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Because I said so: the persistence of mainstream policy advice

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Abstract: The current global crisis has shown the limitations of the mainstream approach. We trace the origins of the limitations of the dominant neoclassical views to the capital debates and to the rise to dominance of intertemporal general equilibrium. The limited use of the Arrow-Debreu model, which became dominant after the capital debates, in terms of policymaking, is central to understand the persistence of policy guided by the aggregative model. We use the International Monetary Fund (IMF) as a case study of this perplexing continuity of policy advice. Given our survey, we conclude that even though the economy is in the midst of the worst capitalist crisis since the Great Depression, a significant paradigmatic shift in economics is extraordinarily unlikely.

Keywords: history of economic thought, economic methodology

Introduction [1]

Economic theory has been in a state of crisis since the 1960s. Nevertheless, the ability of mainstream economists to provide policy advice has been left wholly undisturbed. The nature of this crisis is seldom noticed, given that most economists are utterly unaware of its existence. At present, most economists assume that the aggregative macroeconomic model presented to undergraduates and underpinning most policy advice by professional economists is incontrovertible. Where there is a vague notion of the limitations associated with the idea of aggregate capital, brought to light during the so-called capital

debates of the 1960s, it is presumed that these issues have been satisfactorily dealt with by the disaggregated Arrow-Debreu General Equilibrium (GE) model.

In this sense, the capital debates, having left unaffected the foundations of mainstream economics, are a mere curiosity and should be relegated to a footnote of the history of economic analysis. However, contrary to this widely shared narrative, the capital debates brought about significant theoretical change in the mainstream, and, in fact, the failures of the conventional theory revealed in these debates in effect produced the authority of Arrow-Debreu intertemporal general equilibrium in mainstream theory. What is striking about this theoretical shift is that at the same time the capital debates proved simple parables of relative prices determined by scarcity and driving allocative choices generally invalid, as admitted by Paul Samuelson, economic theory became dominated by an unrelenting neoclassical model that celebrates the potential efficacy of unencumbered markets.

It is thanks to the unassailable nature of the Arrow-Debreu model, from the neoclassical point of view, that the defense of market fundamentalism sprang to the policy arena in the 1970s. In this way, the ascendancy of the Arrow-Debreu model following the capital debates is as substantial a factor as the repeal of the Keynesian consensus is to the methodological and sociological shift that occurred in the profession in this decade. The rise of the rational expectations hypothesis, the development of the efficient market hypothesis, and the relegation of heterodox economists to the margins of the profession (e.g. by denying tenure, or constraining the ability to publish in the same journals) emerge in this sense as a direct result of the capital debates and subsequent adoption of the Arrow-Debreu notion of equilibrium.

Arrow-Debreu provided an authoritative attestation that markets are, in some sense, efficient. *Roma locuta est, causa finita est*, Rome has spoken and the debate is over. It is for this reason that no significant change in policy advice, comparable to the theoretical change took place. While the theoretical model is logical, it is not directly useful for policy analysis; the aggregative model is, on the other hand, readily available for empirical application – even if the evidence is sometimes contradictory – but lacks logical consistency. Since mainstream economics is either logically defective or flatly irrelevant, we conclude that it is authority, rather than logic or empirical evidence, that provides the basis of mainstream policy advice.

The remainder of the paper is divided into three sections. The following section describes the main elements of the capital debates and how the issues raised led to the rise to dominance of intertemporal general equilibrium. The subsequent section expounds upon the limited use of the Arrow-Debreu model in terms of policymaking, and demonstrates the persistence of policy guided by the aggregative model. In the last section, we use the International Monetary Fund (IMF) as a case study of this perplexing continuity of policy advice. Given our survey, we conclude that even though the economy is in the midst of the worst capitalist crisis since the Great Depression, a significant paradigmatic shift in economics is extraordinarily unlikely.

The return of Vulgar Economics

The capital debates remain a puzzling chapter in the history of ideas. Nearly everyone accepts that the British (as opposed to the Massachusetts) Cambridge won the debate, something Paul Samuelson acknowledged early on. [2] Yet, no one seems to grasp the full implications and relevance of the debate itself. Typically it is assumed that the capital debates relate simply to problems of aggregation, and that the use of aggregate production functions and aggregative measures of capital are still justifiable, for simplicity's sake. However, contrary to this viewpoint the capital debates did not rest upon the possibility of building aggregate measures.

The capital debates are associated with the very notion of capital. Classical political economy authors, from William Petty to Karl Marx, including Quesnay, Smith and Ricardo, treated the process of production as a circular one. In this context, capital is a produced means of production [3], rather than a factor of production used in the process of obtaining final goods. The most important result of the capital debates is that, once capital is defined as produced means of production, there is no direct relation between the relative abundance or scarcity of the means of production and its remuneration. Distribution, in other words, is not governed by supply and demand.

Since the Marginalist Revolution, and the rise of the so-called neoclassical school, the notion that relative prices are determined by supply and demand, and that these reflect the relative abundance or scarcity of all goods and services – including factors of production – gained consensus. As a result, the supply and

demand for capital became the determination for the remuneration of capital. The more abundant is capital, the lower its remuneration, and vice versa if it is scarce. Conflict has no role to play in the determination of distribution, and social classes vanished entirely from analysis.

Additionally, substitution leads to the full utilization of resources and their optimal allocation. If capital is scarce and expensive, and labor abundant and cheap, economic agents substitute labor for capital and fully utilize labor. Thus, despite the abundance of labor, its relative cheapness, through the principle of substitution, leads to full employment. Indeed, unhampered markets *do* lead to the veritable best of all possible worlds.

It is the logic of the principle of substitution, based on relative scarcities, that the capital debates shattered. Contrary to the neoclassical parable, the capital debates showed that it is not generally possible to obtain a univocal relation between remuneration and relative scarcity. For example, assume that we have two commodities produced with capital and labor, and that one can be said to be univocally more capital abundant than the other. In this case, as capital becomes more abundant the profit-to-real-wage ratio will fall, more capital will be used, and more of the capital-intensive good will be produced. However, it is possible that one good will be more capital intensive at high levels of the profit-to-real-wage ratio, and that the other becomes the capital intensive good at lower levels of the same ratio. That is, we would have factor intensity reversal. In the instance of factor intensity reversals, the conventional relation between factor scarcity and relative prices breaks down.

In this situation, it would be possible that as the profit-to-real-wage ratio falls, more labor will be used, and more of the labor-intensive good will be produced. In other words, there would be reverse capital deepening and a lower rate of profit associated with a reduction in the use of capital. Substitution moves in the wrong direction, so to speak, and more of the scarce factor is demanded. The implications for neoclassical theory cannot be overstated. First and foremost, there is no relation between relative scarcity and the remuneration of factors of production, and, as a result, distribution is not simply the product of market forces. Further, there is no guarantee that all resources will be fully utilized. [4]

It must be noted that, even though the capital debates are fundamentally about the logical coherence of the neoclassical approach, the results of the capital debates have important empirical implications. Neoclassical theory makes strong

predictions vis-à-vis substitution effects and the relation between relative scarcity and remuneration. Yet the capital debates suggest that some of those predictions might not be consistent, and, as a result, the absence of those relations might be expected in the real world.

The most obvious prediction is the inverse relation between investment (capital intensity) and the rate of interest (its remuneration). As it is well known, there is little evidence that investment is sensitive to variations in the real rate of interest. In a rare survey of the empirical literature on the determinants of investment Robert Chirinko (1993, p. 1906) argues, "[T]he response of investment to price variables tends to be small and unimportant relative to quantity variables." [5] Similar results are obtained by Heim's (2009) more recent study. In other words, interest rates have little effect on gross capital formation, and the substitution effects that imply that agents use the cheaper factor of production are not operative. Further, the empirical evidence suggests that investment reacts to quantity variables, meaning the level of activity. This suggests that the income effects tend to supersede substitution effects and that a firm facing less demand will not buy capital goods, even if the interest rate is low. These results underscore the empirical relevance of the capital debates. [6]

Similarly, the capital debates highlighted the futility of using the aggregate production function to measure the growth and productivity performance of real economies. The theoretical problems with the aggregate production function, associated to the notion of capital as a scarce resource, are compounded by the impossibility of disentangling it from the identity of income with the structure of the functional distribution of income (Felipe and Fisher, 2003). In other words, if one runs a regression of income on capital and labor, as is often done by those using a production function, it necessarily follows that income grows because capital and labor grow. Furthermore, changes in income distribution also affect income growth, as total income (net of taxes) is by definition the wage multiplied by labor utilized in production plus capital multiplied by its remuneration.

In this way, the capital debates leveled the theoretical foundations of neoclassical economics, and provided significant empirical evidence that neoclassical models and their resultant policy prescriptions should be viewed with a healthy measure of skepticism. Faced with the impossibility of using both the notion of aggregate capital and the principle of substitution, neoclassical

economics opted to apply the principle of substitution to each kind of capital good taken as a distinct factor of production, by using the Arrow-Debreu model of intertemporal general equilibrium (Garegnani, 1976; Milgate, 1979). Even though the idea of treating capital as a vector of heterogeneous capital goods was first developed by John R. Hicks in the 1930s, and used by Arrow and Debreu in the 1950s, it was only after the capital debates that it came to be dominant within the mainstream.

The problem with the use of heterogeneous capital goods is that it implies a change in the traditional method of economics. Normal equilibrium positions are associated to a uniform rate of profit; however, when dealing with heterogeneous capital goods that are not substitutable between each other, it becomes necessary to discard the notion of long run equilibrium. In Arrow-Debreu models all prices are short run prices, associated to differential rentals for each capital good, and any change in the data of the system – preferences, technology, and information for given initial endowments – affects the direction to which the economy adjusts (Petri, 2003). In other words, the forces of competition that lead capitalists to those sectors with higher remuneration and establish a uniform rate of profit do not operate in the Walrasian world. [7] Hence, the Walrasian models are incapable of ascertaining tendencies in real economies, a defect that is not mitigated with the introduction of imperfections (Stiglitz, 1993, p. 109), which Stiglitz calls the post-Walrasian and post-Marxist paradigm. Far from increasing the realism of the model, such imperfections only complicate the results of an exceptionally unrealistic one.

Information imperfections, and other related imperfections like price rigidities or lack of rationality, once introduced leave the Arrow-Debreu model unable to produce Pareto efficient solutions, or even market equilibrium, since some markets may not exist. Additionally, the introduction of imperfections renders the aggregative model prone to suboptimal outcomes. Suboptimal results in the presence of imperfections suggest that in their absence markets would still produce optimal outcomes. [8] Some authors tend to confuse the imperfectionist arguments, and the implicit support that they provide for policy intervention, as a break with orthodoxy. While it is clear that they provide space for flexibility in policy advice, they remain firmly based on orthodox grounds. [9] The capital debates, in contrast, showed that unhindered markets, free of imperfections of any type, do not lead to market efficiency in general.

Faced with the logical problems that neoclassical aggregative models are riddled with on the one hand, and the irrelevance of general equilibrium models on the other, neoclassical economists did what any rational agent would do: disregard the critiques and in so doing, their deleterious results, and proceed as if nothing had happened. However, an innovative, if not peculiar development generated a curious division of labor within neoclassical economics. Aggregative models were deployed for the purposes of teaching and policymaking, while the Arrow-Debreu model became the retreat of neoclassical authors when questioned about the logical consistency of their models. In this response, a harsh tradeoff between logical consistency and relevance was cultivated in the very core of mainstream economics.

The degree of fragmentation – as Roncaglia (2005, p. 468) so aptly expresses it – and confusion in the mainstream today is the result of such inconsistency at the core of economics, and not, as is frequently asserted, because of the demise of the Keynesian consensus. The collapse of the certainties provided by the old aggregative neoclassical model have brought about an often cynical defense of market-oriented policies for their own sake. The return of Vulgar Economics, which "sticks to appearances ... [and] believes that 'ignorance is a sufficient reason'" (Marx, 1867, p. 307) is complete.

Old wine in old bottles

Intertemporal General Equilibrium models demonstrate the mathematical existence of a price system that guarantees competitive equilibrium – disaggregated markets, in which there is no excess demand or supply (Geanakopolos, 1992). Although the Arrow-Debreu model can be critiqued on the basis of its behavioral assumptions and extreme simplifications, considerably more devastating to the efficacy of the model is the absence of long run tendencies. Logical consistency for mainstream economics is achieved, but at the exorbitant cost of relevance. In particular, with heterogeneous capital goods no uniform rate of return can be obtained, an outcome that is incompatible with the notion of competition, as understood in the context of existent economies. Yet, it is precisely such persistent forces that inform policy prescriptions. Accordingly, when building models designed for policymaking, neoclassical authors revert to the earlier, logically incoherent, notion of capital as an aggregate quantity.

It should be noted from the outset that general equilibrium practitioners do not, in general, defend the model on the basis of empirical or policy relevance. In fact, in many instances, emphasis is placed on its utter detachment from realistic assumptions. To this effect, Scarf and Shoven (1984, p. x) argue that, "the price of this remarkable achievement in pure theory [Arrow-Debreu's model] seemed extremely high. The techniques used in demonstrating the existence of equilibrium utilized mathematical arguments that were fundamentally non-constructive ... these arguments gave no indication of the way in which prices might be computed and used as a practical tool." Similarly, Kirman (2003, p. 469) points out: "[a] justification for being concerned with general equilibrium would be the belief that it does actually have something to tell us about real economic phenomena. This would certainly be a strong argument for maintaining this activity. . . However, apart from those who use computational general equilibrium models this is not a widely used justification for the use of general equilibrium theory."

In one important respect, neoclassical authors believe the Arrow-Debreu model to be relevant for policy analysis. The first and second welfare theorems demonstrate the Pareto optimality of equilibrium positions. The use of these theorems to provide a fundamental justification for unencumbered markets suggests a belief that these equilibrium positions have some manner of relevance. Such preoccupation reveals the tremendous importance attached to upholding the notion of the efficacy of markets (a quasi-religious belief), which the retreat from the aggregative model to Arrow-Debreu allowed to persist.

In practice, applied neoclassical economics, including applied general equilibrium work, makes use of the older models that were rendered logically inconsistent in the capital debates. This practice is justified by an appeal to simplicity, and is aided by the authors' inability to discern between short period heterogeneous capital goods models, and long period aggregate capital models. It cannot be overstressed that the disaggregated general equilibrium model cannot be the professed benchmark for models containing an endowment of capital as a single value aggregate. The incompatibility is not mathematical, but logical (Petri, 2003). Long run forces present in the single capital good models are simply absent in disaggregated general equilibrium models.

Because of its irrelevance, pure general equilibrium theory is not widely used in policy analysis. Indeed, much of macroeconomics makes use of the production

function, particularly growth theory and its applications, which is decidedly antithetical to general equilibrium theory in its Arrow-Debreu form. Thus, Hahn (2003, p. 207) is not satisfied with 'Lucasians' who believe that representative agent models in macroeconomics are a particular version of Arrow-Debreu general equilibrium theory. It is even the case that much of the applied work that is explicitly self-denominated as general equilibrium (e.g. various applied general equilibrium models, computable general equilibrium models, and dynamic stochastic general equilibrium models) makes use of an aggregate capital endowment in value terms, and the uniform rate of profit. Furthermore, a great many of applied areas of research make use of models and methods (e.g. game theory, complex dynamics, etc.) that would seem foreign and not strictly required for the Arrow-Debreu formulation.

An important dimension to the strange division of labor that developed in neoclassical economics following the capital debates is that in macroeconomics, the dominance of the aggregative model was never contested. Nearly all models of economic growth, from Solow to New Growth Theory, make use of the aggregate production function. The ubiquity of this tool of economic analysis is perhaps obvious. Though the implications of the capital debates extend beyond the aggregate production function, this is perhaps the first victim. [10] Despite Samuelson's admission that the world contains more than one commodity, and Hahn's argument that aggregate production functions, "cannot be shown to follow from proper [general equilibrium] theory and in general [are] therefore open to severe logical objections" [11] the aggregative production function is still found in abundance in the literature.

The central conclusions of both exogenous and endogenous growth models are immediately called into question given their use of the aggregate production function. In particular, the debates on convergence (or lack thereof) would have benefited from an understanding of the flaws inherent to the aggregate production function. In addition, the policy conclusions of these models are questionable (Felipe and McCombie, 2003). That is, in the classic Solow model, policy, generally speaking, is transitory. Increases in the rates of savings and investment – which can be the result of policy – may increase GDP per capita, but this is the consequence of increasing capital intensity of production. Though the effects are temporary, policies that raise savings rates may facilitate catch up among poorer countries as capital intensity is increased. However, as already seen, the concept of capital intensity was effectively annulled by the capital

debates. Additionally, although policy can affect long run rates of growth in the endogenous growth literature, policy suggestions supportive of openness and flexibility rest upon a substitution process that ensures full employment of factors of production.

At the same time, the foremost policy conclusions of modern macroeconomics continue to be uninformed by disaggregated general equilibrium modeling. While there is, of course, a certain degree of debate among neoclassical authors over the most significant theoretical contributions to macroeconomics over the past thirty years, a modern consensus has emerged among macroeconomic policymakers (Romer and Romer, 2002). [12] To a certain extent, this consensus has been influenced by theoretical developments in macroeconomics (Chari and Kehoe, 2006). Nevertheless, none of these theoretical developments, or their derived policy conclusions, can be said to maintain the disaggregation of capital into unique physical quantities. Rather, they rely on old notions of capital subject to the criticisms of the capital debates.

In brief, there are in effect three policy conclusions drawn from the new consensus. First, central banks should be independent and make use of rules to guide monetary policy with the expressed goal of maintaining price stability, and inflation targeting the primary policy objective. Second, fiscal policy should be viewed as the policy tool of last resort, and deficit spending discouraged barring a severe recession. This is particularly the case when the economy is close to the zero bound limit for the interest rate. Finally, the economy has a natural tendency to full employment, as represented by the natural rate of unemployment, or the Non Accelerating Inflation Rate of Unemployment (NAIRU). [13]

This new consensus in macroeconomics can be succinctly described with three equations. [14] The first equation expresses the output gap as a function of the real rate of interest and the past and future expected output gap, the second is a Phillips Curve with a natural rate, and the final equation is a monetary policy rule. In Taylor's (1993) formulation, the policy rule is a function of the output gap, the difference between real and desired inflation, and the equilibrium rate of interest. The equilibrium rate of interest is said to be the rate consistent with a zero output gap, and thus, essentially, a natural rate. It is often claimed that this model possesses general equilibrium characteristics. That is to say, consumption and investment are functions of intertemporal optimization and the

natural levels of output and employment are determined by the supply side. This model fairly accurately reflects the foundation of more complicated models used by central banks in practice (Arestis and Sawyer, 2004, p. 68). The model also suggests that optimal policy is to maintain stable inflation, which would deliver a zero output gap (Blanchard and Gali, 2007). Thus, policymakers need only target inflation, and do not necessarily have to worry about output, though imperfections may complicate this story.

In other words, the new macroeconomic consensus rests on the notion of a natural rate of unemployment, a concept Friedman (1968) based on Wicksell's natural rate of interest in which the equilibrium rate of interest plays a central role. This interest rate corresponds to the full employment level of investment. As has been previously pointed out, this conception has no basis in general equilibrium models with disaggregated capital. Optimal monetary policy as described by the new consensus, all the same, relies fundamentally on this essentially long run notion. Though microfoundations are often provided, these rely on representative agents and a single aggregate capital good.

Another application worthy of note concerns capital taxation. The proposition that capital taxes are to be avoided enjoys wide political support, especially in the United States. Here again the general equilibrium model is brandished in order to justify results, even when it is not directly drawn upon. Indeed, general equilibrium models have been cited as the source of the claim that capital taxation should be approximately zero (Chamley, 1986). These models typically show that the optimal tax rate is zero in a general equilibrium model inhabited by infinitely lived agents. These models have retained an element of the old neoclassical model, as they are bound to the single good world. In the usual manner, representative agents can either consume this single good or put it to use as a capital input. Once again, and in spite of evidence to the contrary as revealed by the capital debates, the results of a one good world are generalized to a multiple commodity world.[15] Resultantly, Chamley's model of optimal taxation can hardly lay claim to any correspondence to actually existing economies.

Further, policy conclusions regarding fiscal austerity rely on theories of crowding out, which in turn rely on the supply and demand for capital. General equilibrium models of international trade (the 2x2x2 models of Hecksher-Ohlin-Samuelson) and taxation (the Harberger type models of taxation) all hinge upon

capital as a single factor of production, given in value but variable in form. In addition, models of the aggregate labor market require the same notion of capital in order to construct labor demand curves. Indeed, even applied or computable general equilibrium work presumes tendencies toward a uniform rate of profit, a result not derivable from rigorous disaggregated general equilibrium models. [16] In light of the critiques that came out the capital debates, none of these models are left standing.

Very little of mainstream policy advice remains intact without the conventional marginalist notion of an aggregate quantity of capital, and, as a result, distribution according to scarcity cannot be shielded from severe criticism. Yet this has not discouraged macroeconomic policy makers from using these deeply flawed models. In addition, claims that these models approximate the more rigorous intertemporal general equilibrium models are unfounded (Petri, 1991). Lacking logical consistency, the use of these models in policy analysis can be understood in the context of the authority provided by Arrow-Debreu, and the vain hope that no one questions the proviso that intertemporal general equilibrium stands as the foundation for modern policy advice. The conclusions of these models – that the system is self-regulating, that inflation is to be kept stable at low levels, that fiscal policy should be austere, taxation should not fall on capital, and the like – cannot be defended in theory. As we shall see, the historical record of the results of these policies has been equally unkind.

Do the exactly the same thing, but this time expect different results

Given the less than paltry theoretical change in neoclassical economics that the capital debates forced, a comparable change in policy advice would be expected. Yet in the policy arena, the virtues of the unfettered market were extolled with more fervor in the decades following this expedient shift in the conventional notion of equilibrium. Here, we use the International Monetary Fund as a case study of the perplexing continuity of policy advice through discontinuity of policy results. The IMF provides a unique example of an institution dedicated to economic policy and empirical research, which has been attuned with the mainstream of the profession. Hence, significant changes in policy orientation would be expected as a result of theoretical developments that change the basic underpinnings of policy models.

Countries facing balance of payment difficulties receive financing from the IMF in installments, conditional upon meeting such performance criteria as outlined in the country agreement. The IMF compendium of macroeconomic stabilization techniques endures more or less in its original form as developed by IMF Research Director Jacques Polak in 1957 (Pieper and Taylor 1998). Its *modus operandi* for hitting inflation and output targets consists of doctoring the exchange rate and austere fiscal and monetary measures. The former typically entails devaluation and opening up capital accounts of the balance of payments, while the latter involves maintaining high interest rates and reducing the debt-to-GDP ratio, with price stability as the overarching goal. The philosophical underpinnings of all policies made by the IMF are the efficacy of free markets, making liberalization the antecedent for most policies.

The performance of IMF guided policy makes this unbending nature of policy advice puzzling, at best. The historical incongruity between promised results and actual outcomes would suggest that empirical observation plays little to no role in informing policy makers at the IMF. Pieper and Taylor survey the effects of Structural Adjustment Programs (SAPs) across nations, demonstrating a mélange of results. In many cases, the economic consequences that come at the heels of these programs are the very failures liberalization professes to circumvent (Pieper and Taylor 1998). This is not a tragedy of coincidence; the assumptions that permeate neoliberal strategy tend to be at odds with economic reality. As they point out, the macroeconomic model developed by Polak "presupposes that reducing the fiscal deficit automatically leads to a lower trade deficit with no effects on output. Such projections frequently turn out to be false" (Pieper and Taylor, 1998, p. 41). Even with the assumption that output and employment tend to their natural levels, when implementing drastic cuts in fiscal spending in tandem with a sharp reduction of imports, the upshot is a policy-induced recession.

Stagflation is not uncommon in countries made to comply with IMF conditionalities, as SAPs typically contain contradictory policies, and exchange rate adjustment proves far thornier in practice than in theory. Historically, devaluation has produced mixed results, while fixed exchange rates, which tend to feature in many IMF programs, have succeeded in reducing purchasing power for workers and increasing labor costs in sectors that produce traded goods. The result, as witnessed in Argentina, is anything but anti-inflationary (Weisbrot and Ray 2010). Often carried out alongside devaluation is the removal of capital

controls, provoking price *and* output volatility, as the exchange rate becomes an asset price for speculative international finance. In spite of such patent policy failures, SAPs and other country agreements changed very little, if at all, throughout the twentieth century. Pieper and Taylor (1998, p. 41) remark that while the general accord has shifted away from more extreme positions, "[t]he essentials, however, have not changed."

Perhaps the only consequence of such a perseverant mismatch between policy forecast and outcome was declining pertinence – a reality Dominique Strauss-Kahn was privy to when he came in as the Fund's managing director in 2007. In his own words: "[w]hat might be at stake today is the very existence of the IMF ... the two main issues are relevance and legitimacy" (Weisman 2007). As the financial collapse that originated in the United States spread to the rest of the world, many of the poorest countries were made increasingly vulnerable to balance of payments crises. The IMF's feudal horn sounded once again as it brokered packages for Hungary, Iceland, Pakistan, and Ukraine. The news media declared the IMF back in business, leaving legitimacy the only difficulty for the IMF to surmount. The result has been a slew of papers and statements ensuring the public that today's Fund is friendly, flexible, and rethinking macroeconomic policy (Blanchard, Dell'Ariccia, and Mauro 2010).

In January 2008, Strauss-Kahn advocated "timely, targeted, and temporary" counter-cyclical fiscal spending in the *Financial Times*. As is the custom, there is a caveat. Only nations with low levels of debt should employ fiscal stimulus, and, as always, monetary policy is "the first line of defense." (Strauss-Kahn 2008) Provided stable inflationary expectations and a credible monetary authority prevail, countries should make the requisite interest rate reductions before resorting to fiscal spending. Insofar as inflation lies in wait – due to external shocks or a push for higher wages – caution must reside with any decision to use monetary policy. Chapter five in the Fund's 2008 World Economic Outlook, titled "Fiscal Policy as a Countercyclical Tool," expounds upon the "three Ts" of fiscal policy with the same admonishment as Strauss-Kahn's initial statement (International Monetary Fund 2008a).[17] Accordingly, underpinning the IMF's 'new' attitude toward public spending is an unwavering faith in the ability of markets to self-correct quickly.

That the IMF is rethinking policy, rather than revamping or reconstructing it, is visible in the country agreements fashioned over the course of the current world economic crisis. Weisbrot *et al.* (2009) analyzed agreements the Fund made

with 41 countries during the current global downturn, including Stand-by Arrangements (SBAs), Poverty Reduction and Growth Facilities (PRGFs), and Exogenous Shocks Facilities (ESFs). Of these agreements, 31 contained pro-cyclical fiscal and/or monetary policies. Fifteen of these agreements contained pro-cyclical policies in both fiscal and monetary measures. Similarly, a study conducted by Molina-Gallart (2009, p. 7) that looks at the SBAs of 10 low-income countries made between December 2008 and May 2009 finds that as the IMF propagates its image as flexible and in favor of pro-poor spending, "this is not what the IMF has been advising, during the very same months, to the world's poorest countries." For these low-income countries, IMF programs maintain tight fiscal policy, and any improvements in terms of flexibility are "timid and exceptional" (Molina-Gallart, 2009, p. 17). Of the 10 country agreements made, all 10 must reduce spending, none can defer debt payments, 5 promote wage bill cuts or freezes, and 5 are instructed to decrease their fiscal deficit. Likewise, monetary policy is severely constrained as these countries have been advised to hike interest rates and boost the level of their official reserves (Molina-Gallart, 2009).

The double standard between some degree of fiscal flexibility for wealthier nations and fiscal austerity for poorer nations notwithstanding (Weisbrot *et al.*, 2009), stringent monetary policy has proven the rule, rather than the exception for the 'new' IMF. As Ilene Grabel (2010, p. 25) notes, "[T]he IMF has been far less flexible with this policy instrument than it has been with fiscal policy." In her survey of the most recent SBAs, contractionary monetary policy emerges as a major component of many country agreements. For instance, in 2008 Ukraine's SBA calls for a reduction in inflation from 25.5 percent to a mere 5-7 percent by 2010; Hungary's agreement imposes an inflation target of just 3 percent by 2010. Correspondingly, the SBA drawn up for Pakistan requires that interest rates be raised by 200 basis points, and the SBAs for both Iceland and Latvia require interest rate increases of 600 basis points (Grabel, 2010). The circumstances surrounding such policy advice in Latvia, which signed an SBA in December 2008, is one of the more stark examples of the Fund trying the same thing, but this time expecting different results.

The agreement contains massive cuts in government expenditures, higher taxes, and wage cuts in the public sector with the intention of extending these to state-owned enterprises. The IMF staff report for the Request for Stand-By Arrangement states that the "effects from these measures, together with the slowing

economy, should also lead to substantial nominal wage cuts in the private sector" (IMF 2009, 19). In all, the Fund considers Latvia's program of pro-cyclical fiscal and monetary policy "appropriately ambitious" (IMF 2009, 25). [18]

The Fund projects improvements for Latvia and many other countries beginning this year and lasting several years, demonstrating its steadfast faith in V-shaped recoveries. (Weisbrot and Ray, 2010) This projection testifies to the IMF's perplexing habit of proffering the same sets of policies and expecting different outcomes. The belief in the self-adjusting nature of the economy is above questioning; the actual experience is not particularly important in the decision making process.

Acclaim for the pro-cyclical anti-labor policies put forward by the IMF was followed by the well-publicized IMF Staff Position Note titled, "Rethinking Macroeconomic Policy," yet one more piece in its effort to persuade the public that the 'new' IMF is all about mitigating the pains of recession (Blanchard *et al.*, 2010). The two main components to receive attention from this paper are first, a proposal to increase the inflation target from two percent to four percent, and second, a discussion of the permissibility of discretionary fiscal spending in conjunction with automatic stabilizers. That either of these policy amendments was received as a break from IMF tradition is a testament to the tenacity of policy advice, even if it tends not to yield the expected results.

When these policy discussions are read within context, it becomes clear that neither signify departure from convention. The purpose of raising the inflation target is to give countries room that would enable them to cut interest rates in times of crisis. Yet the authors underscore the notion that this should be explored much further before being put into practice. In an interview, Olivier Blanchard, the IMF's chief economist and one of the authors of this piece, wonders if the limited flexibility many countries felt in their ability to respond the current crisis is enough to "justify setting a higher inflation target in the future" (Clift, 2010). In other words, he is not as of yet persuaded that raising the inflation target, even by 2 percentage points, is warranted.

In terms of fiscal policy, little is new. Discretionary spending has a role to play in recessions, provided debt levels are such that there is room for fiscal spending. At the same time, it is emphasized that countries must aim for lower debt-to-GDP ratios than they had prior to the world recession. While automatic stabilizers are suggested for consideration, progressive taxation and social

insurance programs "would be warranted only if they were based on a broader set of equity and efficiency objectives, rather than motivated simply by the desire to stabilize the economy" (Blanchard *et al.*, 2010, p. 15). The preferred approach to this type of fiscal policy is just a small deviation from discretionary spending in crises. These automatic stabilizers would include temporary transfers, flat tax rebates, and cyclical investment tax credits, activated when a determined threshold is crossed. Blanchard suggests an 8 percent unemployment level as one such possible threshold (Clift 2010). Reforms along these lines appear "more promising" as they are less costly. To this could be added, ameliorations of this type do not effect a genuine structural and institutional movement away from free markets.

Nevertheless, the authors are apt to alleviate concerns that the IMF is actually rethinking macroeconomics.

> "It is important to start by stating the obvious, namely, that the baby should not be thrown out with the bathwater. Most of the elements of the precrisis consensus, including the major conclusions from macroeconomic theory, still hold. Among them, the ultimate targets remain output and inflation stability. The natural rate hypothesis still holds, at least to a good enough approximation. . . Stable inflation must remain one of the major goals of monetary policy. Fiscal sustainability is of the essence." (Blanchard *et al.,* 2010, p. 10)

Not only does the IMFs inflexibility on monetary policy effectively nullify any genuine support for counter-cyclical fiscal policy, and, therefore pro-poor spending, but even the slightest suggestion that policy analysis should be reoriented is defended on the basis of how it acquiesces to the mainstream of economics. Viewed in this light, it is neither logic or empirics the Fund must contend with, but convention.

Concluding remarks

Economists have frequently argued in favor of *laissez faire* policy, and the reasons underpinning this position have more often than not been associated to their ideological perspective. Whenever the classical authors defended the free market, however, it was never under the presumption that it would lead to full utilization of resources or an equitable distribution of income. The free market was typically defended as an instrument of modernization, that is, an institutional innovation of the rising bourgeoisie against feudal obstacles to

economic development. It was only with the rise of the neoclassical paradigm that the free market came to be considered a mechanism for the determination of income shares of the same factors of production and equated to efficiency in the use of factors of production. With this, the free market ceased to be defended as an instrument of modernization, and instead hailed as a superior institution in itself. The Great Depression and the Keynesian Revolution sapped the faith in free market policies, but did not attack the core ideas behind the marginalist views of market efficiency.

The attack on the main tenets of neoclassical economics that started with the Keynesian Revolution in the 1930s and culminated with the capital debates in the 1960s, showed the logical limitations of the marginalist approach, and forced the mainstream into a defensive position. With the abandonment of the old notion of long run equilibrium, and the adoption of intertemporal equilibrium, the efficiency of markets was not seen as the result of the persistent forces of the economy. If nothing else, the new notion of equilibrium provided a logically coherent notion of market efficiency. Absent solid theoretical foundation, and, oftentimes, empirical support, the persistence of *laissez-faire* policy could at least be anchored to the authority of intertemporal equilibrium.

The limitations of such a strategy have become increasingly evident. The duplicity of a profession that teaches models known to be logically incorrect, and uses these very models for policy analysis – even when the actual outcomes do not correspond to the expected results according to the prescription – is hard to justify. The role of the social conflicts of the 1960s, the inflation of the 1970s, and the rise of several corporate institutions in the rise of pro-market policies have been extensively analyzed. However, the role of the changing attitudes within the economics profession have seldom emphasized the incisive effect that the capital debates had in promoting the revival of the defense of free markets for their own sake.

The current global crisis has shown the limitations of the pro-market liberalizing policies of the last few decades, but from our perspective, it will not be sufficient to promote a meaningful revision of the foundations of economic analysis, and the timidity of the IMF rethinking of its policy stance is a good example of what to expect. In the meantime, learning economics at least remains, as Joan Robinson caustically put it, the best way to avoid being deceived by economists.

Endnotes

[1] A preliminary version was presented at the Eastern Economic Association Annual Conference in Philadelphia, in February 26, 2010. We thank Richard Chapman's comments. The usual disclaimer applies.

[2] See Samuelson (1966). A typical position is that of Robert Lucas (1988, p. 36) who notes the victory of the British side of the argument, and yet remains oblivious to the problems of using the aggregate production function in the same paper.

[3] For Marx (1867, p. 189) capital also involved a social relation between the owners of the means of production and those forced to sell their labor power. For him, capital "can spring to life, only when the owner of the means of production and subsistence meets in the market with the free laborer selling his labor-power."

[4] Both results are important, for example, for the Keynesian possibility of unemployment equilibrium. Keynes' (1936, p. 243) emphasis on the unimportance of the natural rate of interest not only implies that the supply and demand for capital (loanable funds) do not determine the equilibrium rate of interest, but also that the conventional rate of interest may be set at such a level that brings about persistent unemployment.

[5] In a recent empirical study Atesoglu and Emerson (2008, p. 1051) claim to find support for neoclassical models while arguing that "the effect of R [real interest rate] on I [investment] is always positive (sic)," for the American economy.

[6] In the same way, the empirical evidence seems to contradict the notion that higher wages would lead to substitution of cheaper factors of production for labor. The exemplary case is the well-know study of the fast food industry in New Jersey, which found a positive correlation between the minimum wage and employment (Card and Krueger, 1995).

[7] That GE models do not support the notion that the abundance of a factor of production will be associated with lower remuneration has been pointed out by a survey of those models (Bliss, 1975).

[8] The same is valid for Bowles and Gintis' (1993, p. 84) notion that market exchanges are usually contested and endogenous enforcement costs are not zero, and, as a result, there are conflicts of interest among exchanging parties. Therefore, if enforcement costs were nonexistent the Arrow-Debreu results

would prevail. It must be noted that all the literature on post-Walrasian economics presumes continuity between the classical political economy authors and the post-marginalist revolution economics, which would mean that there are no significant distinctions between Smith, Marx, Walras and Arrow. For a debunking of those views see Garegnani (1984).

[9] Colander et al. (2007-8), for example, seems to suggest that several of the post-Walrasian developments can be seen as breaking up with orthodoxy. For a critique see Vernengo (2010).

[10] Garegnani (1970) demonstrates capital reversing with no aggregate production function.

[11] Hahn apud Cohen and Harcourt (2003, p. 206)

[12] For the neoclassical view of the advances in macroeconomics since the 1970s see Woodford (1999) and Blanchard (2000).

[13] Some Marxist authors claim that the NAIRU does not require full employment, but as noted by Sawyer (2002) it remains a characteristic of supply constrained macroeconomic models.

[14] See Arestis and Sawyer (2004) and Lavoie and Kriesler (2007) for critical analysis of the new consensus model.

[15] Despite Chamley's (1986, p. 609) assertion that he can assume a representative agent, one commodity world without "loss of generality [sic]."

[16] See for instance the papers in Scarf and Shoven (1984).

[17] Yet even if this diffident posture could be interpreted as a break from IMF tradition, discretionary spending in times of crisis is scarcely novel in conventional economics. In the 1930's Chicago Economics, in objection to Keynes' position that fiscal policy is an elemental tool for sustaining full employment, assigned a role for fiscal stimulus, to be utilized only in economic contractions when monetary tools have become ineffectual (Pérez and Vernengo, 2010).

[18] For all of its posturing, when Latvia exceeded its IMF target by ending 2009 with a deficit of 7 percent of GDP, the Fund praised it for its stringent actions that were only possible by providing limited relief to the hardest hit in this recession (IMF, 2010).

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