On the Effective Demand Controversy: a chapter in the Brazilian history of heterodox economics[1]

Seiji Seron Miyakawa[2]

Alex Wilhans Antonio Palludeto[3]

Abstract: The Brazilian Effective Demand Controversy of the late 1970s and early 1980s was not just a product of the local reception of the works of Marx, Keynes and Kalecki; it was a distinguished attempt to rethink capitalist dynamics from a peripheral advantage point in a pluralist intellectual environment in a context marked by the exhaustion of the post-World War Two capitalist boom and its negative impacts on the Brazilian economy. Antonio Barros de Castro sought to recover what he termed the 'cycle tradition' against what he regarded as an excessive demand-side bias among heterodox economists. In response, Mario Luiz Possas and Paulo Baltar, Luiz Gonzaga de Mello Belluzzo and Maria da Concieção Tavares and José Carlos Braga mounted a defence of Effective Demand interpreted as a general principle of capitalism macrodynamics, as opposed to an underconsumptionist theory of stagnation and crisis or a mere macro-modelling hypothesis. Finally, João Heraldo Lima and Maurício Borges Lemos advanced a Marxian critique of the Principle of Effective Demand based on the reproduction schemes of Book Two of *Capital*. The Controversy illustrates the theoretical richness and creativity of the Brazilian economic heterodoxy and its success in institutionalizing some degree of pluralism.

Keywords: Effective Demand, capitalist dynamics, business cycles, crises

Resumo: A Controvérsia Brasileira da Demanda Efetiva de fins dos anos 1970 e começo dos anos 1980 não foi só produto da recepção local das obras de Marx, Keynes e Kalecki; foi também uma notável tentativa de repensar a dinâmica capitalista de uma perspectiva periférica, em um ambiente intelectual pluralista, em um contexto marcado pela exaustão do *boom* capitalista pós-Segunda Guerra Mundial e os seus impactos negativos sobre a economia brasileira. Antonio Barros de Castro buscou recuperar o que chamou de 'tradição do ciclo' contra aquilo que considerava um viés excessivo do lado da demanda entre economistas heterodoxos. Em resposta, Mario Luiz Possas e Paulo Baltar, Luiz Gonzaga de Mello Belluzzo e Maria da Conceição Tavares e José Carlos Braga montaram uma defesa da Demanda Efetiva interpretada como um princípio geral da macrodinâmica capitalista, ao invés de uma teoria subconsumista de estagnação e crise ou mera hipótese de macro-modelagem. Finalmente, João Heraldo Lima e Maurício Borges Lemos teceram uma crítica marxista ao Princípio da Demanda Efetiva baseada nos esquemas de reprodução do livro II de *O capital*. A Controvérsia ilustra a riqueza e criatividade teóricas da heterodoxia econômica brasileira e seu sucesso em institucionalizar algum grau de pluralismo.

Palavras-chave: Demanda Efetiva, dinâmica capitalista, ciclos de negócios, crises

JEL: B22, B50, E11, E12, E32

---

[1] This article is partially derived from a doctoral research funded by the São Paulo Research Foundation (*Fundação de Amparo à Pesquisa do Estado de São Paulo*, FAPESP) (Grant no. 2025/10725-0).

[2] PhD candidate. Institute of Economics, University of Campinas (UNICAMP). Lattes ID: 7305258508566271. ORCID: 0009-0006-4384-7668. e-mail: seijism@outlook.com.

[3] Professor. Institute of Economics, University of Campinas (UNICAMP). Lattes ID: 4903225752655629. ORCID: 0000-0002-1528-7548. e-mail: alexwap@unicamp.br.

Introduction

The Brazilian Effective Demand Controversy of the late 1970s and early 1980s is a largely unknown episode in the general history of heterodox economics. Although it unfolded mostly in Brazilian journals, it addressed one of the central theoretical problems raised by the crisis of the post-World War Two capitalist boom: whether Effective Demand should be understood as a limited macroeconomic mechanism, a theory of stagnation, or a general principle of capitalist dynamics.

This article argues that the Controversy was not just a product of the local reception of Keynesian or Kaleckian macroeconomics. Rather, it was an original attempt to posit the Principle of Effective Demand at the core of capitalist dynamics and to assess its relation to Marxian theories of accumulation and crisis. The debate thus reveals the vitality of Brazilian heterodox economics in the late 1970s and early 1980s. Canonical heterodox authors such as Marx, Keynes and Kalecki were not passively received by Brazilian economists; they were creatively appropriated, reinterpreted and placed in a dialogue about questions concerning capitalist development, crises and peripheral economies.

The Brazilian Effective Demand Controversy opened with Antonio Barros de Castro's theoretical attack against Kalecki and, more generally, against what the former regarded as an excessive influence of the Effective Demand approach in heterodox interpretations of capitalist dynamics. Castro's work were answered by Mario Luiz Possas and Paulo Eduardo de Andrade Baltar, who defended Kalecki by enunciating Effective Demand as a *principle*, as opposed to a mere macro-modelling hypothesis. Luiz Gonzaga de Mello Belluzzo and Maria da Conceição Tavares subsequently radicalised this interpretation by associating the Principle of Effective Demand with capitalism's systemic instability. José Carlos de Souza Braga then sought to move the debate beyond the opposition between cyclic and stagnationist views of capitalism by reframing the relation between business cycles, long-run trends and the temporality of the capitalist structure. Finally, João Heraldo Lima and Maurício Borges Lemos advanced a Marxian critique of the Principle of Effective Demand based on the reproduction schemes of Book Two of *Capital*.

The article is organised as follows. Section 1 situates the Controversy in its historical and institutional context, emphasising its relation to the development of Brazilian heterodox economics. Section 2 reconstructs Castro's challenge to the Effective Demand approach from the standpoint of what he termed the 'cycle tradition'. Section 3 examines responses to Castro, focusing on Possas and Baltar's defence of Kalecki, Belluzzo and Tavares' interpretation of Effective Demand as a theory of capitalist instability, and Braga's attempt to rethink the relation between cycle, trend and capitalist temporality. Section 4 analyses Lima and Lemos' Marxian critique of the Principle of Effective Demand. Section 5 concludes by arguing that the Controversy's lasting significance lies in its attempt

to coherently place effective demand, accumulation and crisis within a unified, systematic theory of capitalist dynamics.

1. The Brazilian Effective Demand Controversy in context

The Brazilian Effective Demand Controversy should be regarded as the visible moment of a broader process of theoretical dispute within Brazilian heterodox economics. From the 1960s onwards, economists associated with the structuralist tradition began to reassess the limits of Economic Commission for Latin America and the Caribbean (ECLAC)-inspired interpretations of peripheral capitalist development (Bielschowsky and Mussi 2023). In this process, the analysis of industrialisation, external constraint and structural heterogeneity was increasingly combined with a renewed reading of Marx, Keynes and Kalecki.

Maria da Conceição Tavares occupies a central place in this reassessment. Her early work on import substitution and industrialisation already treated the dynamics of peripheral economies as demand-led, without losing sight of external constraints and structural specificities of these economies (Tavares 1964). In this sense, she departed from the dominant tendency in development economics, including much of the ECLAC tradition that Tavares (1964) herself embraced, to regard long-run growth as fundamentally supply-constrained. For Tavares, effective demand was a key element in understanding capital accumulation, structural change and the long-run dynamics of capitalist economies.

This theoretical move was deepened in Tavares (1977a), in an article originally released in 1970, with co-authorship of José Serra. Against Celso Furtado (1969), Tavares and Serra argued that the slowdown of the Brazilian economy in the first half of the 1960s should not be read as the expression of an unavoidable structural tendency towards stagnation, but rather as the result of a cyclical deceleration of effective demand associated with the completion of previous investment blocs and the emergence of unplanned idle capacity. As a pioneer in the dissemination of Kalecki's thought in Brazil, Tavares (1998a; 1998b) would later adapt Kalecki's formulation of the PED and his three-department model for the purpose of analysing peripheral industrialisation[4] (Andrade and Silva 2010).

The Controversy of the late 1970s and early 1980s must therefore be situated against this background. Its immediate historical context was the exhaustion of the postwar capitalist boom. Brazilian heterodox economists were attempting to interpret the end of the 'Golden Age' of capitalism, the crisis of 'Keynesian' policy regimes, the new phenomenon of stagflation, and changing conditions of capital accumulation in the world economy. They were equally concerned

[4] In parallel, Tavares' discussion of financial capital, already present in her 1971 essay on finance and development (Tavares 1977b) and later deepened in a 1980 article written with Belluzzo (Tavares and Belluzzo 2023), introduced another crucial issue: the relation between finance, investment and structural change.

with the Brazilian experience: the crisis of the post-1964 growth pattern, the rise of external vulnerability and the difficulty of sustaining industrial expansion under peripheral conditions. The Effective Demand Controversy thus linked the general theoretical issue of the relation between demand, profitability and capital accumulation to the specific features of capitalist development in the periphery.

In this context, Luciano Coutinho and Luiz Gonzaga de Mello Belluzzo (1978) had put forward an interpretation for the crisis of advanced capitalism emphasizing the decline in innovative investment that accompanied the ebbing of the postwar technological wave. The slowdown in capital accumulation further contributed to the deceleration of productivity growth, thereby intensifying distributive conflict. Castro's 1979 book *O capitalismo ainda é aquele* ('Capitalism Is Still That One') challenged this interpretation. For Castro, the crisis was better explained by the intensification of class conflict, the rise of the wage share and the profit squeeze that followed. His critique of Kalecki and the Effective Demand approach in general was part of a broader attempt to restore the relevance of what he termed the 'cycle tradition' against what he saw as an excessive demand-side bias in heterodox economics.

The Controversy then unfolded through a series of interventions. Possas and Baltar's *Demanda efetiva e dinâmica em Kalecki* ('Effective Demand and Dynamics in Kalecki') was first presented at the VII Meeting of Brazil's National Association of Postgraduate Programs in Economics (*Associação Nacional dos Centros de Pós-Graduação em Economia*, ANPEC), also in 1979, and published two years later, in *Pesquisa e Planejamento Econômico* (Economic Research and Planning).[5] It defended Kalecki and advanced the interpretation of Effective Demand as a *principle* of capitalist dynamics, rather than a limited mechanism that only pertains to the subject of crises and fiscal policy, or an instance of 'underconsumptionism'. Castro restated his position in *Cadernos de Opinião* in 1980. A year later, Belluzzo and Tavares replied in *Ainda a controvérsia sobre a demanda efetiva: uma pequena intervenção* ('On the Effective Demand Controversy: A Short Intervention'), published in *Revista de Economia Política* (Brazilian Journal of Political Economy), interpreting Effective Demand as a theory of capitalist instability rooted in the monetary character of wealth and the very nature of capitalist investment decisions, made under radical uncertainty. Castro's rejoinder, *A controvérsia da demanda efetiva: o deslocamento da questão* ('Effective Demand Controversy: The Displacement of the Issue'), appeared in the following issue of the same journal, in the final

[5] The main differences between the 1979 ANPEC and the 1981 *Pesquisa e Planejamento Econômico* (PPE) versions of Possas and Baltar's article are: *i*) footnotes/endnotes are rearranged in the 1981 version, and they are altogether omitted from the 1979 version as available in the Meeting's annals (Possas and Baltar 1979); *ii*) the 1981 version is an extended one, including whole paragraphs that are absent from the 1979 version; and *iii*) the 1979 version includes in its text a single explicit reference, in passing, to Castro's book, whereas said reference was suppressed from the 1981 published article. In the discussion that follows, consultation of the extended and revised 1981 PPE version is prioritized (Possas and Baltar 1981). A brief excerpt of this later version is available in English (Possas and Baltar 2023).

quarter of 1981, and accused them of sweeping under the rug of a Minskyan theory of instability the actual issue of whether or not capitalism suffers from a chronic, built-in tendency to stagnate due to the lack of effective demand. In 1983, Braga revisited the debate in *Instabilidade capitalista e demanda efetiva: a razão de Kalecki* ('Capitalist Instability and Effective Demand: Why Kalecki'), reframing the relation between cycle and trend. Lima and Lemos then offered a Marxian critique of Effective Demand in *Uma nova contribuição para o debate sobre demanda efetiva* ('A New Contribution to the Debate on Effective Demand'), in 1984

The institutional setting of the debate is also pertinent. The Controversy could take place because Brazilian economics contained institutional spaces in which fundamental theoretical questions raised from a heterodox perspective were treated as legitimate objects of debate. Its emergence presupposed a field in which disagreement among heterodox traditions was both possible and intellectually consequential. The debate was not simply a local repetition of international quarrels between Keynesians, Kaleckians and Marxists; it was also the product of a specific academic configuration in which heterodox economics had not been pushed to the margins of professional discussion. Brazilian economists were able to appropriate international theories actively and creatively because they worked in an environment where pluralism was preserved (Ekerman 1989; Versiani 2007; Dequech 2018; Fernandez and Suprinyak 2019). The Effective Demand Controversy was therefore not an isolated episode, but a sign of the broader richness and vitality of Brazilian economic heterodoxy in the late 1970s and early 1980s. It is also worth noting that most of its central participants were connected, directly or indirectly, to the Institute of Economics of the University of Campinas (*Universidade Estadual de Campinas*, UNICAMP). Castro, Possas, Baltar, Belluzzo, Tavares and Braga were all associated with the intellectual environment that would later be identified with the 'Campinas School of Political Economy' (Palludeto and Laplane 2023; Bastos and Gimenez 2023).[6] Lima and Lemos, although faculty members at the Federal University of Minas Gerais (*Universidade Federal de Minas Gerais*, UFMG) at the time, had also completed their graduate studies at UNICAMP. The Controversy thus expressed not only a theoretical dispute, but also the process of formation and consolidation of Brazilian heterodoxy.

Seen in this light, the debate was a distinguished attempt to rethink capitalist dynamics from a peripheral advantage point in a pluralist intellectual environment. The Brazilian Effective Demand Controversy revolved around two closely connected questions. The first was historical: how should one explain the end of the postwar boom and the crisis of capitalist accumulation in the 1970s? The second was theoretical: could Effective Demand be treated as a general principle of capitalist

[6] At the time the controversy arose, Castro held a professorship at the Federal University of Rio de Janeiro (*Universidade Federal do Rio de Janeiro*, UFRJ). In the case of Possas and Braga, their participations in the Controversy were intertwined with the elaboration of their respective PhD dissertations (Possas 1983; Braga 1985), in which ideas first put forward in the context of the Controversy found further development. Also, Possas' doctoral supervisor was Tavares.

dynamics? In this sense, the discussion of technical minutiae in Keynes' and Kalecki's macroeconomic models unsurprisingly fills no small number of pages written in the course of the Controversy. Nevertheless, the kernel of the Controversy, its distinctive content, lies not so much in these technical aspects of Kalecki's or Keynes's models, which were also extensively scrutinised in the international literature, but in the validity and correctness of the conception, dear to many Brazilian heterodox economists, of Effective Demand as a *principle*, or a 'general law of the capitalist system's dynamic', as Belluzzo and Tavares (1981) put it. The following sections reconstruct the debate around these questions.

2. Castro's challenge: Effective Demand and the 'cycle tradition'

The initial terms of the Controversy were set by Castro (1979). As stated above, Castro's reproach of Kalecki and the Effective Demand approach is entwined with his alternative interpretation of the crisis of postwar capitalism, stemming from what he called the 'cycle tradition', one associated with Marx, Tugan-Baranovsky, Mitchell, Kondratiev, Schumpeter and others, according to which capitalist crises unfold from within the dynamics of accumulation itself, rather than from an allegedly chronic insufficiency of demand.

Castro's 1979 book is a collection of essays, some original and some written at various points during the 1970s and previously published in Brazilian journals or presented at seminars and conferences. In the book's introduction, Castro acknowledges that, to a significant extent, the book originated from notes for his classes at UNICAMP's Economics Graduate Program, therefore reflecting discussions then taking place among faculty and students. Most of the book is devoted to analysing the postwar capitalist boom in core countries and its exhaustion and crisis, without overlooking differences between the dynamics observed in this period in the United States, as the world's new leading power; the United Kingdom, the prewar power then overtaken by the US; and the postwar 'Miracle' economies of Germany, Italy and Japan. However, the theses that would stir the Effective Demand Controversy were most forcefully articulated in chapters five, 'Why not Kalecki?', and six, 'The Return of the Cycle', neither of which had been published before.

In his diagnosis of the economic downturn in core countries, Castro subscribes to the profit squeeze interpretations advanced by Boddy and Crotty (1974) and Glyn and Sutcliffe (1972). This places him at odds with Kalecki's contention that the mass of realised profits is determined by the magnitude of capitalists' investment and consumption expenditures and, consequently, wage increases cannot squeeze profits, since it is the level of output that adjusts the level of profits so determined to a greater wage share (Kalecki 1971). The profit squeeze theory of crisis was controversial in the 1970s and remains so today. Nonetheless, Castro argues that there was a fairly common understanding among 'pre-Keynesian' economists that downturns are preceded by periods

of vigorous expansion in which aggregate demand is *not* deficient. On the contrary, capitalism in these periods actually appears to grow beyond its possibilities, as profitability is squeezed down by not only wages that keep rising while employment remains persistently high but also increasing capital costs, that is, raw-material prices and interest rates. For Castro, this shared view is exactly what characterizes the 'cycle tradition'. Castro considers himself a disciple of this tradition and laments that Keynes's and Kalecki's theory of Effective Demand, whatever its merits, became a hindrance to its further development.

According to Castro, the experience of the Great Depression of the 1930s regrettably came to replace that of recurrent business cycles as the backdrop for theorising capitalist dynamics. In place of alternating periods of expansion and contraction, in which the boom itself creates the conditions for crisis, and the crisis creates the conditions for a recovery and a new boom, capitalism came to be characterised as a system continuously operating sub-optimally, always beneath and never beyond its own possibilities, owing to the absence of automatic mechanisms to fully employ available labour and fully utilise installed productive capacity.[7] For Castro, this view of capitalism was prefigured by the likes of Malthus and Rosa Luxemburg, later gaining prominence through the celebrated works of Baran, Sweezy, Steindl and Joan Robinson, for whom stagnation was the norm and growth was an exception to be explained by exogenous causes: innovations and the opening of new markets, together with government expenditures, above all in arms. In this sense, capitalism after Keynes seemed to be ruled not so much by its own inner laws than by the will of policymakers. Hence the title of the book, 'Capitalism is still that one', meaning that 'Keynesian' postwar policy regimes did not abolish the classical cyclical dynamic of capitalism, which reasserted itself in the crisis of the 1970s: a dynamic in which capital profitability is to be restored through bankruptcy of marginal firms operating with obsolete technology, intensified concentration and centralisation of capital, and reduction of wage costs and strengthening of labour discipline brought about by rising unemployment.

Castro therefore posits that the causes for the exhaustion of an upswing and its cyclical reversion into a downswing are to be found in the production of surplus-value, not its realisation. He goes to great lengths to argue that Marx's General Law of Capitalist Accumulation does not deny but rather affirms the possibility of periodic slowdowns in capital accumulation caused by the absorption of most of the reserve army of labour (Marx 1976). Marx's claim that wages are the dependent variable while accumulation is the independent variable is only meant to refute Ricardo's, Malthus's and Mill's theorising of wages as determined by an alleged 'iron law' based on the 'principle of population'. Hence a slowdown in accumulation is precisely the mechanism through which the system '[…] excludes every diminution in the degree of exploitation of labour, and every rise in the

[7] 'This proposition goes far beyond a mere attack against Say's Law. Frankly speaking, it amounts to an Anti-Say Law' (Castro 1980, p. 113 – our translation).

price of labour, which could seriously imperil the continual reproduction, on an ever larger scale, of the capital relation' (Marx 1976, p. 771-2 — quoted in Castro 1979, p. 135), thereby reasserting the dependence of wages on accumulation. Furthermore, the effects of the tendential rise in the organic composition of capital on employment only make themselves felt in the long run, over several business cycles, and they are in fact ambiguous, since mechanisation also cheapens labour power by releasing it, thereby fostering further accumulation.[8]

Kalecki's principle of capital stock adjustment also suggests that accumulation itself drives down its own profitability. However, Castro believes that Kalecki obtains this result only formally, through the specification of a business cycle model in which upswings and downswings occur around a static trend and mutually offset one another, as time lags between orders and deliveries of investment goods generate positive or negative variations of the net capital stock around depreciation level. In such a model, growth cannot emerge endogenously from the cyclical dynamic itself; it can only be introduced by means of an exogenous coefficient representing technical progress and innovation, whose addition changes the slope of the trend given by the capital stock replacement process, a trend over which business cycles are 'superimposed'. At bottom, Castro regards Kalecki's model as merely a species of the multiplier–accelerator macro-model genus, albeit a particularly attractive one, for Kalecki's theory of profit determination by capitalist spending allows him to claim that capitalists are 'masters of their own fate' (Kalecki 1971, p. 13), rather than mere 'employees of capital', as in Marx. In regard to Kalecki's claim that profits cannot ever be squeezed by wages, Castro argues that it holds only insofar as one assumes, with Kalecki, that capitalists' spending decisions are made before and independently of any rise in wages, and, so, are unaffected by the rise. According to Castro, Kalecki's conclusion is already hidden in his premise, since it is trivially evident that, if capitalist spending is held constant *by assumption*, workers' consumption out of wages can only rise to the extent that total output correspondingly rises.

In summation, Castro accused the Effective Demand approach of underestimating the endogenous, inner drive of accumulation, conceiving the whole of capitalist dynamics on the basis of an unwarranted generalization of the historically specific unfolding of the 1930s crisis, and assuming, as a result, a stagnationist outlook of capitalism, in which the state's whims hold more explanatory power than the laws of motion of the economy itself. This is the charge with which Possas and Baltar, Belluzo and Tavares and Braga were faced.

[8] Rejecting explanations of the 1970s crisis based on Marx's Law of the Tendency of the Rate of Profit to Fall, Castro (1979) claims that there was no sensible rise in the organic composition of capital of core countries in the post-war period. Yet he provides no data to substantiate this claim.

3. Effective Demand as a principle

The response to Castro did not consist merely in defending Kalecki's model of the business cycle on technical grounds. Its central move was to reconceptualize Effective Demand as a *principle* of capitalist dynamics. As shall be seen in this section, Possas and Baltar, and later Belluzzo and Tavares, held that the Principle of Effective Demand (henceforth PED) should not be confused with underconsumptionism; with the orthodox 'Keynesian' textbook notion of a 'demand gap'; or with a narrow short-period macroeconomic hypothesis, relevant only to the analysis of crises and government expenditures. It expressed instead a causal view of capitalism in which expenditure unidirectionally determines income and output; investment plays a leading role in capitalist dynamics; and capitalist instability follows from the monetary form of wealth as well as the expectational, speculative nature of investment decisions made under uncertainty. Braga would later radicalize this move by arguing that the PED has to be situated within a broader theory of the temporality of the capitalist structure.

3.1 Possas and Baltar: against Say's Law and underconsumptionism

If Castro had set out reasons for 'why not' Kalecki, Possas and Baltar (1981) made the case in favour of Kalecki, regarding him as the most rigorous and far-sighted representative of the view that takes Effective Demand to be a *principle* that is, something more than a theory, something that underpins and even precedes the theorising of capitalist macrodynamics. Their article plays a foundational role for an important strand of Brazilian heterodox economic thought, whose distinctive trait is this shared understanding of Effective Demand as a principle, rather than a special topic concerning state spending in downturns, or a modality of 'underconsumptionism', an accusation which Possas and Baltar complained to be frequently and unjustly levelled against Kalecki and Keynes. As anticipated just above, the PED so interpreted also stands against the typical mainstream modelling of Keynes's theory, in which a 'demand gap' between actual and potential output arises from the supposedly independent character of investment and the dependent character of consumption relative to current income.

Against Say's Law, the PED holds that there is not merely an identity between expenditure, income and output, but an unequivocally unidirectional relation of causal determination running from expenditure to income and output. In other words what defines Say's Law as the diametrical opposite of the PED is not the mere assertion of that identity, which Possas and Baltar consider tautologically true and the PED therefore admits. It is rather the unwarranted logical leap from that identity to the claim that production, supply, creates its own matching demand. According to Possas and Baltar, Say's Law reasoning fails on two grounds, the first being: 'Production is only capable of generating an equivalent demand if fully realized, that is, it is ultimately the realization and not the production

as such that is responsible for the creation of purchasing power.' (Possas and Baltar 2023, p. 111-2). Second, Say's Law ignores that each individual agent's spending is not limited by their own income, but may in fact be greater or smaller than income, since there is a credit system and money can function as a store of value. At the aggregate level, it is income that consequently adjusts to expenditure.

Hence the PED implies a significantly different conception of 'autonomous expenditure' from the conventional one, referring to current income. For Possas and Baltar, not only investment, government and foreign expenditures, but even consumption out of workers' wages should be understood as autonomous in the sense of the PED, even though Kalecki often makes the simplifying assumption that workers do not save in order to emphasise the residual role of savings in the aggregate determination of income by expenditure. Still, investment remains the key variable under the PED, for two reasons: *i*) investment decisions are driven by the anticipation of future profits, that is, they are expectational in nature, unlike other spending decisions; and *ii*) investment spending adds not only to output, by itself and through its dynamic effects on aggregate demand, but also adds to productive capacity. From this well-known 'dual character' of investment follows the principle of capital stock adjustment, or the need for investment demand to generate a sufficient rate of utilization of a productive capacity now enlarged by it, if further capital accumulation is not to be curtailed. In fact, Possas and Baltar stress that the PED's main condition of validity is that production be elastic, so that the economy's adjustment to variations in aggregate demand falls, at least partially, on the level of output, rather than on the level of prices. Moreover, the more idle the installed productive capacity, the more likely it is that output quantities will respond, instead of prices, to changes in demand. The PED is therefore not restricted to a hypothetical, static short run, defined as the timespan within which capacity can be treated as constant, for any change in aggregate demand and output also alters the rate of capacity utilisation, thereby affecting subsequent investment decisions by setting the capital stock adjustment principle in motion.

Possas and Baltar further argue that Kalecki's contributions to economic theory far exceed the sketching of a variant of the multiplier–accelerator model of business cycles consistent with the PED. They contend that Kalecki has also fruitfully integrated the macro- and microeconomic levels of analysis by treating the functional distribution of income as an explicit parameter of the model; by incorporating the mark-up pricing practices prevalent under oligopolistic competition through the concept of 'degree of monopoly';[9] and by differentiating between three vertically integrated

[9] 'The price fixing power which manifests itself in the degree of monopoly doesn't depend only on relations of competition between firms. This power is equally exercised over workers […]. Inasmuch as the concept of degree of monopoly expresses not only competition among capitalists, but also conflict between capitalists and workers, it contains within itself the process through which income distribution takes place at the firm level' (Possas and Baltar 1981, p. 123 – our translation). The claim that modern capitalism is characterized by an absence or weakening of competition that follows from the micro-foundations of Kalecki's and Steindl's macro treatment of capacity utilisation is also reproached

'Departments' that produce investment goods, consumption goods for capitalists and consumption goods for workers, respectively. In Possas and Baltar's opinion, Kalecki's formulation of the PED is not only more encompassing than Keynes's but also clearer: in Kalecki, distribution is determined by the degree of monopoly, and profits are determined, along with total output, by capitalist spending, given the distribution. In Keynes, by contrast, this causal sequence is lost inside the aggregate investment–saving identity, as capitalists' and workers' consumption are collapsed together within an economy-wide consumption function dubiously grounded in psychological factors. For Possas and Baltar, Kalecki's more mediated theory of distribution helps him to avoid confusions, common among Keynesians, between, on the one hand, changes in net financial positions and various forms of wealth-holding that follow from capitalists' investment decisions, and, on the other, savings as a macroeconomic residue and saving as a microeconomic 'non-decision' and 'non-act' of spending. In addition, Kalecki's three-department model provides a conceptual link between the functional distribution of income and the productive structure of an economy, allowing one to appreciate the leading role acquired by certain sectors in certain periods; the distributional changes that follow from transformations in the productive structure, or that are required for them to occur; and the dynamic effects of these changes. Such a link is especially valued by economists working on capitalist development in peripheral countries, as in the previously mentioned case of Tavares (1998a; 1998b) herself.[10]

Possas and Baltar are therefore unwavering in their defence of Kalecki's conjectures on distribution, and in particular on the impossibility of wages ever squeezing profits, suggesting that any reasoning that posits an inverse relation between wages and profits ultimately adheres to Say's Law.[11] They also uphold Kalecki's procedure of formulating a stationary, 'pure cycle' model and then adding to it an exogenous growth component, not only as an adequate logical device but as an accurate theoretical portrayal of capitalist reality, endorsing Kalecki's argument that growth cannot be taken for granted as a feature of capitalism in the absence of technical progress, innovations and new markets. In other words, they hold that business cycles and the long-run trend of economic growth or stagnation have different determinants: effective demand in the former case and structural

by Castro (1979; 1980) on the basis of Clifton's seminal article on Marx's theory of competition and its difference from neoclassical 'perfect' and 'imperfect' competition alike (Clifton 1977).

[10] Interestingly, Possas and Baltar highlight that Kalecki isn't really a Marxist author, despite being largely perceived as such, since Marx is but a very loose source of insights and inspiration for him, and even though Kalecki dubbed his three-department model 'Marxian Equations of Reproduction', this is a misnomer: the model's logical structure and premises are very different from those of Marx's reproduction schemes in Book Two of *Capital* (Marx 1978).

[11] 'For instance, a wage increase accompanied by greater bargaining power of workers *vis-à-vis* firms can, according to Kalecki, convert into a change of income distribution in favour of workers. Such a modification, however, will not have been effected in detriment of the aggregate level of profits, for the latter bears no direct dependency relation with wages – *unless one doesn't intend to discard Say's Law*' (Possas and Baltar 1981, p. 121 – our translation and italics). Castro (1979) had already protested that the 'ghost' of Say's Law was repeatedly conjured to pre-empt discussions on the merits of the 'cycle tradition'.

change in the latter. Finally, Possas and Baltar point out that the Effective Demand approach takes the content of aggregates, that is, the composition of output and the productive structure of the economy, as given. For them, this does not render the approach in any way faulty; it only means that it must complement, and be complemented by, the specialised investigation of structural change of the kind undertaken by Schumpeter and Marx. Nevertheless, Possas and Baltar remain convinced that, in this domain as well as in that of Effective Demand, capitalists are indeed 'masters of their own fate', arguing that both Schumpeter and Marx find, each in their own way, that capital inherently tends to autonomise itself from and subsume to itself any 'external' obstacle to its self-valorisation, '[…] which does not mean the exclusion of class struggle, or, much less, of the historical role of the working class' (Possas and Baltar 1981, p. 152, footnote 53 — our translation).

While defending Kalecki's modelling of the business cycle, Possas and Baltar shifted the Controversy away from the question of whether Kalecki's modelling is indeed satisfactory. Their central claim was that Effective Demand should be understood as a *principle* governing macro determination of the level of output and employment in diametrical opposition to Say's Law. However, their response to Castro also left a problem unresolved. Despite repudiating charges of underconsumptionism, Possas and Baltar nonetheless posed a dichotomic separation between the determinants of cycles and the determinants of the long-run trend and accepted Kalecki's view on the necessity of exogenous forces to push capital accumulation beyond simple reproduction levels, a view that was on the centre of Castro's case against the Effective Demand approach. Braga's later intervention in the Controversy was largely motivated by this unresolved problem.

3.2. Belluzzo and Tavares' 'short intervention' and Castro's 'displacement of the issue'

Belluzzo and Tavares (1981) pushed what could be termed the 'Campinas School' response to Castro further by arguing that his critique of the Effective Demand approach missed the mark: it was not at all directed against the *principle* of Effective Demand. Their 'short intervention' in the Controversy aims to reinforce and clarify the difference between the PED and the underconsumptionist thesis of *insufficiency* of effective demand. They begin by lamenting that orthodox and Marxian economists seem quick to unite in their defamation of Keynes and that Castro had joined this chorus despite his own virtuosity.[12] Rejecting Castro's claims concerning the obstruction of the 'cycle tradition' by the Effective Demand approach, Belluzzo and Tavares add:

[12] 'Keynes is dead. So proclaim – *urbi et orbi* – the heralds and practitioners of the new Monetarist orthodoxy. Keynes should never have existed. So seems to desire the vestals of die-hard Marxism, echoing, in plainsong, the exequies performed in conservative sanctuaries. Here, in these sad tropics, the anti-Keynesian curse is being shouted by all these people, but, within the shouting, it is possible to discern a singular speech [Castro's] for its sophisticated tone and erudite posture' (Belluzzo and Tavares 1981, p. 107 – our translation).

> If that happened, we all should deplore. One can only be unsettled by the possibility of economic theory having languished for forty years, undernourished by such petty controversy, but it is also possible that Professor Castro, despite his usual rigor and mastery of the literature, underestimated the true scope of the principle of effective demand (Belluzzo and Tavares 1981, p. 108 – our translation)

According to Belluzzo and Tavares, Castro's understanding of the Effective Demand approach is no different from that underlying Alvin Hansen's '45-degree graph' found in any conventional macroeconomics textbook, that is, the mainstream 'demand gap' interpretation of Keynes' General Theory already criticised by Possas and Baltar. To dispel this 'bastard Keynesian' reading of the General Theory (henceforth GT), Belluzzo and Tavares draw on *The General Theory of Employment* (Keynes 1937), Keynes's own rebuttal article to Viner, from a year after the original release of his homonymous magnum opus. Based on this article, they underscore that Keynes' main concern is not the volume of investment that will adjust aggregate supply and demand, as it is for his 'epigones', but rather the effects of investment *fluctuations* on aggregate demand, output and employment. For Belluzzo and Tavares, Keynes' theory is therefore one of the systemic instability of capitalism, an instability rooted in the 'sudden and wide' fluctuations to which investment is inherently subject given its profit-seeking goal:

> […] the anarchic nature of intertemporal decisions that characterize the pursuit of this goal lead the capitalist class *as a whole* to problematic evaluations – to the system's stability – about the present value of its capital and the desired form of possessing wealth. The relation between the interest rate and the probable yield of newly produced capital goods may be such that indicates to the whole of the capitalist class that the maximum rate, rewarding productive capital, as well as the safest form, at the moment, of possession of capital *sans phrase*, are both, in fact, incompatible with the current pace of investment and, therefore, with the current level of income and employment (Belluzzo and Tavares 1981, p. 111 – our translation)

In addition, Belluzzo and Tavares quote extensively from a letter from Keynes to Hobson, dated February 14, 1936, in order to further challenge allegations of underconsumption or 'excess saving' causing effective demand failures in Keynes' theory.

> 2. The apparent failure of consumption in such circumstances is not really due to the consuming power being absent, but to the falling off of incomes. This falling off of incomes is due to the decline in investment occasioned by the insufficiency of the return to new investment compared with the rate of interest. Thus the decline of investment, by reducing incomes below normal, has the appearance of producing a surplus of consumers' goods. But, just as the appearance of overinvestment did not really represent an absolute overinvestment for social requirements, so the apparent surplus of consumers' goods does not represent a true surplus over what consuming power ought to be. If steps are taken to increase investment, the effect of this on incomes will increase demand up to a point where the apparent redundancy disappears.
>
> 3. There is, according to my view, no place in which redundant saving, so to speak, can be in suspense. If some individuals are saving in excess of the flow of new investment, this means

> that there must be corresponding losses and dis-saving by others who have to live on their capital. (Keynes 2013, p. 210 – quoted in Belluzzo and Tavares 1981, p. 110-1)[13]

Castro (1981) in turn accuses Belluzzo and Tavares of 'displacing the issue': they had simply failed to answer whether or not they believed capitalism suffers from a built-in tendency towards insufficiency of effective demand. 'I wonder if said belief is no longer worth being discussed? If that is the case, I cannot but be satisfied. It just so happens, however, that its abandonment necessarily has implications which Belluzzo and Conceição [Tavares] seem to not notice – and which justify, perhaps, candles still being burnt on such a cadaver' (Castro 1981, p. 110 – our translation). He then points to discrepancies between Keynes' refusal of underconsumptionism in the letter to Hobson quoted by Belluzzo and Tavares and his positive judgements of Hobson's and other underconsumptionist theories in chapter twenty-three of the GT (Keynes 1936) and elsewhere. He also attacks the underconsumptionist overtones in earlier works by Castro's contenders, particularly in *Acumulação do capital e industrialização no Brasil* ('Capital Accumulation and Industrialisation in Brazil'), Tavares' 1974 habilitation (*livre docência*) dissertation, presented to the Federal University of Rio de Janeiro (*Universidade Federal do Rio de Janeiro*, UFRJ). In that dissertation, Tavares refers, for instance, to

> […] a mature stage of capitalism, understood as that which no longer finds limits to its expansion on the side of the technical structure of capital […] The system faces, on the other hand, problems on the side of the dynamic realization of the surplus, i.e., it begins to manifest a permanent tendency to increase its profit accumulation potential over the effective rate of growth of utilized productive capacity (Tavares 1998a, p. 35-6 – our translation; quoted in Castro 1981, p. 111).[14]

According to Castro, Belluzzo and Tavares' interpretation of Keynes lacks textual support, as there is no explicit mention of systemic instability or investment volatility in chapter three of the GT, 'The Principle of Effective Demand'. Both themes do appear in chapter twelve, 'The State of Long-Term Expectations', and chapter twenty-two, 'Notes on the Trade Cycle', as well as in the 1937 Viner rebuttal. However, Castro maintains that Keynes could not possibly have succeeded in integrating them into the core of the GT, for Keynes' treatment of those themes actually seems to imply that effective demand failures and persistent involuntary unemployment have no cause other than the radical uncertainty inherent in economic calculations, so that '[i]f, on the other hand, our knowledge

[13] This very brief letter is a reply to two of Hobson's own letters to Keynes, who had sent him a copy of the then recently published GT, and it consists of an enunciation of five topics of minor theoretical disagreement between the two. Belluzzo and Tavares quote topics two and three.

[14] In other passage quoted by Castro, Tavares expresses her support of Steindl: '[…] it is not an explanation of barriers to growth from the side of resources, neither from the side of the wages/profits opposition, but rather from the side of realization problems and intercapitalist competition. It can therefore be considered a dynamic and long run generalization of the Keynesian thesis of effective demand insufficiency and not of the Classical Ricardian or Marxist theses' (Tavares 1998a, p. 62 – our translation; quoted in Castro, 1981; p. 111).

of the future was calculable and not subject to sudden changes, […] we might reasonably suppose that the whole of available resources would normally be employed, and the conditions required by the orthodox theory would be satisfied' (Keynes 1937, p. 218-9 – quoted in Castro 1981, p. 112). Furthermore, Castro objects that the multiplier only establishes a quantitative relation between the amount of consumption and investment goods that it pays entrepreneurs to produce; it does not establish investment as a 'leading' or 'determinant' variable. 'Saving and Investment are the determinates of the system, not the determinants. They are the twin results of the system's determinants, namely, the propensity to consume, the schedule of the marginal efficiency of capital and the rate of interest' (Keynes 1936, p. 183-4 – quoted in Castro 1981, p. 114).

Castro therefore concludes that Belluzzo and Tavares' reading of the GT is indebted more to Minsky than to Keynes himself. Yet Minsky, unlike Keynes, is placed by Castro within the 'cycle tradition', since Minsky had criticised the GT for the scant attention it gave to the role of finance in business cycle movements, a role that, according to Castro, has always been constitutive of the tradition's research agenda, notably in Marx, Tugan-Baranovsky and Schumpeter. For Castro, Minsky's contribution to that tradition is all the more invaluable because Minsky was sceptical of the relevance of multiplier-accelerator models of any kind, whether Harrod's, Hicks' or even Kalecki's.

> If, for [Belluzzo and Tavares], the principle of effective demand solely has to do with systemic instability and investment volatility, that is, if there has never been any other Keynes than Minsky's, then Keynes has nothing to do not only with Hansen, but also with Kalecki and Steindl. In that case, Keynes would just be the theoretician of uncertainty (and also an unsuccessful theoretician of the cycle). If so, my attack against the effective demand insufficiency thesis would only hit Kalecki, Sweezy, Steindl and their disciples. But we know it isn't quite like that. There is another Keynes, that Minsky attempts to sweep under the rug. And, regrettably, this was the Keynes who had the most influence, especially in the cycles to which all three of us belong (Castro 1981, p. 114-5 – our translation).

The exchange between Belluzzo and Tavares and Castro made clear that the Effective Demand approach involves much more than simply understanding that capitalism is prone to realisation failures. If there is a unidirectional causal relation of the determination from expenditures to output and income, then capitalist instability must also be deeply rooted in this relation. The monetary character acquired by wealth under capitalism subjects investment to 'sudden and wide' fluctuations. Because investments are made under radical uncertainty in anticipation of future profits, they are expectational and inherently speculative in nature. Still, Belluzzo and Tavares' efforts to dissociate the PED from underconsumptionism and 'bastard Keynesian' textbook interpretations of the GT was met by Castro with a renewed insistence on the question of whether capitalism is better portrayed as a system in which periods of lacking demand cyclically alternate with periods of excess demand and fast-paced capital accumulation, squeezing down profitability from the supply side; or as one that would continuously operate a sub-optimal level, leaving resources, labour force and installed

productive capacity idle, if it was not for external stimuli coming from the state, new markets and innovations. Braga thus sought to 'dislocate the issue' in a different way than the one protested about by Castro, that is, to move the Controversy past its original terms, past the opposition between cyclical and stagnationist views of capitalism, and towards a theory of capitalist temporality.

3.3. Cycle, trend and capitalist temporality: Braga's reconstruction of the problem

Siding with Campinas along Possas and Baltar and Belluzzo and Tavares, Braga (1983) nonetheless identified weaknesses in previous responses to Castro. For Braga, Possas and Baltar fell into Castro's 'trap' by tacitly conceding that, because cycle and trend have different determinants, growth is exogenously driven and cannot be explained by the PED. Belluzzo and Tavares, by contrast, expounded the PED '[…] as a general law of the capitalist system's dynamic and which affirms its intrinsically unstable character' (Belluzzo and Tavares 1981, p. 111 – our translation; quoted in Braga 1983, p. 22). However, they did not take a clear stand on the issue of chronic demand deficiency raised by Castro, who in turn charged them with 'displacing' this issue and confining to generic remarks on systemic instability and investment volatility more attributable to Minsky than Keynes.

Pursued along these lines, the Controversy had wandered into the dead end reached by the multiplier-accelerator macro-modelling literature. On this point, Braga endorses Pasinetti's (1974) conclusion that distinct parameter values in the investment function of such models can give rise either to an exponential growth trend or to explosive, regular or dampened cycles, with no solid grounds for choosing among specifications and no specification capable of yielding a cycle-cum-growth trend. To escape this impasse and meet Castro's challenge of conceiving cycle and trend in a unitary manner, so that the trend emerges from the cycles themselves, Braga proposes that the trend be reconceptualised as 'a contradictory development of the very structure of the capitalist system' (Braga 1983, p. 23 – our translation), rather than as a 'long-run' trajectory of ill-defined temporality: '[…] the long run is not unique; it may be expansive or stagnant. And, in fact, capitalism's history is made of long periods of prosperity as well as long depressive periods' (Braga 1983, p. 23 – our translation).[15] Therefore, it would be equally wrong to assume that capitalism tends to stagnate in the absence of exogenous propellants and to take capitalist growth for granted, attributing stagnation instead to exogenous, accidental factors. In this sense, Braga argues that there may be whole phases during which effective demand is indeed insufficient, not to fill a 'gap', as in traditional 'Keynesian' models, but to maintain and further raise the rate of profit. According to Braga, Castro actually accepts that effective demand may be faulty in specific, transient situations such as the Great Depression of

[15] In a footnote located around this point of the text, Braga (1983) refers approvingly to Schumpeter's theory of business cycles, in which cycles of lower order, i.e., shorter length unfold over a trend originated by cycles of an immediately higher order.

the 1930s, while denying at the same time that there is a *secular* tendency towards effective demand insufficiency in capitalism. For Braga, this amounts to upholding Say's Law in the long run and disregarding the antinomic nature of the trend, in which the possibility of a stagnant long run is just as inherently inscribed as that of an expansive one.

According to Braga, the static interpretation of the GT is, to some extent, faithful to the ambiguous letter of its text, and not merely a fabrication of the mainstream. However, Braga argues not only that the GT is rich enough to contain within itself the elements for a superior, dynamic formulation of the PED, but also that Kalecki has in turn succeeded in freeing the PED entirely from mainstream static equilibrium hypotheses. For Braga, Kalecki's merit was to push the problematic of cycle-trend integration to its limits. In doing so, he obtained results that laid the basis for a new and different problematic that 'transcended' his own: that of situating cycle and trend in the temporality of the capitalist structure.[16] In fact, Kalecki had already indicated that '[…] the long-run trend is but a slowly changing component of a chain of short-period situations; it has no independent entity […]' (Kalecki 1971a, p. 165 – quoted in Braga 1983, p. 25).

Across the successive versions of his macro model, Kalecki struggled to specify an investment function capable of accounting for both variations in aggregate demand and the adjustment of productive capacity to these variations, on the one hand; and autonomous firm-level investments aimed at introducing innovations and incorporating technical progress into the capital stock in order to capture surplus profits, on the other. As is well known, he regarded this as the *pièce de résistance* of Economics (Kalecki 1971a). As seen above, Kalecki initially elaborated a 'pure cycle' model under the provisional hypothesis of a stationary economy and subsequently added to it an exogenous trend coefficient, a first approximation he would later judge unsatisfactory. The inclusion of the trend coefficient changes the profile of cyclical fluctuations, so that the trend does appear to emerge from the cycles. Braga notes, however, that this is an inconsistent solution, which resolves the problem operationally rather than theoretically: technical progress would remain a long-run element unless a theoretical explanation of how it influences capitalists' investment decisions could be provided to justify the addition of a trend coefficient to a short-run investment function. Kalecki's own reservations about this solution eventually led him, in his 1968 article *Trend and the Business Cycle* (Kalecki 1971a), to attempt to overcome the evident duality still lingering in his theory. In this revised specification of Kalecki's investment function, technical progress allows firms to capture a portion of the profits that would otherwise accrue to capitals operating with older equipment, thereby generating a deviation of the rate of profit from the 'standard' rate that new investments based on the old technique would obtain at the current level of activity. The size of these deviations, determined

[16] Hence the title of Braga's PhD dissertation: *Temporalidade da riqueza* ('The temporality of wealth') (Braga, 1985).

by the pace of technical progress, would then lead capitalists to invest more, less or the same as their firms' total internal accumulation, that is, their retained earnings, thereby modifying the cyclical behaviour, prolonging booms and shortening recessions or vice versa. Yet Kalecki himself acknowledges that, even in this revised model, '[…] the rate of growth at a given time is a phenomenon rooted in past economic, social and technological developments rather than determined fully by the coefficients of our equations as is the case with the business cycle' (Kalecki 1971a, p. 183 – quoted in Braga 1983, p. 31, footnote 32).[17]

For Braga, this meant that cycle and trend remained separate entities and, Kalecki's 1968 model marking the exhaustion of the cycle-trend integration problematic rather than a breakthrough in it. Kalecki did nonetheless indicate, in his own way, that the realm of capitalist investment decisions is where the key to dissolving the short-run/long-run dichotomy should be sought. Moreover, however rudimentary a representation of capitalism that abstracts from technical progress and finance may be, Kalecki's 'pure cycle' model reveals that the roots of capitalist instability lie not in technical progress and finance alone, but much deeper, in the very nature of capitalist investment, thus substantiating the PED. What is needed, according to Braga, is not to *integrate* cycle and trend, a goal which mathematics supposedly proved impossible, but to *determine* them both simultaneously, in a theoretical sense, within the temporality of the capitalist structure. In other words, the structural parameters that, in Kalecki's modelling, correspond to 'past economic, social and technological developments' must be object of historical investigation,[18] which in turn requires a 'theory of the dynamics of capitalist calculation', together with a theory of the general determinants of capital as 'a diverse entity, synthesis of the multiple forms of appropriation of wealth' (Braga 1983, p. 35 – our translation), the latter theory being, of course, Marx's. Although these general determinants shape the process of capital valorisation and subordinate capitalist dynamics, an adequate understanding of the latter can only be achieved through more concrete mediations, of which Effective Demand is a crucial one. To grasp these mediations, Kalecki and Keynes, and also Schumpeter, are indispensable, in Braga's view. For Braga, even though Marx's concept of capital is far richer than theirs, an impoverished conception of capitalist dynamics had come to prevail among Marxists, partly because

[17] A semi-autonomous trend coefficient β, defined as a slowly changing function of time, is included in the specifications of Kalecki's 1968 model in such a way as to encapsulate advantages for individual firms of leading technical change (Braga 1983; Kalecki 1971). Castro too had complained that growth was '[…] to be explained, even in [Kalecki's 19]68 model, by the "trend components"' (Castro 1979, p. 120 – our translation).

[18] 'It is clear that the only "secular trend" of capitalism one can talk about is: a vigorous economic development, marked, for the same reason, by structural instabilities, on the course of which a crises emerge that results in a stagnant trajectory, whose reversal is not automatically determined by the market and that, consequently, foists such a disturbance (economic and political) that give rise to structural mutations, changes in the modalities of interaction of the political and economic levels, "technological revolutions", transformations in the content of institutions, all of this as an expression of that development altering – with no preestablished historical end – the *fundamental properties* of this mode of production' (Braga 1983, p. 37-8 – our translation).

of Marx's own inability to proceed, in his writings on the Critique of Political Economy, up to a stage in which these mediations could be adequately developed at a lower level of abstraction.[19]

Braga hence sought to recast the Controversy in broader, more ambitious terms. He did not abandon Kalecki, but, instead, attempted to overcome the limits of Kalecki's thought by situating the PED within a theory of capitalist temporality, one through which investment, technical change, finance, competition and the ever-changing forms of capitalist wealth could be historically and concretely analysed. This kind of approach that mobilizes Marxian categories while refusing to reduce all capitalist dynamics to an 'abstract' law is a hallmark of the 'Campinas School' tradition in Brazilian heterodox economics.

4. Turnover time, realisation and reproduction: Lima and Lemos' Marxian critique

While Kalecki may have been the unmistakable protagonist of the Effective Demand Controversy drama, Marx has also been a recurrent character, invited, alongside Schumpeter, to climb upon the stage from its two sides: by Castro, as the founding father of the 'cycle tradition', and by Possas and Baltar and Braga, as a theoretician of capital valorisation, structure and change. Only the late intervention of Lima and Lemos (1984) in the Controversy adopts, by contrast, a strictly Marxian standpoint, drawing on the reproduction schemes and the categories of turnover time and functional forms of capital, from Book Two of Marx's *Capital* (Marx 1978), to mount an internal critique of the PED, as opposed the more usual critiques predicated on 'external factors' such as technical progress or finance. For Lima and Lemos, Effective Demand pertains strictly to the sphere of circulation and therefore to 'capital in general': it can be conceived in abstraction from competition and the interactions between 'many capitals', and even from accumulation itself, that is, under simple reproduction. Although Lima and Lemos formalise their argument mathematically, the formalisation adds little clarity and appears to be marred by printing typos. Their reasoning, however, is sufficiently clear and cogent to be fully grasped from textual exposition alone.

Possas and Baltar had stated the PED as a unidirectional relation of causal determination running from expenditures to incomes, through which the level of output and employment is likewise determined. Lima and Lemos point out, however, that while aggregate expenditures and incomes are indeed identical, output is not necessarily identical to income and expenditures, and may be either greater or smaller than them. If expenditures are greater than output, there is underproduction, real output growth thereby falling short of demand; if they are smaller, there

[19] Notwithstanding differences on the propounded theoretical treatment of said mediations, a similar case is made in the PhD dissertation of Frederico Mazzucchelli (2004), who was a doctoral colleague of Braga at UNICAMP's institute of Economics. Mazzucchelli's dissertation was defended in the same year Braga's article was published, and two years before Braga himself defended his PhD dissertation.

is overproduction, and a fraction of produced output is not realised, that is, it accumulates as unplanned inventories, instead of being sold. Only the simplifying assumptions of constant prices and zero net inventory variation can ensure that output always equals expenditure and income. If Y denotes income, E expenditure, O produced output, O' realised output and Δ net inventory change, then $Y \equiv E \equiv O' = O - \Delta$.

In Book Three of *Capital*, Marx had stressed that production and realisation are two separate, independent acts, the latter preceded by the former.

> It is the extraction of this surplus-value that forms the immediate process of production [...] As soon as the amount of surplus labour it has proved possible to extort has been objectified in commodities, the surplus-value has been produced. But this production of surplus-value is only the first act in the capitalist production process, and its completion only brings to an end the immediate production process itself. Capital has absorbed a given amount of unpaid labour. […] Now comes the second act in the process. The total mass of commodities, the total product, must be sold, both that portion which replaces constant and variable capital and that which represents surplus-value. If this does not happen, or happens only partly, or only at prices that are less than the price of production, then although the worker is certainly exploited, his exploitation is not realized as such for the capitalist and may even not involve any realization of the surplus-value extracted, or only a partial realization; indeed, it may even mean a partial or complete loss of his capital. The conditions for immediate exploitation and for the realization of that exploitation are not identical. Not only are they separate in time and space, they are also separate in theory (Marx 1981, p. 352 – the last two sentences are paraphrased by Lima and Lemos 1984, p. 75).

For Lima and Lemos, the PED effectively negates this relative autonomy between production, on the one hand, and circulation and realisation, on the other, by subsuming the former under the latter, that is, by having realisation determine production. They emphasise that autonomy of production and realisation is not only logical-theoretical but concrete, not least because both production and realisation take time. The turnover time of capital is the sum of a capital's production time and its circulation time: respectively, the time a capital-value spends tied up in the direct production process and the time it takes for the commodities produced to be brought to market and sold. Contrary to what Possas and Baltar and Tavares claim, the fact that commodity production must be sanctioned by the market does not mean that production and realisation are inseparable in reality,[20]

[20] Lima and Lemos went to great pains to demonstrate that the spheres of production and circulation are, in fact, separate, in Marx's text as well as in reality, since their separation had been strongly contested by Tavares in 1978: 'Let us look at one of the statements that has given rise to confusion: "surplus-value" can only be generated in the "orbit of production," and can only be "realized" in the "orbit of circulation." What does it mean? Does it mean, by any chance, that in capitalist production, surplus-value is generated *first* and *then* it becomes profit […]? No, it does not. It just means that although [it is possible to decompose] *abstractly*, that is, analytically, capitalist production into several "orbits" […], in reality it is the first historical mode of production in which production and circulation of commodities and the circulation of money are associated (concretely inseparable). The "separation" between the orbit of production – where "surplus-value" is generated –, the orbit of circulation of commodities – the "market" where "surplus-value" [is realized] –, and the orbit of circulation of money capital – where capital becomes its most "apparent" form – is very dangerous, and it can only be done with clear analytical purposes. In other words, with clarity about the Marxist "separation" method. Orbits are only "separated" to be "redone," to understand that profit and capital are global phenomena that do not remain without any of

but rather that commodities *may or may not* be realised, that is, they exist *prior to* and *independently of* whether or not they are successfully realised.

According to Lima and Lemos, the PED's denial of autonomy between production and realisation ironically entails a very strong equilibrium assumption: that produced output always equals realised output and, so, there is never under- or overproduction and, as noted above, no net change in inventories. This would imply that the turnover time of capital is so negligibly short that capacity utilisation rates, inventory stocks and output can adjust almost instantaneously to changes in aggregate demand. Such an assumption not only flies in the face of the blatantly anarchic character of the capitalist mode of production; it also loses sight of a decisive link in the explanation of business cycles and their periodicity, since turnover time is an important source of discrepancies between supply and demand. Suppose, for instance, that in a given year investment expenditures are increased in sectors and activities whose turnover time exceeds one year. These expenditures would raise demand for raw materials and labour power, which would in turn raise consumption demand out of wages, resulting in an increased aggregate income. However, output, that is, supply, would not increase to the same extent; the real counterpart of this increased monetary income would instead be a larger stock of unfinished goods. The excess demand would initially be met by inventory sales, but as inventories were depleted, new investments in circulating capital would be required to replenish them through higher produced quantities, so that the imbalance between demand and supply would persist. A cyclical boom would ensue, likely accompanied by rising prices and wages. Eventually, the unfinished goods would be completed and brought to market, generating an increase in supply unmatched by an increase in demand; the boom would then turn into overproduction and undesired inventory accumulation as the imbalance shifted from the demand to the supply side.

For Lima and Lemos, the variety of turnover times across capitals lays the foundation for business cycles of different lengths, such as the manufacturing industry cycle of about nine years and the construction cycle of about seventeen years. The former, however, has special relevance because depreciation and replacement of fixed capital are encompassed in the proportionality conditions for balanced reproduction. Following Marx, Lima and Lemos take the economy's total yearly depreciation to be roughly constant. Under simple reproduction, equilibrium would require yearly replacement of fixed capital to equal depreciation, which is of course unlikely. Yet Lima and Lemos insist that such discrepancies between gross fixed capital formation and depreciation are more than mere manifestations of a generic 'anarchy of production'; they are also linked to the turnover time of capital in the capital goods industry, that is, to what Kalecki called the time lag between orders and deliveries. The replacement of fixed capital, and additions to its net stock, under expanded

them' (Tavares 2023, p. 83-4 – small corrections to the translation were made, between brackets, upon comparison with the version published as chapter two of Tavares 1998; this passage is also quoted in part in Lima and Lemos 1984, p. 75).

reproduction, can therefore trigger cyclical movements through the same mechanism outlined above. A rise in orders for capital goods would 'activate' the capital goods industry, increasing its expenditures on raw materials and wages, raising demand and activity levels and generating an upswing. Once orders were delivered, the capital goods industry would undergo relative 'deactivation', curtailing expenditures and prompting realisation failures and the accumulation of unplanned inventories. Lima and Lemos thus arrive at conclusions similar to those Kalecki drew from his 'pure cycle' model, even regarding the difficulties of sustaining expanded reproduction, since increases in the rate of accumulation disturb balanced reproduction in Lima and Lemos' mathematical model. They contend, however, that their model still fares better than Kalecki's in one respect: it has no need for an investment function, whose specification troubled Kalecki throughout his career.

In the spirit of the 'cycle tradition', Castro had invoked Marx's authority to contend that conditions for crises are created at the sphere of production rather than realisation. Lima and Lemos' point is quite different. In a nutshell, they argue, alongside Marx, that production and realisation are two equally constitutive moments of the circuit of capital. However, these two moments are not at all identical; instead, they are logically, spatially and temporally separated, and unevenness in the turnover time of capital is actually a major force shaping business cycle movements. According to Lima and Lemos, determination of output and employment by expenditure would only be as straightforward as the PED assumes if separation of the two moments, and therefore time itself, was abstracted away, so that all produced output was realised and no overproduction or underproduction of commodities and no net inventory variation ever took place.

Concluding remarks

This article has reconstructed the Brazilian Effective Demand Controversy as a significant episode in the history of heterodox economics. Its importance does not lie only in the specific arguments exchanged over Keynes, Kalecki or Marx. It lies above all in the theoretical question that most animated the debate: whether Effective Demand could be treated as a general principle of capitalist dynamics, rather than as a short-period macro-hypothesis of output and income determination, or an underconsumptionist theory of stagnation and crisis.

The Controversy emerged from a specific historical and institutional context. It took place in a Brazilian academic environment in which heterodox economists occupied important spaces of teaching, research and professional debate. This pluralism made possible a dispute in which Marxian political economy and Keynesian and post-Keynesian economic theories could confront one another within the same intellectual field. The fact that the Controversy occurred at all is therefore part of its significance. It reveals a moment in which Brazilian economists were not merely receiving

international theories, but actively reworking them in order to address problems of crisis, accumulation and peripheral capitalist development.

Castro gave the Controversy its initial form. By criticising Kalecki and the Effective Demand approach, he sought to recover the 'cycle tradition' and to explain the crisis of the postwar boom through the internal dynamics of accumulation, class conflict and profit squeeze. Possas and Baltar responded by defending Kalecki and by reformulating Effective Demand as a *principle* opposed to Say's Law and supply-led conceptions of capitalist macrodynamics. Belluzzo and Tavares then further distinguished the PED from underconsumptionist and textbook 'demand gap' theories, interpreting Effective Demand as a theory of capitalist instability rooted in the expectational and speculative nature of investment decisions, radical uncertainty and the monetary form of capitalist wealth.

Braga's intervention pushed the Controversy to a more abstract level. His central contribution was to show that the debate could not be reduced to the opposition between stagnation and cyclical growth. The real challenge was not integrating cycle and trend, but determining both within the temporality of the capitalist structure. In this sense, Braga used the limits of Kalecki's own models to show the need to situate the PED in a broader framework of capitalist calculation, technical change, finance, competition and varying historical forms of capitalist wealth. Lima and Lemos, in turn, exposed another limitation of the PED by rescuing from Book Two of *Capital* Marx's reproduction schemes, as well as his categories of turnover time and functional forms of capital. Their critique of the PED highlighted that production and realisation are two distinct moments of the circuit of capital and that the temporal discrepancies between these moments are themselves constitutive of business cycle movements.

Taken as a whole, the Controversy did not produce a definitive synthesis. Its importance lies precisely in the tensions it revealed: between production and realisation, cycle and trend, short run and long run. These tensions were not merely signs of theoretical incompleteness. They defined the terrain upon which Brazilian heterodox economists attempted to construct a theory of capitalist dynamics capable of going beyond both neoclassical theory and 'mechanical' versions of Keynesianism and Marxism. In this sense, the goal of this article was not to 'take sides' or to 'settle' the Controversy, but simply to revisit it as a means to display and divulge the theoretical richness and creativity of the Brazilian economic heterodoxy and to ground it in its historical and institutional context.

References

Andrade, Rogério P. de; Silva, Renata Carvalho. 2010. 'Uma mestra na periferia do capitalismo: a economia política de Maria da Conceição Tavares'. *Revista de Economia Política* [Brazilian Journal of Political Economy] 30 (4 (120)): 549-559.

Bastos, Pedro Paulo Zaluth; Gimenez, Denis Maracci (eds.). 2023. *Campinas School of Political Economy: Volume 2 – Selected Works on Brazilian Economy*. Campinas: Unicamp-IE; Curitiba: CRV.

Belluzzo, Luiz Gonzaga de Mello; Tavares, Maria da Conceição. 1981. "Ainda a controvérsia da demanda efetiva: uma pequena intervenção". *Revista de Economia Política* [Brazilian Journal of Political Economy], 1 (3): 107-112, July-Sep. 1981.

Bielschowsky, Ricardo; Mussi, Carlos. 2023. 'Brazilian Economic Thought in the Developmentalist Era: 1930-1980'. In: *A History of Brazilian Economic Thought: From Colonial Times Through the Early 21st Century*, edited by Ricardo Bielschowsky, Mauro Boianovsky, Mauricio C. Coutinho. London: Routledge.

Boddy, Rafford; Crotty, James. 1974. 'Class Conflict, Keynesian Policies and the Business Cycle'. *Monthly Review* 26 (5): 1-17.

Braga, José Carlos de Souza. 1983. 'Instabilidade capitalista e demanda efetiva: a razão de Kalecki'. *Revista de Economia Política* [Brazilian Journal of Political Economy] 3 (3): 17-41.

_____. *Temporalidade da riqueza: uma contribuição à teoria da dinâmica capitalista*. 1985. PhD dissertation, UNICAMP.

Castro, Antonio Barros de. 1979. *O capitalismo ainda é aquele*. Rio de Janeiro: Forense-Universitária.

_____. 1980. 'A controvérsia da demanda efetiva'. *Cadernos de Opinião* 15: 112-122.

_____. 1981. 'A controvérsia da demanda efetiva: o deslocamento da questão'. *Revista de Economia Política* [Brazilian Journal of Political Economy], 1 (4): 110-115.

Clifton, James A. 1977. 'Competition and the Evolution of the Capitalist Mode of Production'. *Cambridge Journal of Economics*, 1 (2): 137-151.

Coutinho, Luciano G; Belluzzo, Luiz Gonzaga de Mello. 1978. 'O desenvolvimento do capitalismo avançado e a reorganização da economia mundial no pós-guerra'. *Estudos CEBRAP* 23: 6-31.

Dequech, David. 2018. 'Applying the Concept of Mainstream Economics Outside the United States: General Remarks and the Case of Brazil as an Example of the Institutionalization of Pluralism'. *Journal of Economic Issues* 52 (4): 904-924.

Ekerman, Raul. 1989. 'A comunidade de economistas do Brasil: dos anos 50 aos dias de hoje'. *Revista Brasileira de Economia* 43 (2): 113-138.

Fernandez, Ramón Garcia; Suprinyak, Carlos Eduardo. 2019. 'Manufacturing Pluralism in Brazilian Economics'. *Journal of Economic Issues* 53 (3): 748-773.

Furtado, Celso. 1969. 'Desarrollo y estancamiento en América Latina: un enfoque estructuralista'. *Investigación Económica* 29 (113): 43-73.

Glyn, Andrew; Sutcliffe, Bob. 1972. *British Capitalism, Workers and the Profit Squeeze*. London: Penguin.

Kalecki, Michal. 1971. *Selected Essays on the Dynamics of the Capitalist Economy*. London: Cambridge University Press.

_____. 1971a. 'Trend and the Business Cycle'. In: . *Selected Essays on the Dynamics of the Capitalist Economy*. London: Cambridge University Press.

Keynes, John Maynard. 'The General Theory of Employment'. *The Quarterly Journal of Economics* 51 (1): 209-223.

_____. 1936. *The General Theory of Employment, Interest and Money*. London: Macmillan.

_____. 2013. Letter to J. A. Hobson, 14 February 1936. In: *The Collected Writings of John Maynard Keynes: Volume XXIX – The General Theory and After, A Supplement*, edited by Donald Moggridge. Cambridge (United Kingdom): Royal Economic Society/Cambridge University Press.

Lima, João Heraldo; Lemos, Maurício Borges. 1984. 'Uma nova contribuição para o debate sobre demanda efetiva'. *Revista de Economia Política* [Brazilian Journal of Political Economy], 4 (2): 69-86.

Marx, Karl. 1976. *Capital: A Critique of Political Economy.* Volume One. London: Pelican Books.

_____. 1978. *Capital: A Critique of Political Economy.* Volume Two. London: Pelican Books.

_____. 1981. *Capital: A Critique of Political Economy.* Volume Three. London: Pelican Books.

Mazzucchelli, Frederico. 2004. *A contradição em processo: o capitalismo e suas crises*. 2nd edition. Campinas: Unicamp-IE.

Palludeto, Alex Wilhans Antonio; Laplane, Mariano Francisco (eds.). 2023. *Campinas School of Political Economy: Volume 1 – Selected Works on Economic Theory and International Political Economy*. Campinas: Unicamp-IE; Curitiba: CRV.

Pasinetti, Luigi L. 1974. *Growth and Income Distribution: Essays in Economic Theory*. London: Cambridge University Press.

Possas, Mario Luiz. 1983. *Dinâmica e ciclo econômico em oligopólio*. PhD dissertation, UNICAMP.

_____; Baltar, Paulo Eduardo de Andrade. 1979. 'Demanda efetiva e dinâmica em Kalecki'. In: *Anais do VII Encontro Nacional de Economia: Atibaia (SP), 11 a 14 de dezembro, 1979* [Annals of the 7th Economics National Meeting: Atibaia (SP), December 11-14, 1979]. Porto Alegre: Editora Meridional EMMA.

_____. 1981. 'Demanda efetiva e dinâmica em Kalekci'. *Pesquisa e Planejamento Econômico* 11 (1): 107-160.

_____. 2023. 'A note on the Principle of Effective Demand". In: *Campinas School of Political Economy: Volume 1 – Selected Works on Economic Theory and International Political Economy*, edited by Alex Wilhans Antonio Palludeto. Campinas: Unicamp-IE; Curitiba: CRV.

Tavares, Maria da Conceição. 1998a. *Acumulação de capital e industrialização no Brasil*. 3rd edition. Campinas: Unicamp-IE.

_____. 1998b. *Ciclo e crise: o movimento recente da industrialização brasileira*. Campinas: Unicamp-IE.

_____. 2023. 'A Counterpoint to the Vision of Self-Regulation of Capitalist Production'. In: *Campinas School of Political Economy: Volume 1 – Selected Works on Economic Theory and International Political Economy*, edited by Alex Wilhans Antonio Palludeto. Campinas: Unicamp-IE; Curitiba: CRV.

_____. 1964. 'The Growth and Decline of Import Substitution in Brazil'. *Economic Bulletin for Latin America*, 9 (1): 1-59.

_____. 1977b. 'Natureza e contradições do desenvolvimento financeiro recente'. In: ___. *Da substituição de importações ao capitalismo financeiro*. 6th edition. Rio de Janeiro: Zahar.

_____ (with José Serra). 1977a. 'Além da estagnação'. In: _____. *Da substituição de importações ao capitalismo financeiro*. 6th edition. Rio de Janeiro: Zahar.

Tavares, Maria da Conceição; Belluzzo, Luiz Gonzaga de Mello. 2023. 'Finance Capital and Multinational Corporation'. In: *Campinas School of Political Economy: Volume 1 – Selected Works on Economic Theory and International Political Economy*, edited by Alex Wilhans Antonio Palludeto. Campinas: Unicamp-IE; Curitiba: CRV.

Versiani, Flavio Rabelo. 2007. 'Intercâmbios, verbas e pluralismo: a ANPEC na evolução do ensino e da pesquisa em economia no Brasil'. In: *Ensaios de História do Pensamento Econômico no Brasil Contemporâneo*, edited by Tamás Szmrecsányi, Francisco da Silva Coelho. São Paulo: Atlas.