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## Economic development and the revival of the classical surplus approach

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# Economic Development and the Revival of the Classical Surplus Approach

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## Introduction

In this note we describe how we have been trying to rethink development economics in our own research programme and teaching (both graduate and undergraduate) practice in the Instituto de Economia at the Universidade Federal do Rio de Janeiro, Brazil (that is why all references here are to our own works<sup>1</sup>). Over the last few years we have been rethinking development economics adopting the “standpoint” of the Classical Surplus Approach, in the form in which this approach has been revived and modernised by Piero Sraffa and Pierangelo Garegnani since the early sixties. That, of course is not a fashionable route nowadays, and to our knowledge is not adopted elsewhere in Latin America at all, but it should perhaps be noted that this was the perspective taken by a fine theorist, historian of thought and development economist: the late Krishna Bharadwaj.

## Two Problems with Traditional Development Economics

In our view, traditional development economics, in spite of its great achievements, suffered from two serious problems. First of all, development economists had a chronic tendency to jump too quickly to the normative dimension, to suggesting policy interventions while perhaps not having clarified sufficiently how the developing economies actually functioned. This tendency was so deeply entrenched that often some of the best development economists fell into the habit of treating the developing capitalist economies as if they were planned or socialist systems (witness Kalecki’s treatment of what he called “mixed economies” or the widespread use of “Say’s Law” in Latin American Structuralist literature).<sup>2</sup>

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<sup>1</sup> Many of these papers are available at our homepage at [www.redeal.org](http://www.redeal.org) (look for programas and then workshop 2000 and then “teoria do desenvolvimento economico- Carlos Medeiros & Franklin Serrano”). Some of the papers have english versions that are not yet online. Our e-mail addresses are: [ca29@centroin.com.br](mailto:ca29@centroin.com.br) (Medeiros) and [franklin.s@openlink.com.br](mailto:franklin.s@openlink.com.br) (Serrano).

<sup>2</sup> Cf. Serrano(2001)

The other, very much related, basic shortcoming of development economics was the fact that development economists did not in general engaged themselves into a detailed discussion of the normal operation of the market mechanism, of what it could or it could not realistically achieve. That often led to some underestimation of the difficulties of planning on the product markets and, more importantly, to enormous confusion and ambiguity concerning what happens in the markets for the so called factors of production (i.e. how distribution, labour employment and capital utilisation are actually determined).

For example, a large number of critical development economists argued (and still argue) that the “static” resource allocation inefficiencies of a number of developmental policy interventions are more than compensated by their positive “dynamic” efficiency effects. But what do they mean by static allocation inefficiency? Do they mean developing economies would have a spontaneous tendency to a Pareto efficient static general equilibrium with full employment of all factors in the absence of interventions? Probably not. But then if it is not the neoclassical concept of efficiency what do development economists really mean by static allocation efficiency or inefficiency?<sup>3</sup>

Can unregulated competitive markets really generate efficient allocations, a tendency towards full employment of all the factors of production, automatic equilibrium in the external trade and balance of payments, etc.? These are very controversial but crucial general questions in economics and the development economists were often happy to grant that maybe competitive product and specially factor markets were great for the North but for some reason they did not exist in the South.

Given such widespread but theoretically weak “imperfectionist” attitude, later, it was not that difficult for the neoliberal neoclassical counterrevolution to argue that the problem of development was precisely that of creating the markets (and associated institutions) that supposedly performed so well in the North and were somehow missing in more tropical surroundings.<sup>4</sup> It was of course this counter revolution that drove development economics to its current very narrow and rather limited corner, where advocates of pro-active development policies are reduced to trying to prove that “market failure” is greater than “government failure” in the South and thus intervention is “Pareto improving”.

This defensive attitude however does not seem to be necessary. In our view, the neoclassical characterisation of the operation of the market mechanism is wrong both in the North and in the South, for a large and well documented

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3. The same ambiguity appears in any other problem that requires a discussion of relative prices. For instance when development economists discuss comparative advantage in international trade, it is never clear if they mean by this the neoclassical HOS view or the Classical view of say Ricardo, which contrary to what is in most textbooks, was totally different (it had nothing to, for instance, with full employment).

4. Note that something analogous happened to Keynesian economics in the North when the unstable theoretical compromise between the Keynes’s new ideas (such as effective demand and on the institutional determination of the money rate of interest) and his old neoclassical views (on marginal productivity of factors and the supply and demand for money) did not survive the monetarist and rational expectations attack on the then prevailing “neoclassical synthesis” (Serrano, 2000a).

number of theoretical , empirical and historical reasons. The fact that neoclassical economists is nowadays ideologically and culturally dominant does not mean that it is necessarily scientifically sound.

If we look at the experience of both the North (mass unemployment) and the South (lack of growth convergence) in the last two decades, it seems quite clear that from a policy point of view we desperately need Keynesian Welfare States in the North and Developmental States in the South. It seems rather difficult to think that this struggle can be sustained intellectually if development economics remains stuck in that little corner.

Therefore, we believe that there is basic problem of economics in the discussion of development. We are fully in favour of enlarging the agenda of economic development to include grassroots movements, social policies , gender issues, environmental aspects and so on. However, if almost everybody involved in the discussion (even non economists) implicitly accepts the neoclassical dogma that a competitive capitalist economy left to its own devices in principle does generate an optimal allocation of “scarce” resources it will be very difficult to move forward in most of these very complex issues. For instance, taking for granted this neoclassical view of the market mechanism makes people believe in all sorts of (often purely imaginary) things such as the trade-off between equity and efficiency, that (non lump sum) taxes or minimum wages are “distortionary”, etc. that come from the two fundamental theorems of neoclassical welfare economics.

The essential task then is to understand better how the capitalist economies of the North and the South really work . That requires some theoretical and a huge amount of applied work to free us from the myths of neoclassical economics and of the totally distorted account of the evolution of the economies of the North and of the South as portrayed by the IMF and World Bank and mainstream academic institutions over the last two decades.

## **The Revival of the Classical Surplus Approach**

In a very broad sense, if we consider the economic theories of the general operation of the market mechanism we can say that most of them were based around three big ideas or general principles. In the old days these would have been called “principles of political economy” (or more recently of “economics”).

The first of these is the concept of the economic surplus typical of the old classical economists from Petty to Ricardo. According to this principle , the surplus is determined by technical conditions of production and a customary “subsistence” wage<sup>5</sup> and competition operates by distributing the surplus among the various types of property incomes via the price system. This notion of the surplus is of course compatible with a number of different specific theories and models and it has been used as a general analytical

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<sup>5</sup> Note that as Sraffa pointed out , in modern conditions wages, besides the “ever present element of subsistence” also can be seen as absorbing part of the surplus through bargaining. Sraffa and his followers have been discussing the possible role of the interaction between changes in money wages and the State’s long run rate of interest policy as influencing the determination of this “surplus” part of the wage (Serrano, 1993).

framework by a number of people explicitly or implicitly (whether or not they considered themselves as followers of the classics).<sup>6</sup>

The second is the so called principle of substitution which, of course, gave rise to the marginalist revolution and the birth of the neoclassical approach. It is indeed the notion of factor substitution (both direct and indirect) that gives a basis for the idea that factor prices reflect the “relative scarcities” of the endowments of the factors of production. The scarcity of the factors (and particularly that of labour), is the necessary and only basis, in economies in which there is production, for arguing that relative product prices are indexes of scarcity and everything else that follows from that.

The neoclassical approach has evolved so much and in some directions that which have taken it actually very far from its beginnings that we nowadays tend to forget that the neoclassical approach, as a vision of how the market mechanism works, is entirely based on the presumed operation of this fundamental principle of substitution as much as the classical approach is based on the notion of the surplus.

There is also a third fundamental principle, the principle of effective demand, according to which the aggregate levels of output (and not just relative outputs) are determined by the monetary demand of those who can pay the normal supply prices. That principle was introduced by Keynes (and by Kalecki) in the thirties and is also one of these big ideas that led to a number of different developments in many areas and produced a lot of specific theories and models organised around this principle.

The first two principles (surplus and substitution) gave rise, of course, to distinct approaches to the general economic theory, particularly to the theory of prices and distribution, respectively the classical and the neoclassical. The third principle (effective demand) being concerned with perhaps less general questions and not necessarily linked to a particular approach to price (and distribution) theory could not and did not really give rise to another general approach to economics. It was only natural then that most of the fundamental discussions about the principle of effective demand have been in one way or another concerned with its compatibility or incompatibility with the general approaches based on the other two principles.<sup>7</sup> Equipped with this simple taxonomy, it is quite easy to explain the essentials of the general project of the modern Classical Surplus Approach led by Piero Sraffa at Cambridge, UK and developed by his closest followers. This project can be conveniently summarised here as being based on three points.

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<sup>6</sup> Some examples of theories that use the surplus principle in some way without being explicitly classical theories would include Lewis’s analysis of the dual economy, Leontief input-output economics and conflicting claims models of inflation, among many others.

<sup>7</sup> For instance, the debate mentioned in note 2 above relating the principle of effective demand to the neoclassical theory based on factor substitution. Another example are the controversies surrounding the so called Cambridge theory of distribution put forward by Kaldor, Joan Robinson and others, in which it is questioned if this is the best way to ensure the compatibility between the surplus principle and the principle of effective demand (for a negative assessment from a Sraffian point of view on see Serrano (1996,2001).

The first point is the internal critique of substitution which has shown that this principle cannot in general be deduced in economies that use produced means of production. It is a critique of the attempt to treat capital as factor of production in the same footing as the non reproducible factors such as labour and land, which shows that there are serious theoretical flaws on the idea that factor prices could possibly reflect “relative scarcities”.

The second point is the idea that we should return in the general theory of value and distribution to the classical view based on the concept of the surplus, which leads to an “objective” theory of relative prices, where competitive prices reflect the technical conditions of production and the rules of distribution.

Finally, because we are returning to the classics after Keynes, the third point is that we should fully integrate the principle of effective demand in the analysis, thus we should produce some synthesis between Keynesian-Kaleckian and Classical theory basing the whole thing on the principle of the surplus. That allows us to study the importance of effective demand not only for short fluctuations but for the long run process of accumulation.

## The Surplus and Economic Development

The above description may sound to you rather abstract and “high brow” but we think that this approach not only much consistent theoretically than the neoclassical approach but also, and more importantly for our purposes here, provides a much better base for explaining the stylised facts of economic development. Here, for the sake of brevity we can illustrate that by mentioning just two of these stylised facts (although very important ones):

- i) the connection between economic development and the fall in the share of employment in agriculture and
- ii) the association between the investment share and the rate of growth (both in absolute terms and per worker).

The first of these stylised facts can be seen as the result of two important structural tendencies. 1) An initial increase in productivity in agriculture without which there can be no surplus at all.<sup>8</sup> 2) the inevitable change in the structure of demand away from agriculture as soon as the social division of labour which was made possible precisely by this productivity increase in the basic sector becomes more and more complex (This is what is behind Engel curves). That, of course, was the view of the old Classical economists who were all very much concerned with this process of structural change and the policies and institutions that would improve it at specific historical and geographical circumstances (some examples: W. Petty argued for public investment in infrastructure to lower the cost of food; Cantillon was concerned that urban expansion required a big improvement in the quality of urban manufactures so that those could be traded for a part of agricultural surplus which was needed to feed the city dwellers; the French Physiocrats emphasised the need to use modern capital goods in “industrialise” agriculture; Ricardo believed Britain should import food from countries where good quality land was more abundant to lower the cost of food).

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<sup>8</sup> See Medeiros(2000b) for the fundamental role of the food surplus in economic history.

In modern times we can see the overwhelming importance of this pattern of structural change in the difficulties in increasing real wages and living standards in the Post war industrialising development strategies in Latin America and India, where agriculture was not modernised at an adequate pace . Other notable examples are the chronic difficulties experienced in the Soviet Union or the dramatic changes in China when agriculture was modernised in last few decades.<sup>9</sup>

## Decreasing Marginal Returns to Capital Accumulation and “Convergence”<sup>10</sup>

The second stylised fact mentioned above , that of a strong connection between the share of capital investment and the rate of growth of GDP and GDP per worker , shows that in actual historical experience there is no general tendency towards convergence and that countries that speed up (physical) capital accumulation do grow much faster.

As it is well known, this stylised fact is difficult to explain with the usual neoclassical (Solow) exogenous growth theory, in which capital accumulation has decreasing marginal returns. In fact, in the last decade or so an enormous amount of effort was put in the so called neoclassical endogenous growth theory to try to account for the lack of evidence of decreasing marginal returns to capital accumulation in reality. The endogenous growth models are however based on extremely arbitrary assumptions about the technological relations of the economy.

It should be noted that the tendency towards decreasing marginal returns to capital accumulation in exogenous growth theory is in fact a consequence of the neoclassical theory of prices and distribution , since in that theory there is market clearing in the markets for factors of production. The decreasing returns to capital accumulation are not a technological assumption but an inevitable result of assuming that the extra capital goods are being combined with a fully employed (or at any rate “scarce”) labour force . The neoclassical endogenous growth literature , on the other hand , only manages to eliminate the tendency towards decreasing returns to capital accumulation by resorting to fantastic assumptions about “externalities” that always have the correct form and precise magnitude to offset exactly the basic tendency towards decreasing returns that comes from the supposedly scarce labour force.<sup>11</sup>

It is rather ironic to see so many development policy enthusiasts embrace neoclassical endogenous growth theory and happily swallow their extremely ad-hoc assumptions apparently without realising how curious it is for a theory of growth supposedly applicable to developing economies to be based on the idea that the labour force is a scarce factor.

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<sup>9</sup> On the Chinese experience see Medeiros(1999). For the Brazilian experience Medeiros (2001). For an analysis of the importance of fast productivity growth in agriculture for the development of mass consumption in the U.S. see Medeiros (2000a).

<sup>10</sup> This section is based on Serrano (2000b)

<sup>11</sup> There are of course a few endogenous growth models in which there is unemployment but this is supposed to be caused by real wage rigidities given the (incorrect) presumption that factor substitution works in general.

It seems clear however, or at least it always seemed clear both to the old classical economists and to the traditional development economics literature, that capitalist economies in general and developing economies in particular were “labour surplus” economies. From a classical perspective the labour force in developing economies is anything but scarce (in the developed economies also the size of the labour force never seems to have been historically an important obstacle to long run growth).

Merely dropping the neoclassical idea of labour scarcity immediately eliminates the tendency for the decreasing returns to capital accumulation, for the added capital equipment is usually combined with more labour (or more productive workers). Thus in a Classical view the growth of the productive capacity of the economy depends directly on the rate of capital accumulation. If we simply add the Smithian considerations about increasing returns to scale (which were later recovered by Kaldor) we can also easily explain the connection between the accumulation and the growth of GDP per worker. Note also, that if long run growth depends directly on capital accumulation there is absolutely no reason to expect automatic convergence of growth rates, since convergence results are entirely based on the traditional neoclassical tendency towards decreasing marginal returns to capital.<sup>12</sup>

Therefore, once the silly idea of labour being scarce is dropped, it becomes clear that unequal development is simply the norm in capitalist economies. That also means that some sort of developmental State that is concerned with promoting capital accumulation is actually a necessary (but not sufficient) condition for “catch up” or “convergence”.

## **Internal and External Constraints on Capital Accumulation and Development**

In developing capitalist economies, i.e., those that, in one way or another, are capable of producing a significant surplus over the customary subsistence standards, in the long run, even more than in the short, since it is easier to adapt output to demand over time, through the operation of the principle of effective demand, the decisions to invest generate aggregate saving through variations of income and output. The accumulation of capital thus depends on the growth of investment.<sup>13</sup>

However, the continuous expansion of investment that generates productive capacity for the private sector depends ultimately on the level and growth rate of final demand (government spending, consumption and exports)

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<sup>12</sup> Note that as Sraffa showed the whole idea of the marginal product of capital anyway would only make sense in the narrow confines of an homogenous capital model. No reference to this critical results from the early sixties is to be found in the modern textbook of growth theory. There is also no reference to more recent work by Pierangelo Garegnani, Bertram Schefold and Fabio Petri that show that the capital theoretic problems raised by Sraffa and endemic to all versions of neoclassical general equilibrium theory and are not an “aggregation problem” nor confined to the “naive” production function model. The critical literature produced after the mid seventies has simply been ignored (see Serrano(1998a, 2000a)).

<sup>13</sup> For critique of the savings gap of Chenery’s two gap model see Serrano & Willcox (2000).

through the accelerator or capital stock adjustment effects. In our view it is those supermultiplier effects (i.e. the combined effects of the accelerator and the multiplier) that explain the pattern of the stylised fact connecting the share of investment and the growth rate.

For the data seems to show that in fact it is the investment share that adjusts to the growth rate, after a considerable time interval. That can be explained in a demand led growth regime by the fact that when the growth rate of final demand increases then investment and capacity start growing together but initially without an increase in the investment share since an increase in the actual degree of capacity utilisation can and does accommodate the faster expansion of both final demand and investment.

Only gradually over a longer period of time, through a “flexible accelerator”, the share of investment starts increasing to adjust more finely the levels of productive capacity to the level and growth rate of final demand.<sup>14</sup> In any case the pace of demand led growth is strongly affected by the macroeconomic policies of each State. These policies are in the long run very much influenced, with the possible exception of the country that issues the international currency, by the need to satisfy the external or balance of payments constraint.

Thus, in our view the key to understanding the process of capital accumulation in the developing countries is the study of the complex interaction, in each historical period, between the international trade and financial environment economic, the associated geopolitical situation (which is crucial to understand market access and finance) and the development policies of each nation State. Different developmental States intent on speeding up structural change, improving infra structure, expanding and diversifying the internal market or alternatively on capturing strategic positions in export markets will have completely different degrees of success according to the different international environment they face. Our research on development focuses precisely in the study of the interaction between the changes in the international economic and geopolitical environment, under different international financial and monetary arrangements and the changes in the policies and development outcomes of different States. The main “transmission channel” between these two levels being changes in the balance of payments situation of the developing States, which by their turn affect the macroeconomic policies and through then the pace of capital accumulation.<sup>15</sup>

We have for some time now been using this general framework as a basis for a research programme. This programme has already produced a number of specific studies on growth of specific countries or regions and we feel that some of the results are encouraging.<sup>16</sup> This scheme is not only theoretically

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<sup>14</sup> Note however that this is usually achieved merely by investment growing for a while faster than final demand and not through an absolute reduction in final demand. On the supermultiplier story see Serrano (1995,1996, 2001), Serrano & Willcox (2000) and Serrano, Cesaratto & Stirati (2002).

<sup>15</sup> See in particular Medeiros & Serrano(1999) where the general historical interpretative framework is developed.

<sup>16</sup> Medeiros(1997) provides a comparison between the East Asian and Latin American experiences in the early nineties. Medeiros(1998) discusses the Asian

consistent but also allows us to escape both from the pitfalls of the ‘fatalist’ view that everything about development is determined from the international environment (as in so much of the Marxist globalisation literature for instance) and also from the sometimes excessive “methodological nationalism” (in which everything is credited to the specific national policies or institutions, disregarding the external elements) that is common in some of the more critical development literature.

## Why The Inferiority Complex?

In any case the approach we follow and the programme we carry out is only one of many possible alternatives. Much more important than explaining or defending our research programme is to emphasise in this occasion is that we strongly believe that there is absolute no need for the development economists to have such a inferiority complex towards mainstream neoclassical economic theory. There is also no need to pay a tribute to it by desperately trying to argue in a neoclassical way for policies that we know are desirable for entirely non neoclassical reasons . Moreover, we do not really need to be so grateful when an eminent neoclassical occasionally concedes that some of the stuff that the development economists say are sometimes relevant here or there. Military and political colonialism seems to have been partially replaced by a theoretical, ideological and cultural inferiority complex.

However, there has been and there is a lot of excellent critical work being done, both theoretical and applied, in the South and also in the North. If we manage to bring more of it together and try to teach it and disseminate it more widely, without going through the virtually blocked routes of traditional journals and orthodox institutions of the north, development economics instead of a surviving as a minor branch of neoclassical growth and welfare economics , can become again a socially useful profession whose purpose, as William Petty, the founder of our profession and particularly of the classical approach to development knew is to help the citizens of the various developing countries to achieve “peace and plenty”.

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