it does not hold at all in concrete historical reality. The actual day-to-day workings of capitalism, even for the "pre-Fordist" periods, do not show any proof of subservience of the department producing means of consumption to that producing means of production nor a faster development of the former (apart from periods of initial industrialisation).

Moreover, Aglietta advances a milder, but even more questionable and erroneous, version of Luxemburg's thesis: *the motive impulses for the transformation of the productive forces* derive from Dept. I. In other words, technical innovation and the employment of the extraction of relative surplus-value take place primarily and exclusively in Dept. I. This is a unsustainable hypothesis. However, Aglietta does not bother to justify it and treats it as self-evident. We have already shown that Mandel, who subscribed to a more flexible and qualified version of this hypothesis (namely that although accumulation and technical change proceed faster in Dept. I in general, there are periodic variations of this pattern in favour of Dept. II and also capitalists in Dept. II will not abstain forever from innovating and employing relative surplus-value extraction), is wrong. The same reasons hold for the regulationist version; and more forcefully since the latter does not allow even for Mandel's periodic variations in the rates of growth and the interrelationship of the two departments. It seems there is a simplistic and linear identification, on behalf of the Regulation Approach, of the transformation of the productive forces (i.e. changes in the organisation of the labour-process, technological innovation etc.) with the production of new modernised means of production. Obviously, this is not the case. Relative surplus-value can increase with the re-organisation of the labour-process and the latter does not always require new machinery, but rather a re-arrangement of previous technological systems. Furthermore, if this is the justification for the regulationist thesis, then there is no reason why it should hold only for the "pre-Fordist" regimes and not for Fordism as well. But then Regulation Approach's very concept of Fordism breaks into smithereens, since its major representative, the automobile industry from which it takes its name and where the alleged radical change in the labour-process took place belongs to Dept. II (to the extent that it produces vehicles for mass consumption and not means of transport for the production of commodities).

Concluding, Regulation Approach's foundation on the primacy of the Dept. I is completely unfounded on both theoretical (its Marxist credentials) and empirical (its relevance to reality) grounds. Moreover, the methodology and the underlying assumptions of the regulationist argument are profoundly wrong.

Notes

1. For a critique of Regulation's theory of consumption see Mavroudeas (1990, ch. III).

2. The restatement of Regulation's definition of certain terms is necessary here:

Absolute surplus-value is the effect in the homogeneous field of value of the wage relation as a general process of separation between individuals, and separation of the power of disposal over the means of producing their conditions of existence (Aglietta (1979), p. 69). The distinction between absolute and relative surplus-value denotes an articulation of social relations that induce different but complementary practices (Aglietta (1979), p. 68) and, therefore, these are inseparable from one another.

The *regime of accumulation* is a form of social transformation that increases relative surplus-value under the stable constraints of the most general norms that define absolute surplus-value (Aglietta (1979), p. 68).

3. Dept. II is further divided in two sub-departments. Subdepartment IIa produces means of consumption (mainly luxury goods) for the capitalists and sub-department IIb produces means of consumption for the wage-earning class.

4. Aglietta maintains, also, that the uneven development of the two departments has a significant effect on the *devalorisation of capital*. According to Aglietta capitalist production is founded on the transformation of conditions of production, whose origin is the creation of new means of production and the lowering of the value of those means that replace those that have been consumed (Aglietta (1979), p. 102). However, there is no reason why the pace of transformation of the productive forces should be adapted to the pace of replacement of fixed capital which satisfies the conservation of the value of constant capital. This is an irreconcilable contradiction. On the one hand capitalism, as a commodity-producing society, in order to reproduce the conditions of production has to conserve the value of all commodities in exchange. On the other hand, because capitalism is founded on the antagonism of the wage relation, it cannot reproduce its constitutive relation except by revolutionising the conditions of production. There results a devalorisation of capital (Aglietta (1979), p. 103). Inasmuch as the tendency towards the uneven development of the two departments is not offset by the general penetration of capitalist production into Dept. II, then the devalorisation of capital is expressed as a recurrent movement formed by successive phases of massive increase in gross fixed capital formation and phases of deep depression (Aglietta (1979), p. 104). If the transformation of the conditions of existence of the wage-earning class contributes to the harmonious development of the two departments, then the devalorisation of capital becomes a permanent process, structurally incorporated into the rhythm of capital formation.

5. For example Clarke (1988), despite complaining about the vague character of Aglietta's assertion on this matter, does not question its overall validity.

6. Joan Robinson (1971), also, in her introduction to Luxemburg's book has raised a similar objection.

7. Rosdolsky (o.p.p. 449) points out that the cause of this confusion in the mathematical aspect of Marx's schemes is the fact that in both schemes accumulation in the initial year does not

follow the rule which guides it in the succeeding years. He attributes this shortcoming to a possible preliminary attempt which Marx found no time to correct.

8. For a critique of this method see Rosdolosky (1977, p. 453) and Fine (1980, ch. 1).

9. We suggest that Regulation belongs to this breed of theories that neglect or oppose to the "grand theoretical" methodology (i.e. a theory covering the whole spectrum from the more abstract laws and concepts to the empirical analysis) and substitute it with intermediate concepts with an almost immediate identification with the most concrete phenomena or with empirical perceptions believed to be self-evident. A vocal supporter of this methodology was Merton (1968). For a critique of this methodology, with reference to the Flexible Specialisation thesis and Regulation see Fine (1987) and Mavroudeas (1990).

10. He refers to the rate of profit: $s/(c+v)$. His assertion amounts, essentially, to a denial of the existence in capitalism of a tendency of the rate of profit to fall (co-existing with its counter-acting forces).

References

- Aglietta M.* (1979), "A Theory of Capitalist Regulation", New Left Books.
- Bukharin N.* (1972), "Imperialism and the Accumulation of Capital" in Bukharin N. -Luxemburg R. (1972) "Imperialism and the Accumulation of Capital", Penguin.
- Clarke S.* (1988), "Overaccumulation, Class Struggle and the Regulation Approach", mimeo.
- Fine B.* (1980), "Ideology and Economic Theory".
- Fine B.* (1987), "Segmented Labour Market theory: a critical assesment", Birkbeck College Discussion Paper.
- Fine B. - Hams L.* (1979), "Rereading Capital", Columbia University Press.
- Lenin V. I.* (1968), "A note on the Question of the Market Theory" in Collected Works vol. 4, Lawrence and Wishart.
- Luxembrug R.* (1971), "The Accumulation of Capital", Routledge.
- Mandel E.* (1978), Introduction to Vol. II of Capital, Penguin.
- Mavroudeas S.* (1990), "Regulation Approach: A Critical Appraisal", Ph. D. thesis, Univ. of London.
- Merton R.* (1968), "Social Theory and Social Structure", The Free Press.
- Robinson J.* (1971), "Introduction" in Luxemburg (1971), "The Accumulation of Capital", RKP.
- Rosdolsky R.* (1977), "The Making of Marx's "Capital", Pluto.