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João Emboava Vaz

THE ROLE OF THE EXTERNAL SECTOR IN DEMAND AND GROWTH REGIMES: A POST-KEYNESIAN STRUCTURALIST CONTRIBUTION

Rio de Janeiro

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Dissertation presented to the post-graduate program from Universidade Federal do Rio de Janeiro, as requisite to the title of Master in Economics of Industry and Technology.

Supervisor: Prof. Dr. Fabio Neves Perácio de Freitas

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Presentation

This master's dissertation was written in a short time frame for the completion of the master's in economics at IE-UFRJ under extraordinary circumstances. It is a product of my study time at both Berlin School of Economics and Law and at Federal University of Rio de Janeiro. It was an intention of the dissertation to bridge the production of two research centers from these schools, the Institute for International Political Economy – Berlin and the Political Economy Group – IE/UFRJ. For this reason, I had the impression the dissertation would not be complete without reaching the point of contact between both center's political economy views of contemporary capitalism. This may have led the dissertation to have a broad reach, while possibly lacking in robustness and consistency in each step. This is of my exclusive responsibility.

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This master's dissertation would not be possible without the supervision of professor Fabio Freitas, to whom I am extremely grateful for all advice, conversations, comments, and incentives. It draws a lot from what I have learned with professor Eckhard Hein in Berlin, to whom I will always be grateful for all the support and teaching. It also benefits from previous works with my dear colleagues Juan Manuel Campana and Benjamin Jungmann. At UFRJ, I am greatly thankful to Franklin Serrano for insightful and instigating conversations and patient explanations, and to Ricardo Summa and to Carlos Medeiros for good advice and constant exchanges throughout the semester. I also thank all the staff and professors at the PPGE Coordination and Secretary which helped me move through a treacherous bureaucratic path.

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Abstract

This master's dissertation contributes to the literature on macroeconomics and political economy of growth and distribution from a post-Keynesian Structuralist perspective. It does so by building on this perspective's views on the role of the external sector on demand-led growth and linking it to the literature on demand and growth regimes under finance-dominated capitalism. Net export expansion through lower wages cannot be generalized and gross capital flows matter. Export growth is crucial for the growth of domestic demand components, but exports have less potential on driving growth the larger the domestic market is. These factors complicate the identification of export-led growth and *export-led stagnation* and *false-positive export-led* experiences may arise. Once this is taken into consideration seemingly 'export-led' experiences may have a strong participation of domestic demand, especially government expenditure. Brazil and China in the 2000s are examples. A classification of growth regimes based on external and domestic demand is proposed. The role of the external sector in the post-Fordist period is analyzed. Loosen external constraints have allowed for the decoupling of the periphery in the 2000s and the shift of global economic dynamism towards the East.

Keywords: post-Keynesian Structuralism, external sector, political economy, growth and distribution, state-led growth, growth regimes

Resumo

Essa dissertação de mestrado contribui para a literatura de macroeconomia e economia política do crescimento e da distribuição por meio de uma perspectiva Estruturalista pós-Keynesiana. Isso é feito a partir da visão dessa perspectiva sobre o papel do setor externo no crescimento liderado pela demanda, e conectando-a à literatura de regimes de demanda e crescimento sob capitalismo dominado pelas finanças. A expansão das exportações líquidas pela queda dos salários não pode ser generalizada e fluxos brutos de capital importam. O crescimento das exportações é crucial para o crescimento dos componentes domésticos da demanda, mas elas possuem menor potencial de liderar o crescimento quanto maior for o mercado doméstico. Esses fatores complicam a identificação de experiências de crescimento liderado pelas exportações, já que pode haver experiências de *export-led estagnation* ou de *falso-positivo export-led*. Uma vez que isso é considerado, aparentes experiências de crescimento 'export-led' podem possuir na realidade, forte participação da demanda doméstica, principalmente do gasto público. Brasil e China nos anos 2000 são exemplos. O papel do setor externo no período pós-Fordismo é analisado. Restrições financeiras mais flexíveis possibilitaram o descolamento da periferia nos anos 2000 e um deslocamento do dinamismo econômico global para o Leste.

Palavras-Chave: Estruturalismo pós-Keynesiano, setor externo, economia política, crescimento e distribuição, crescimento liderado pelo Estado, regimes de crescimento

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Y – income and output

K - capital

Π – total profits

w – real wages

h - investment to GDP ratio

m – import to GDP ratio

π – share of profits on income

S – savings

I – investment

$\alpha \; or \; SM$ – supermultiplier

Z – autonomous demand

β – imported content

δ – domestic content

ε – income elasticity of exports

μ – income elasticity of imports

θ – firm's mark ups

X – exports

M – imports

C – consumption

c – household consumption to GDP ratio

G – government consumption

η – export price elasticity

φ – import price elasticity

e – nominal exchange rates

R_X – net income inflows from the rest of the world

FB – financial balance

CC – consumer credit

E – inventories

g – growth rate of GDP

*OBS: variables presented here may have different meanings depending on their subscripts, those are explained in the context of the introduction of each variable with its subscript.

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1. Introduction

Economic theory is giving increasingly attention to the role of institutions and social conflicts on explaining growth and distribution differences among countries. Inspired by Regulationist political economy on one hand and post-Keynesian/Kaleckian macroeconomics on the other, some authors have identified a finance-dominated accumulation regime as the substitute of the Fordist regime in developed economies (Stockhammer, 2008; Hein, 2012; Lavoie and Stockhammer, 2013). This regime of accumulation would have generated, especially during the 2000s, global imbalances between *debt-led demand boom* and *export-led mercantilist* demand and growth regimes (Stockhammer, 2010; Hein and Mundt, 2012). These classifications have recently inspired a literature on comparative political economy focused on demand-led growth (Baccaro and Pontusson, 2016, 2018) counterposed to the supply-side (firm's oriented) view of the Varieties of Capitalism literature (Hall and Soskice, 2001; Hope and Soskice, 2016).

The analysis of such demand and growth regimes and their political economy has expanded to developing countries (Ackay et al., 2022; Campana et al., 2023) finding some limitations on interpreting the growth patterns in these countries under such classifications. This has pushed authors to point out to the need to integrate the views of the Latin American Structuralist school for the analysis of developing countries (Perez-Caldentey and Vernengo, 2022; Stockhammer, 2023). This dissertation takes this idea further, claiming that the Latin American Structuralist tradition may strongly contribute not only to the understanding of growth patterns in peripheral countries, but to the overall development of global capitalism in the past decades.

Latin American Structuralism has its seminal work on the contribution of Raúl Prebisch (1949). Although interested in the specific challenges of development of Latin American countries, Prebisch presented an analysis of capitalism as a global system. Latin American Structuralism was constituted as a political economy framework, based on a historic structuralist method influenced by the original Marxist analyses of national social formations (Bielschowsky, 1998; Vernengo, 2006). After an important period of cross-semination between Structuralist authors and Cambridge scholars (and Kalecki) in the 1970s, Latin American Structuralism, in one of its branches, has spurred a post-Keynesian or Kaleckian tradition. This tradition presents a strong continuation, but also a break off with some of the original Structuralist ideas. Authors in these traditions still give great attention to the external constraint and the position in the international division of labor as

fundamental aspects of growth and development patterns, but now see growth as an essentially demand-led process with the dollar-dominance as the main aspect of dependency (Vernengo, 2006).

The seminal work of Tavares (1985) in this post-Keynesian Structuralist tradition has influenced a large international political economy literature (Tavares and Fiori, 1998). Tavares saw the events in the late 1970s and beginning of 1980s as the comeback of US hegemonic dominance with the reinstitution of the power of the dollar, now free from the gold-pegging. For this tradition, the joint analysis of monetary governance and state action by the 'cyclical hegemonic center' and contemporary international division of labor are of paramount importance for the political economy explanation of the global capitalist system and of individual country's growth performances (Tavares and Belluzzo, 2004; Medeiros and Serrano, 1999). In this context, the external sector and the influence of state policy on domestic demand are crucial for explaining demand-led growth of any country (Medeiros and Serrano, 2001).

This master's dissertation follows recent efforts to link the finance-dominated capitalism literature to the post-Keynesian Structuralist tradition, arguing that a political economy and macroeconomic synthesis between both traditions is possible, but that it depends on the analytical treatment of the external sector. The external sector has always been of paramount importance to the Structuralist tradition given its attention on the problematics of development. It is argued that this tradition has presented an analytical treatment of the external sector that differs in focus from the neo-Kaleckian inspired finance-dominated capitalism literature. The undermining of structural features of the external sector and overemphasizing of price-competitiveness in the latter literature may have led it to misinterpretation both of individual countries experiences as of the post-Fordist global regime.

The dissertation has four objectives: (1) to present the common theoretical ground in terms of political economy and growth theory for a synthesis between both traditions; (2) to clarify the differences in the treatment of the external sector and its relationship to demand-led growth; (3) to present a global view of the post-Fordist period, and especially of the 2000s, combining the analysis of both traditions; (4) to present a definition and methodology of identification of export-led experiences based on this better treatment of the external sector. These objectives are distributed in the chapters that follow.

Chapter 2 presents the different comparative political economy approaches to distribution and growth treated here (Neoclassical, post-Keynesian, and Latin American Structuralism). Special attention is given to the history of economic thought around each approach, with focus on the views on capitalism and the accumulation process underpinning each approach. The argument is built that under the political economy view of Kalecki and the ongoing convergence towards the Supermultiplier growth model as a basis explanation of demand-led accumulation, a synthesis is possible between the demand and growth regimes in finance-dominated capitalism literature and the post-Keynesian Structuralist literature. But it relies on a better treatment of the external sector on demand-led growth by the former.

Chapter 3 revisits the role of the external sector on demand-led distribution and growth theory in different traditions. It theoretically grounds the relationship between external sector and domestic markets, going through the role of exports, imports, exchange rates, income distribution, and financial flows. It then revisits the concepts of export-led stagnation and false-positive export-led growth regimes and discusses the economic challenges of developing a domestic market under external financial constraint.

Chapter 4 presents an international political economy (IPE) analysis of the post-Fordist period globally as a first attempt of synthesis between post-Keynesian Structuralist and finance-dominated capitalism views on the political economy. It highlights the role of geopolitics and of the international monetary system both in the Fordist regime in center countries, as in the formation of the post-Fordist regime. Special attention is given to the analysis of the 2000s, with the argument that both literatures may have complementary views on the political economy analysis of the period. While the finance-dominated capitalism literature has greatly advanced in the analysis of shifts in center countries that allowed for an international environment of greater liquidity, it is limited in its assessment of structural economic shifts in the global economy. More precisely, its treatment of export-led growth outside of center countries undermines the role China has taken in global demand, the ‘rise of the rest’, and the shifting economic dynamism towards the East.

Chapter 5 then brings the discussion to the analysis of individual (or comparative) countries experiences. It discusses the definition of ‘export-led growth regime’ in light of the theoretical discussion presented in chapter 3 and analyses the methodologies of identification of such regimes. A methodology of growth decomposition and external financial position is proposed and applied

to Brazil and China for the period of 2000-2019. Under the treatment of the external sector highlighted the political economy analysis of both countries as export-led is misleading. Finally, a new taxonomy of clustering countries according to their comparative growth dynamics is proposed.

2. Comparative Political Economy of Distribution and Growth: an overview

The study of differences in distribution and growth performances among countries, or more generally the determinants of capital accumulation, may very well be the longest subject of the Economics discipline (not by chance the work often regarded as founding the field is called *An Inquiry into the Nature and Causes of the Wealth of Nations*). But if the question of capital accumulation was crucial for the classical economists, it lost traction after the marginalist revolution in the late 19th century. It is with Keynes, and more specifically with Harrod's (1939) attempt to extend Keynes' theory to the long run (or to a dynamic analysis as he would call it) that the topic is reborn.

Under neoclassical economists of the synthesis, the quest became to build a growth theory compatible with the substitution principle of general equilibrium theory, in order to show that the economy was Keynesian in the short run and neoclassical in the long run (Solow, 2000). Solow's (1956) model was without a doubt the most successful in that endeavor, remaining the canonical model of mainstream economics growth theory to this day.[1] The main finding of the model was that growth was not explained by the rate of savings (or by capital accumulation more generally), but for technical change. In light of this result, Solow (1957) presents a growth accounting methodology distinguishing the variation of productivity (in capital per capita) between technical change and available capital per unit of labor. This contribution inspired an empirical literature comparing growth trajectories between countries and periods under this supply-sided growth decomposition methodology (Hulten, 2010).

In the late 1980s a new set of growth theories, named 'endogenous growth theories' tried to reconcile long run growth rates with the savings rate by endogenizing technical progress to physical (Romer, 1986) or human capital (Lucas, 1988). Although endogenous growth theory gained some traction during the 1990s, in the end of the century it was already greatly criticized for having even more restrictive assumptions than Solow's simpler model (Solow, 2000; Serrano and Cesaratto, 2002). To explain growth differences, economists often linked them to differences in the institutional settings, after the pioneering contribution of North (1990). Following the

[1] Although the model may be argued to be incompatible with a simple flexibilization of its very strong and unrealistic assumptions (it loses its results under elasticity of substitution different than unity or with more than one capital good in the economy, for example). Nevertheless, the model's assumptions were still more plausible than the ones from 'endogenous growth theory. For more on this issue see Serrano and Cesaratto (2002).

tradition of neoclassical growth theory, now tied to New Keynesian short-term analysis (Carlin and Soskice, 2006) and the new focus on institutions, Hall and Soskice (2001) developed the literature on Varieties of Capitalism (VoC) in the field of Comparative Political Economy (CPE).

Paralleled to neoclassical growth theory and inspired by the critique of it by Sraffa (1960) and Robinson (1962), a post-Keynesian distribution and growth tradition was born in 1960s' Cambridge. This tradition could be expressed as being Keynesian both in the short and in the long run (Lavoie, 2022, Ch.1). In this tradition two models were able to conciliate long run growth rate determined by effective demand with a stable equilibrium trend of growth:[2] the neo-Kaleckian growth model (Rowthorn, 1981; Dutt, 1984), in which growth is led by autonomous investment; and the Sraffian Supermultiplier model (Serrano, 1995), in which growth is led by the autonomous non-capacity creating components of demand. These two models under the post-Keynesian tradition form the theoretical background for demand and growth regimes and decomposition analyses.

Another different tradition of political economy of distribution and growth can be seen in the Latin American Structuralist school of thought originating after Prebisch's (1949) seminal work. As other classical development economists (like Lewis (1954)), the structuralists turned to the classical economists to delve into the question of growth in an underdeveloped context, as neoclassicals assumed a world of labor scarcity which was not present in their object of inquiry. Although long-run capitalist growth for these authors did not mean full employment of the labour force (as it did for the neoclassicals), they still assumed Say's Law and thus growth would be limited by the availability of capital. This tradition evolved, incorporating many aspects of post-Keynesian economic theory. But still maintaining the most important aspects of its method for political economy analysis.

This chapter presents a review of the literature on political economy analysis of growth and distribution, taking into account these differences in growth theory backing each strand. We start by presenting the Varieties of Capitalism approach, which spurs out of the New Keynesian or New Consensus synthesis within neoclassical economics. Then we present its critique with the

[2] The Cambridge long-run model is considered here to by ultimately supply (or distribution) determined in the long run (Lavoie, 2022, Ch.6). The Kaldorian tradition after Thirlwall (1979) is not considered here to present a model with a closure to an effective demand driven model, and more as a model for the external constraint. To which we come back to in chapter 3.

incorporation of post-Keynesian demand and growth regimes analysis, the recent contributions on Supermultiplier methods related to this literature, and the call for Post-Keynesian Structuralist contributions for the extension of these analyses to developing countries. Lastly, we present the political economy tradition of Latin American Structuralism and its intersection with post-Keynesian and more specifically Kaleckian macroeconomics.[3]

2.1. Neoclassical approaches: supply-side growth accounting and the Varieties of Capitalism (VoC) approach

As we have seen, in neoclassical growth theory supply-side factors determine long-term capital accumulation. More specifically, (total factor) productivity is the defining feature explaining growth differentials in all canonical growth models in this tradition (Solow, 1956, Romer, 1986, Lucas, 1988). This has inspired a literature on supply-side 'growth accounting' which decomposes economic growth into capital-deepening (increase in capital-labor ratio) and productivity growth, with new contributions taking into consideration changes in input-output quality and the endogeneity of capital and productivity growth (Hulten, 2010). For some of the authors in this tradition, "Growth accounting is the principal qualitative tool for understanding [the phenomenon of unevenly distributed growth across time and across the world], and for assessing the prospects of further increases in living standards" (Hulten, 2010, p.1).

On the other hand, if supply-side growth accounting spurred a rich literature on quantitative analysis of growth, it has not fully translated that into a political economy explanation of growth. It is the seminal contribution of Hall and Soskice (2001) which inaugurates the 'Varieties of Capitalism Approach' (VoC) and analyses supply-side growth more directed towards institutions and their political economy. Their work differed from the main comparative political economy approaches of the post-war era (Schonfield, 1965; Berger, 1981; Boyer, 1990) by 'locating the firm at the center of the analysis' and focusing on 'variation among national political economies' (Hall

[3] The field of International Political Economy, and its sub-field of Comparative Political Economy, is a broad multidisciplinary field with contributions from economists, sociologists, political economists, among other specialists. It is often the case that the theoretical economic background is not made clear (or there is even confusion about the theory taken by the analysts). The approach taken here to differentiate between these 3 strands comes from the focus of the dissertation on the Economics field of Growth Theory. Our assumption is that even when not doing it explicitly, each body of literature reviewed bases itself on certain views of the process of capital accumulation There was also an effort to contextualize these views and theories on the history of economic thought context they appear.

and Soskice, 2001, p.4) (giving less focus to international or regional institutions).[4] Their goal was to 'build bridges between business studies and comparative political economy' and 'connect the new microeconomics to important issues in macroeconomics' (Hall and Soskice, 2001, p.5). Methodologically their approach focused on using game theory's understanding of strategic interactions to focus on which kinds of institutions would alter the political economy of different actors by altering their strategic interactions.

The key result of the seminal VoC approach is that of clustering the developed economies into two varieties of capitalism based on their main institutional interactions: liberal market economies (LME) and coordinated market economies (CME). With a firm-centered political economy approach, their analysis focuses on aspects in which firms have to develop relationships to resolve coordination problems central to the competences they advance. They look at the relationship of the firms in regard to: industrial relations, vocational training and education, corporate governance, inter-firm relations, and employee relations. The two ideal types of political economy arising from the analysis would then represent different set of institutional relations of firms. In liberal market economies (LMEs), firms would coordinate their actions through hierarchies and competitive market economies based on formal contracting, price signals, and demand and supply of goods and services based on neoclassical economics. With innovation and productivity gains coming from this inter-firm competition. The archetypical example of LME would be the US. In coordinated market economies, firms would depend more heavily on non-market relationships to develop their main competences, with more collaborative relation between firms, and a bigger role of the government and labor unions. Productivity gains and innovation would come from a more collaborative connection between these institutions. The archetypical example of CME would be Germany. More or less explicitly, the VoC approach has argued in favor of the CME variety of capitalism as a more egalitarian and "worker friendly" alternative of capitalism (Baccaro and Pontusson, 2016).[5]

[4] Although claiming to go beyond these previous traditions of comparative political economy, Hall and Soskice (2001) also claim to build from them. Namely, Modernist, Neo-corporatism, and Social Structures of Accumulation/Regulationist approaches. For more on the relation between VoC and these strands both in political science and in economics, see Palley (2023).

[5] In terms of history of economic thought, the VoC approach may have been motivated by a political role of arguing against Thatcher's liberal ideas in the UK, as highlighted by Palley (2023). Its British proponent, David Soskice, has also been a counsellor for the British Labour Party.

The institutionalist view of the VoC approach is inspired by North (1990). As mentioned before, the end of 1990s spurred a certain skepticism on 'new growth theory' of the previous decade, with increasingly importance given to factors such as geography, trade integration, and national institutions on determining productivity growth within the neoclassical inspired literature. The seminal work of Douglas North, which highlighted the role of institutions on growth comparisons gained special prominence, with institutions becoming increasingly regarded theoretically and empirically as good explainers of growth path differences across countries (Rodrik et al., 2004). The VoC approach can thus be better contextualized under this moment of reshaping in economic thinking of neoclassical economics. On one hand, it drew from the increasing role given to institutions (and thus political economy) on determining growth (through the supply-side). And on the other hand, it was based on the new Neoclassical Synthesis approach to macroeconomics, which linked New Classical focus on hyper-rational microeconomic behavior mainly based on game-theoretic interaction of individuals and firms with New Keynesian considerations of market (and non-market) rigidities (Hein, 2023). [6]

Mkandawire (2014) has also highlighted how these shifts in economic doctrines in developed countries were pushed upon developing countries. While in the 1980s and 1990s, multilateral organizations like the World Bank and the IMF pushed for a doctrine of complete market liberalization and state suppression under the 'structural adjustment programs', by the end of the 1990s there was already some recognition that the liberalizations had harsh effects and did not bring economic growth to developing countries (World Bank, 1998). Mkandawire points out to this shift as one from the doctrine of the 'Washington Consensus' to one of 'Washington Confusion', with an "eclectic combination of neo-institutionalism, growth orientation, and welfarist interests" (p.173). Thus, also to developing countries, the explanation for their lagging behind started being related to their (backward) institutions (World Bank, 2005). First works of the VoC approach to less developed countries can be seen with the extension to Eastern European countries by Nölke and Vliegenthart (2009).[7]

[6] For more on the new neoclassical synthesis see Blanchard and Johnson (2009, Ch.25) and Lavoie (2022, Ch. 4). The big influence of New Keynesian Macroeconomics can also be noted by David Soskice's authorship of both seminal works of VoC (Hall and Soskice, 2001) and New Keynesian three-equation model (Carlin and Soskice, 2006).

[7] For emerging economies, the term 'state-permeated-capitalism' was coined (Nölke et al., 2020). Although not the topic of this dissertation, the characterization of such diverse countries in terms of the size of the state seem shallow

Among heterodox economists, there are different positions about the importance of the VoC approach. Palley (2023) praises the approach, claiming that it "has achieved what four decades of heterodox economic research has been unable to accomplish: a magical combination of words that effortlessly lifts the spell of TINA" (p. 2). TINA being the acronym for the 'There Is No Alternative' doctrine put forward by Margareth Thatcher to justify neoliberalism as the only possibility of economic organization of contemporary society. However, it should be noted that Palley takes a broader view of the VoC approach, adding Social Structure of Accumulation/Regulationist views and Growth Models literature under the framework of VoC. Hein (2023), on the other hand, criticizes the VoC approach for "downgrading the role of aggregate demand, finance, and income and wealth distribution for long-run analysis" (p.1). For him, the VoC approach "is meant to be overcome by the more dynamic growth models approach" (p.1), to which we turn next.

2.2. Post-Keynesian approaches: growth models, demand and growth regimes, and Neo-Kaleckian and Sraffian Supermultiplier theories

As we have just seen, the dominant paradigm on Comparative Political Economy (CPE) (within the broader field of International Political Economy (IPE)) in the past 20 years has been the 'VoC approach' (Hall and Soskice, 2001; Hope and Soskice, 2016), which has its economic foundations on the new 'Neoclassical Consensus' (Carlin and Soskice, 2006). Baccaro and Pontusson (2016) made use of demand-side macroeconomics of post-Keynesian growth theory to propose a 'Growth Models approach' (GM) to overcome supply-sided and firm oriented analysis of the VoC approach. They argue the impact of the anti-Keynesian economic revolution of the late 1970s on the CPE field had not been fully appreciated, and argue for the pick-up of Keynesian, and especially Kaleckian, ideas to CPE analysis.

The contributions by Baccaro and Pontusson (2016, 2018) have been picked up by other political scientists on the CPE tradition which have also wished to surpass the microeconomic supply-sided view to political economy (Blyth and Matthijs, 2017; Schedalik et al., 2021). As Baccaro and Pontusson put it: "For macroeconomists inspired by Kalecki, power and distributive conflict are critical for understanding macroeconomic relationships and outcomes, [which]

(and also undermines the role of the state in developed countries). It seems that this tradition could also greatly benefit from the Structuralist political economy tradition.

establishes an elective affinity with CPE scholarship" (Baccaro and Pontusson, 2016, p.181).[8] This points out to a point stressed by Hein (2023) and Lavoie (2022, Ch.1) that for post-Keynesian economists political economy – power, conflict, institutions, and class interests – are not secondary to the field, as usually regarded in mainstream economics, but are a fundamental part of economics and directly linked to macroeconomics and policymaking.

Hein (2023) reviews the post-Keynesian theoretical background underpinning the GM approach spanning out of what he calls the Kalecki-Steindl and the Sraffian Supermultiplier traditions. He highlights that these two traditions would have more potential for connection with CPE/IPE than other post-Keynesian traditions (for example, the Kaldor-Robinson or Thirlwall models) because income distribution presents no independent roles on long-run growth in the other traditions (Hein, 2023, p.3). In neo-Kaleckian growth models, growth is led by autonomous investment, which does not depend on profits in the canonical model (Lavoie, 2022, Ch.6.2), but does on the 'post-Kaleckian' variation (Bhaduri and Marglin, 1990). While in the Sraffian Supermultiplier, growth is determined by non-capacity creating components of demand – government expenditure, exports, residential investment, and wealth and credit-based consumption – and a decrease in inequality has a temporary expansionary effect. CPE and IPE political economy analysis tied with decomposition exercises can be especially important for these post-Keynesian growth theories as they add explanations to medium to long-run dynamics to these long-run equilibrium models, giving better explanations to growth processes observed in reality. Therefore, a long literature has applied methodologies based on growth decomposition and regimes clustering to different countries (Ackay et al., 2022; Hein, 2023).

The term 'regime' used in post-Keynesian literature comes from its influence by the French Regulation School and the idea that capitalism stablished in different contexts different 'regimes of accumulation' – a macroeconomic setting of growth and distribution – supported by a 'mode of regulation' – a set of institutional policies and class compromises (Aglietta, 1979; Boyer, 1990; Ackay et al., 2022). The French Regulation views on political economy also pose clear similarities to the US-based Social Structure of Accumulation literature (Hein et al., 2014), which relates moments of boom in capitalist economic growth to the institution of specific

[8] Lavoie (2022, p.49) cites Gilles Dostaler: "Kalecki can be considered to be the real founder of post-Keynesian theory".

historically determined social structures that tame class conflicts allowing for accumulation (McDonough et al., 2010). Post-Keynesian, Regulation, and Social Structure of Accumulation schools have in common the notion that institutions and economic development are mutually dependent, opening space for the relation between growth, economic policymaking and the political analysis of institutions and conflict (Hein et al., 2014). It is also important to mention that all these strands share Marxist roots (in the case of post-Keynesians through Marx's influence on Kalecki and Sraffa). This might help explain their methodological focus on historical and structural analysis with a great focus on social conflict based on groups' economic functions within the production system. This is methodologically very different from VoC's focus on methodological individualism and rational (game-theoretical) agents.

Here, however, it is important to discern between three different phenomena named 'regimes' in the post-Keynesian neo-Kaleckian literature, which can be seen as different layers of analysis. First, Bhaduri and Marglin's (1990) 'post-Kaleckian' model introduced the notion of wage- and profit- led regimes (also present in Blecker (1989) for an open economy). Here the term 'regime' is meant to signal that under different structures of the economy an increase in profits can increase growth (being profit-led) or can decrease growth (being wage-led). It does not mean either wages or profits are *actually* leading growth, it just points out to a partial derivative effect based on the underlying/structural equations of that economy.[9] The second definition is closer to the Regulationist definition of an 'accumulation regime'. Stockhammer (2008, 2010) and Hein (2012) have argued that post-Fordism, developed countries have entered into a finance-dominated accumulation regime, with financial developments and motives shaping the pace and pattern of capital accumulation.[10] A very important concept to which we come back in depth in chapter 5. This accumulation regime would lead to global imbalances originating two 'demand and growth regimes': debt-led consumption boom and export-led mercantilist. This is the third reference to 'regimes' in Kaleckian literature, associated to demand sources leading growth. They can be seen as subvariants of the 'finance-dominated accumulation regime'.[11]

[9] For a review on applied contributions on that literature see Stockhammer and Onaran (2013).
[10] Boyer (2000) had previously advanced the idea of a 'finance-led regime', which has a different definition of that presented by Stockhammer.
[11] The term 'finance-dominated accumulation regime' was used by its first proponents (Stockhammer, 2008). While more recent literature mentions 'finance-dominated capitalism' and uses the term 'regimes' only to the 'demand and growth regimes' (Hein, 2023)

The link between those layers is on the relationship between institutional structure, income distribution, and demand expenditures that lead accumulation. Growth and distribution have a relative autonomy in its background theory, while both are conditioned by the economic structure.[12] Inspired by institutionalist and neomarxist views of the Regulationist and Social Structure of Accumulation approaches, the economic structure is taken in this tradition as the set of institutions prevailing in a capitalist system which support the realization of profits and the accumulation of capital.[13] Thus, the 'economic structure' would be interpreted here as the parameters that link growth and distribution (propensity to consume out of wages, investment sensitivity to profit margins, export and imports effects from devaluations and changes in costs, etc.)(Medeiros, 2015, Ch.1). With these parameters defining whether an economy is wage-led or profit-led. Lavoie and Stockhammer (2013) point out that most economies are wage-led, and the global economy certainly is wage-led. Finance-dominated accumulation regime would then refer to the post-Fordist period started in late 1970s in developed countries in which there was a weakening of labour in relation to capital and a prevalence of motives of the financial sector in driving accumulation. Since most countries are wage-led, would have led the world to very low growth. Although lower growth was in fact seen, some higher growth rates were possible due to the liberalization of credit which allowed for worker's consumption without wages on one side, and by export-led growth on the other. Export-led growth being a variation of profit-led growth in which the decrease of wages increases international price competitiveness and exports (Blecker, 1989).

Baccaro and Pontusson (2016), although not so theoretically clear, pick up this last concept of regimes calling them 'growth models': credit-financed consumption-led and export-led growth models. They also point out conceptually to a 'state-led' growth model, not mentioned

[12] This is the same as argued by Hein (2023) that distribution has an independent role to play in neo-Kaleckian and Sraffian growth theory, while it did not on the Kaldor-Robinson Cambridge model, as on that model income distribution was the endogenous variable that led accumulation. In Kaleckian and Sraffian traditions (as in the classicals and in Marx) distribution is defined by political and institutional aspects, and enter the accumulation analyses as given structures (as parameters or exogenous variables). The exception being the modelling of conflict effects on prices (Lavoie, 2022, Ch. 8).

[13] Medeiros (2015, Ch.1) highlights that these structures can be broadly defined as being 'liberal' or 'regulated', with the social structure of the 'regulated capitalism' corresponding broadly to the view of 'reformed capitalism' discussed by Kalecki (Kovalick, 2001). The resemblance of these categories of 'liberal' and 'regulated' to the LMEs and CMEs of the VoC approach may be revealing of the ideological influence of the shift from 'capitalist golden age' to 'neoliberalism' in developed countries on political economy thinking in the North Atlantic.

by neo-Kaleckian demand and growth regimes literature until recently[14]. They also mention Bhaduri and Marglin's (1990) contribution and their focus on income inequality as an inspiration, but they abstain from the wage- profit-led regimes in their classification. One can also argue that the credit-financed consumption-led and export-led regimes can be theoretically linked with neo-Kaleckian 'distribution-led' channels (Hein, 2023).

On the other hand, Morlin et al. (2022) have argued that the definition of growth being led by credit-financed consumption, exports, or government expenditure is more theoretically fit with the Sraffian Supermultiplier growth theory. Indeed, in this tradition the formalized growth model has these autonomous components of demand as the ones driving long-run growth (exports, credit-based expenditures, and government expenditure). Not only that, but the Supermultiplier tradition has for long given focus to the political economy aspects of growth, with social conflicts over policy-making at the core of autonomous demand components, thus determining growth (Medeiros and Serrano, 2001; Serrano, 2009).[15] Freitas and Dweck (2013) have presented a growth decomposition and political economy methodology based on the supermultiplier, which has motivated other country analyses and comparisons (Morlin et al., 2022; Passos and Morlin, 2022; Campana et al., 2023; Labat and Summa, 2023). This methodology does not involve the classification of countries in 'growth regimes/models', but by imposing the Supermultiplier theory on the data, demand contributions are differentiated between autonomous and inducing, giving focus to the effects of growth from the autonomous components mentioned before.

Under the neo-Kaleckian inspired 'demand and growth regimes' the debt-led private demand boom (DPDB) and export-led merchantilist (ELM) regimes were extended taking into consideration intermediary cases of weakly export-led (WEL) and domestic demand led (DDL). Hein (2011) and Hein and Mundt (2012) present a methodology of classification between these regimes that has been applied to a great variety of countries (see Ackay et al., 2022 for a review).

[14] First contributions on finance-dominated capitalism literature referred to a decrease in the size of the state in terms of privatization and deregulation but with sustained fiscal policy having a role in maintaining stability, but not leading growth (Stockhammer, 2008). More recently, Stockhammer (2023) argued that a concept of state-led growth might have to be advanced to analyze developing countries, but without mention of its possibility for developed countries.
[15] The founder of the Supermultiplier tradition, Franklin Serrano, as well as his close students Fabio Freitas and Ricardo Summa (to cite some) are organizers of the Political Economy Research Group at the Federal University of Rio de Janeiro.

We come back to the methodology of classification on Chapter 5. Campana et al. (2023) and Hein (2023) have also argued that the national account and financial balances methodology applied by the demand and growth regimes literature is not contradictory to the Supermultiplier methodology introduced by Freitas and Dweck (2013). In their seminal contribution Freitas and Dweck do not directly address the 'demand and growth regimes' literature but it is directed towards the supply-sided decomposition literature which we mentioned in section 2.1 (Hulten, 2010). Their objective was to provide a demand-sided alternative to the growth accounting based on neoclassical growth theory; an objective shared by neo-Kaleckian authors.

It is important to mention that there has also been an approximation between Sraffians and neo-Kaleckians in terms of growth theory, under the Supermultiplier (Lavoie, 2016; Hein, 2018; Dutt, 2019). Indeed, the supermultiplier theory is inspired by the notion of 'external markets' (Kalecki, 1967) and by Kalecki's work on effective demand more broadly. As Serrano (2009) puts it: "It is clear to us that it is in Kalecki, even more than in Keynes, the starting point to the development of the theory of accumulation of the surplus approach renewed stemming from the work of Sraffa (1960)" (p.3).[16] In terms of history of economic thought this convergence is also explained by the struggles of consolidation of the effective demand determined long-run growth theory that originated the post-Keynesian field in the Cambridge of the 1950s. The Kaldor-Robinson model first introduced in this tradition was able to make savings adjust to investment in the long-run through distribution changes, but long-run growth was still at full capacity utilization determined by supply factors. The neo-Kaleckian model (Rowthorn, 1981; Dutt, 1984) was the first in which long-run growth was determined by effective demand (autonomous investment). However, this model did not have the economy converging to a normal rate of utilization and it undermined the accelerator effect of investment and the Harrodian instability (Skott, 2012). The Supermultiplier (Serrano, 1995) was able to overcome these

[16] According to Serrano (2009) the main point of disagreement with Kaleckians from his Sraffian perspective is on price theory. Kalecki during most of his life, and most Kaleckians, adopted a theory of 'imperfect competition' under a 'monopolistic capitalism' assuming fixed mark-ups in real terms. While Sraffians understand that classicals and Marx's theory of competition was compatible with barriers of entry and oligopolies as those would represent a form of rent that would not change overall price-setting dynamics in the economy. Which would mean that although nominal mark-ups would be fixed, real mark-ups would depend on class struggle. Serrano (2009) points out that Steindl, Sylas-Labini and Bain had already contributed on that direction and that Kalecki himself admitted that workers' bargain could indeed affect real wages and income distribution on his last text (in Kalecki, 1971: 'the class struggle and the distribution of national income').

problems in a (autonomous) demand-led determined long-run growth model, while maintaining the main Kaleckian results of paradoxes of savings and of costs as traverse effects (Lavoie, 2016).

Lastly, the demand and growth regimes approach was recently extended to the analysis of developing countries (Ackay et al., 2022; Campana et al., 2023). While for developing countries the Great Financial Crisis of 2008 has been regarded as a changing point in regimes of accumulation (Hein and Mundt, 2021), the same is not widely observed for emerging economies (Ackay et al., 2022; Campana et al., 2023). The central role the external sector, the international division of labor, and the role the state play on growth in developing countries has led authors to push for the integration of this literature of growth models/regimes with Latin American Structuralism in developing countries (Perez-Caldentey and Vernengo, 2022; Stockhammer, 2023). This dissertation aims at doing that, with specific attention given to the analysis of the external sector and the government in this tradition. But first let us introduce the school of thought as a whole.

2.3. The Latin American Structuralist approach to political economy

The Latin American Structuralist school of thought was born and organized itself around the UN Economic Commission for Latin America and the Caribbean (ECLAC, or CEPAL in the Portuguese/Spanish translation) under the leadership of Raúl Prebish. Which meant that its formulations were close to policymakers across the subcontinent, but not so much in academia. It can be said that for that reason, "for a long time the unity and reach of the 'CEPAL system of political economy' were kept unknown" (Bielschowsky, 1998, p. 11).

The school has its seminal work in the original contribution of Prebisch (1949) about the obstacles of development in Latin America. Prebisch presented a throughout analysis of capitalism as a global system divided into a center and a periphery, distinguished by their structural positions in the international division of labor. The center led the world's economic cycles and technological dynamism, exporting high income elasticity products and depending on the imports of primary inputs and food from the periphery. The latter would consist of the former (or current) colonies and other poor countries, they would export low value-added low income elasticity goods and suffer instability and downward wage pressures from bust phases of cycles from the center. Also presenting great lags in technology absorption and a heterogenous structure of production, with pre-capitalist and capitalist sectors coexisting. Prebisch's thesis was that the main obstacle to

development in the Latin American periphery was the external constraint. Because the periphery exported goods of lower income elasticity than those it imported, it would always grow less than the rest of the world, otherwise falling into a lack of foreign currency to trade, a balance of payments constraint. The solution was to industrialize, led by a strong developmentalist state (like the US and Germany had done before the wars). To then export higher quality goods.

Thus, this tradition always had at the core of its analysis an interpretation of the world's division of labor and how that affected national structure of production. According to Bielschowsky (1998), the analytical framework of the CEPAL school of thought was built on the combination of this structuralist thesis of underdevelopment of Latin America as put forward by Prebisch on one hand, and a historic and inductive method on the other hand. The method, which he calls 'historic-structuralist method' was based on the political economic analysis of capitalist development of a specific time and place (often a country) based on the center-periphery relationship. It combined three steps of analysis: (1) a country's external integration, where it is located in the international division of labor and how that makes it vulnerable or not to external shocks; (2) national domestic structures of production, with present economic activities and political/social groups tied to these structures; (3) the action of the state, how the state could act given the external and domestic position in order to lead the country to industrialization and break out of dependency.

The school of thought presented groundbreaking analyses of the national structure of production and social formation of countries, like those of Brazil by Furtado (1959) and Chile by Pinto (1959). They were based on the context of 'socio-economic formation' first introduced by Lenin (1899). According to Vernengo (2006), this would come from the influence of previous Latin American Marxist historians, the first ones to provide an original view on the position of Latin American countries in the colonial and post-colonial economic system created by capitalist Europe (Mariategui, 1928; Prado Junior, 1942; Bagú, 1949). These could even be regarded as the first political economy analyses of Latin America.

Here we can see their view on economic structure differs from the neo-Marxist and Keynesian views which are more focused on institutions that regulate the capital-labor relationship in a (advanced) capitalist society. According to Medeiros (2015, Ch.1): "In the Development Economics of Structuralist basis, the productive structure in a determined country is formed by the

set of sectors, productive activities, and its relations defined by a given technology" (p.22). Development, by the introduction of new patterns of production and consumption, would bring an economy from agriculture to the expansion of industrial and services sectors. An industrialized economy would be marked by the inclusion of a capital goods market and a great variety of goods and services. The heterogeneity of productivity between agriculture and urban activities, or between the exporting sector and the other sectors being a key characteristic of underdeveloped nations. This more sectorial, supply-side view, of the productive structure of a country was able to grant a political analysis that dealt with distribution and power also on the sectorial or activity level (as in Furtado, 1959). And on the other hand, it posed the transformation of economic productive capacity as "an original limiting factor of income distribution and capital accumulation" (Medeiros, 2015, p. 22).

As with other classical development economists like Lewis (1954), Prebisch and Furtado's first analyses for Latin American were closer to the Classical economists in terms of economic theory of accumulation. As they were dealing with economies with great amount of unemployed labor, the neoclassical theory would not apply there. On the other hand, Keynesianism seemed to them to apply only for developed nations, in which capital accumulation was already advanced. In Classical growth theory, there was no full employment of labour, but there was a full employment of capital (through Say's Law without a clear mechanism). The limit for growth to them, when the financial constraint of the balance of payments was overcome (or was above this rate) would then be the availability of capital.

During the 1960s and 1970s many economists associated with Latin American Structuralism had to flee their countries due to the instauration of far-right military dictatorships. During this time some authors, like Furtado, spent a few years at Cambridge, while post-Keynesian scholars, like Kaldor and Kalecki, spent some time in Latin America. Signs of clear cross-semination can be seen on Kaldor's (1970) use of the external constraint on his regional growth model, Kalecki's (1972) analysis of inflation in developing countries, and Furtado's (1974) incorporation of demand as a crucial aspect of the industrialization process. But it took some time for Latin American Structuralist theory to come closer to an effective demand driven analysis of growth and development. Furtado (1974) started to notice that the industrialization that took place in some Latin American countries, like Brazil, was not able to develop the production structure

because it was focused on copying consumption patterns from the center countries by national elites, while attracting foreign-owned companies on cheap labor, increasing inequality. On the other hand, even Kalecki (1972) did not view growth in developing countries as led by demand. For him, structural heterogeneity would mean that once industrialization began and income accelerated, there would be a big pressure on the consumption of agricultural goods. With the concentration of land under the ownership of a few and with extensive unproductive use, increasing demand for agricultural goods would create inflationary pressures which would redistribute income, generating a sort of Cambridge equation long-run equilibrium.

It was Tavares (1974, 1978) who brought Kalecki's model of an advanced economy (and Steindl's) to the analysis of Latin American countries. During the 1960s and 1970s countries like Brazil and Mexico experienced record rates of growth with strong industrialization. Already in the 1970s, scholars had noticed that the disregard for inequality and building of a domestic market, the intense participation of foreign firms, and the externally financed government expenditures made the process of industrialization weak and unable to produce a developed society (Tavares and Serra, 1970). By the end of the 1970s and beginning of the 1980s, with the crisis of external debt it was made clear that the reliance on external finance and the lack of a strong domestic market had left the countries incredibly vulnerable. At that point most analysts saw a weakening of American dominance both in economic and geopolitical terms. Tavares (1985) on the other hand, points to the exact opposite: US hegemony was coming back stronger than ever, putting the brakes on the growth of its main allies (and competitors), while pressuring Soviet Union militarily and sinking the Third World in debt crises. The dollar-dominance, stronger than ever, had become the main constraint to development.

Since the understanding that Latin American countries could grow by their own means pushed by their own domestic demand (a virtuous endogenous cycle) one could say there was already a strong post-Keynesian and especially Kaleckian influence on the Structuralist view developing there. Led by Maria da Conceição Tavares, this line of thought moved out of ECLAC, already disputed under more liberal views, and went on to form heterodox economics schools in Campinas and Rio de Janeiro. One of its main goals was to reconcile Keynes and Marx, with

Kalecki and Steindl as their main influences in doing so (as well as Schumpeter).[17] After Tavares (1985), it was clear that the main halts on domestic development were the external constraint and forming internal political coalitions towards that goal. In terms of political economy, that work inspired a series of books on International Political Economy, with analyses of researchers from both Campinas and Rio de Janeiro on capitalism's rearrangement in the decades following Volcker's deflation and on specific country's development experiences (Tavares and Fiori (1998) is the first of a series of four books in which many texts used here were published).

These contributions theoretically became the basis of the international political economy school of thought of Federal University of Rio de Janeiro (UFRJ).[18] Given Kalecki's and Latin American structuralism strong theoretical influences on this line of thinking, I call it post-Keynesian Structuralist view on the course of this dissertation.[19] And take it as the main theoretical influence on the theoretical discussions done in chapters 3, 4, and 5.

2.4. Summarizing CPE approaches and proposing a possible synthesis between the demand and growth regimes in finance-dominated capitalism and the post-Keynesian Structuralist approaches

This chapter has presented three political economy approaches. Two main traditions in Comparative Political Economy (CPE) and the political economy view of Latin American Structuralism. The differentiation between these broad approaches was made based on the growth

[17] By the end of the 1970s, the economic thinking of these centers, greatly influenced by Conceição Tavares, had started shifting to the thesis of creating a virtuous endogenous cycle of technical progress within the Brazilian economy (Tavares, 1978). Schumpeter was an important influence on this regards, of technical change.

[18] Unfortunately, until the moment this dissertation was written these books were never translated to English.

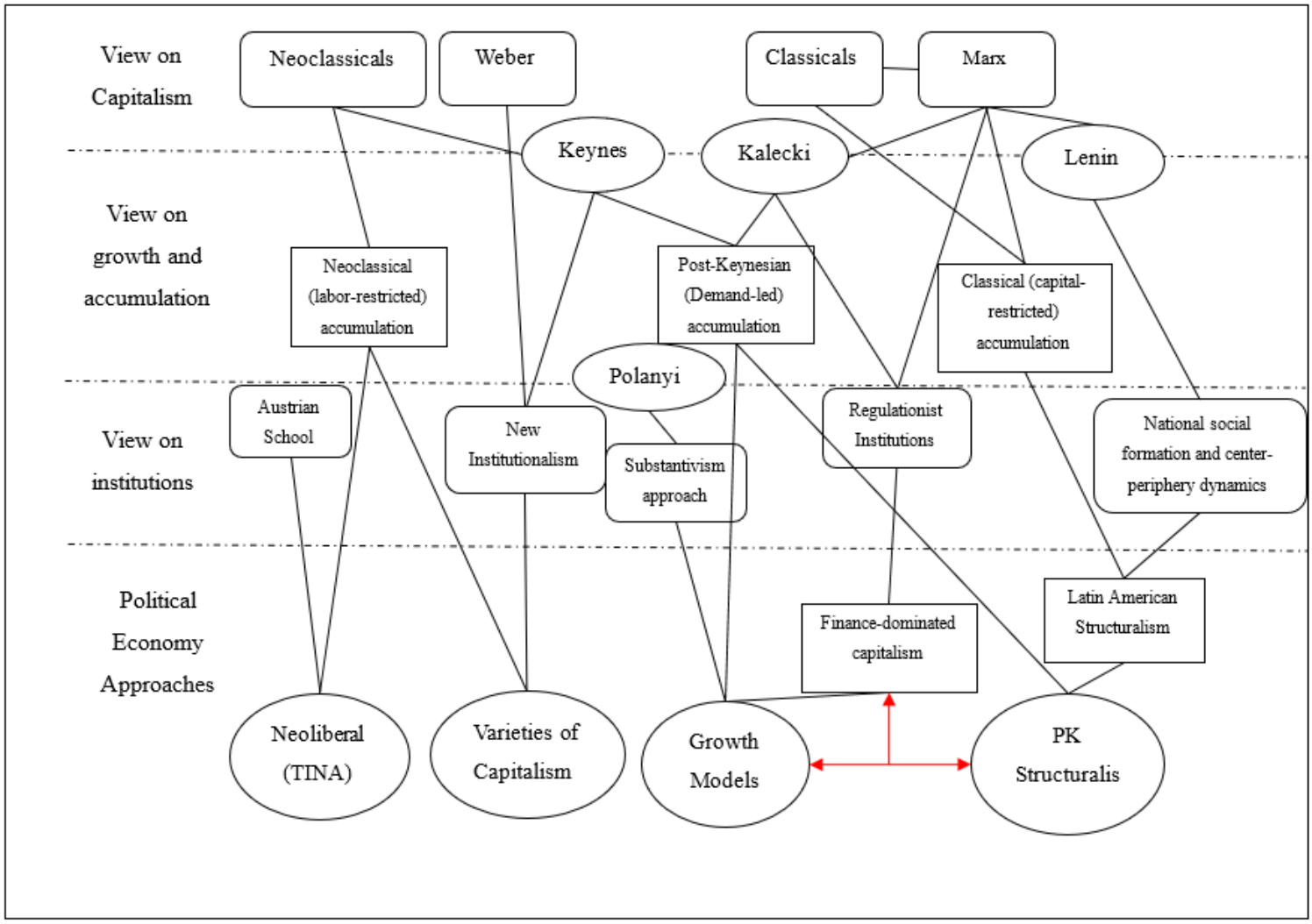
[19] The choice of naming in this case is not easy, as there seems to be no consensus in the literature. Perez-Caldentey and Vernengo (2022) refers to this literature as 'Structuralist Keynesian', while Medeiros (2015) uses the same term 'structuralist keynesian' to refer to the neo-Kaleckian literature after Lavoie and Stockhammer (2013). Moreover, Palley (1998, 2023) and Skott (2019) have proposed 'Structuralist Keynesian' views which do not relate to the Latin American Structuralist tradition, adding to the confusion. Another difficulty is that 'Post Keynesian' was a term for some time in Brazil associated with the Fundamentalist post-Keynesian strand after Davidson and Carvalho. While what we call here 'post-Keynesian Structuralists' covers a broader tent with strong Kaleckian and Sraffian influence. For this reason, we use Lavoie's 'broader tent' term 'post-Keynesian' (instead of the version without hyphen Post Keynesian, see Lavoie (2022, Ch. 1.4.4) for the history of this distinction). On the other hand, Lavoie (2022, Ch.1) himself presents the tradition after Latin American Structuralism as 'Development Structuralist', outside of post-Keynesian economics (although including authors like Lance Taylor and Franklin Serrano as post-Keynesian economists). I believe the term 'post-Keynesian Structuralist' can represent the link between this 'broader tent' post-Keynesian tradition of effective demand led growth and the Latin American Structuralist tradition. The term 'post-Keynesian Structuralist' to refer exactly to the effective demand tradition within 'Development Structuralism' was used by Stockhammer (2023) when arguing for the need to integrate these views with the Growth Model approach.

theory, or the theory of accumulation, theoretically underpinning each strand. On the other hand, the post-Keynesian Structuralist tradition maintains the historic-structuralist method of classic Latin American Structuralism, while breaking with the classic-Structuralist theory of accumulation. In this sense, moving in the direction of a possible synthesis with the post-Keynesian/Kaleckian views on political economy of growth and distribution. This section briefly summarizes the main theoretical influences of the approaches we have reviewed and highlights the possibility of the synthesis proposed in this dissertation.

2.4.1. A summary of economic influences of CPE approaches

As we have seen, apart from different underpinning economic views on what determines growth and accumulation in capitalism, the different approaches also have different theoretical interpretations of institutions and more deeply different views of what characterizes capitalism. It can be summarized in Figure 1:

***Figure 1**. Main Influences of Political Economy Approaches Reviewed*



Source: own elaboration

As pointed out by Perez-Caldentey and Vernengo (2022), at the basis of all approaches to comparative political economy there is a view of how and whether societies may organize themselves in different structures of production, and fundamentally what characterizes capitalism. The VoC approach would have taken over both the old field of comparative economic systems (which compared capitalist and socialist societies) and the research on 'transition economies' in the period following the end of the Cold War. At the roots of the VoC approach there would be the Weberian definition of capitalism defined by the behavior of the firms. For Max Weber: "a rational capitalistic establishment is one with capital accounting, that is, an establishment which determines its income yielding power by calculation according to the methods of modern bookkeeping and the

striking of a balance" (Weber (1927), in Perez-Caldentey and Vernengo (2022)). As in VoC, the firm and its behavior are the defining feature of the type of economic society, or the type of capitalism, developed in a specific country and time.

On the other hand, Classical British Political Economy authors were focused on the process of capital accumulation, grounded by the notion of stages of economic development – hunting, pastoral, agricultural, and commercial societies – for Smith and his successors. Thus, it was the type of economic production the society was organized for, and the division of labor in each of these forms of organization, that defined a society. Issues of distribution and class relations were at the forefront of their analyses, with historical and institutional factors taken into consideration as aspects that affect these class relations and economic organization. Marx was influenced by this tradition to develop his concept of the capitalist mode of production, while also breaking with it. Influenced by Historic Materialism, Marx saw the capitalist mode of production as a historic determined form of organization of society, which emerged from the conflicts and contradictions the feudal system presented beforehand in Europe. Thus, breaking with Smith and Ricardo on their view of capitalism or 'commercial societies' as a natural progressive development of human organization.

In terms of views on institutions, Marx greatly influenced the French Regulationist School and the Social Structure of Accumulation school, as we have seen. These strands have given great focus to institutions such as labor unions, state structures, policy-making, etc. With the idea that each period of accumulation was marked by institutions that *regulated* the relationship between capital and labor. This view got prominent after their analysis of the Fordist regime of accumulation in the developed world, also influenced by Gramsci's seminal contribution on the topic. As we mentioned before, this view of institutions greatly influences the finance-dominated capitalism literature and its incursion into the Growth Model approach.

On the other hand, influenced by Lenin (1899) and by the Imperial Studies of the late 19th century, Latin American historians of the beginning of the 1900s developed the idea of social economic formations and of center-periphery dynamics that greatly influenced Latin American Structuralist view of political economy (Vernengo, 2006), as we have mentioned before. Although not incompatible with the regulationist view, the focus of this approach is on how capitalism, as a global mode of production, organizes the international division of labor. And how the structure of production of an individual country developed depending on their integration in this international

division of labor. With groups of interest, institutions, and governments being tied to these specific industries or structures of production that developed in each period and place.

The diagram of influences of economic views on Political Economy, expressed by Figure 1, is of course a simplification. Nevertheless, it may help summarize the influences of main approaches on this interdisciplinary field through the lenses of history of economic thought. The VoC approach, today dominant in CPE, can thus be seen as an alternative to the politically influent idea of neoliberalism as the only and natural alternative (TINA, as we have mentioned in section 2.1). In this sense, it draws from New Institutionalism and its focus on firm behavior to distinguish 'varieties of capitalism' based on how different institutions affect firms' capabilities to develop their competences. Pointing out to 'coordinated market economies' as better alternatives for institutional organization within national contexts.

In the CPE field most of the approaches critical to the VoC approach are broadly connected to corporatist and social embeddedness views influenced by Karl Polanyi's Substantivism approach (Streeck, 2010; Perez-Caldentey and Vernengo, 2022). We have not presented this view deeply here, as it is not so much of the focus of this work. Nevertheless, for Perez-Caldentey and Vernengo (2022) what distinguishes this view from the New Institutionalist (and even the Neoliberal) views on institutions is that markets are social constructs and may be inefficient resource allocators, with the focus being on how these markets are *embedded* by institutions that direct them towards social justice or towards 'free markets'. Based on Baccaro and Pontusson's (2016) statement that the critics of VoC in general had failed to propose a positive alternative approach to CPE and to their proposed GM approach as the positive contribution emanating from these views, we have here focused on the Growth Models approach and in its influence by the finance-dominated capitalist approach (Stockhammer, 2008; Hein, 2012). Moreover, Perez-Caldentey and Vernengo (2022) also point out to Baccaro and Pontusson (2016) and Blyth and Matthijs (2017) as contributions merging the neo-Polanyian approach with neo-Kaleckian macroeconomics, and compatible with the view of capitalism and of institutions fostered by Marx and the classicals.

As we have highlighted in the diagram, the bridge built by Baccaro and Pontusson with Keynesian and especially Kaleckian economics, may present very different theoretical roots to political economy to that of the VoC approach. To start with, Kalecki and the Regulation and SSA schools that influence the Kaleckians, come from a different view of what forms capitalism and its

institutions. One closer to the view of Marx and based on his Historical Dialectic Materialism approach. In it capitalism is seen as a historical determined mode of production with the class conflict between (wage) labor and capital, a social relation determined in the sphere of production, as the foundation of institutional and economic organization of this society. In the Kaleckian economical approach, this view is linked with the view, also advanced by Keynes, of full employment being achievable by stimulating demand. Although different from Keynes, for Kalecki there could be a class motive that leads to a halt in full employment (and growth) due to social conflict (Baccaro and Pontusson, 2016; Kalecki, 1943). The view of a finance-dominated accumulation regime, which fostered polarizing 'demand and growth regimes' or 'growth models' of accumulation led by debt-financed consumption or by exports, allowed CPE authors to propose the existence of historic-determined varieties of capitalism determined by demand source and prioritization of labor or profits.

We have presented the Supermutiplier theory and its application to growth models literature as part of the GM approach literature (as it is presented in Morlin et al. (2022)). This is due to the argument by Morlin et al. (2022) that theoretically the growth led by credit-expenditure, exports, and state expenditure (cited by Baccaro and Pontusson although not applied in the classification) is more theoretically supported by the Supermultiplier model than by the Neo-Kaleckian or post-Kaleckian growth models. Perez-Caldentey and Vernengo (2022), on the other hand, pose the supermultiplier as underlying a completely different approach to 'varieties of capitalism' very close to what we named here post-Keynesian Structuralist tradition ('Structural Keynesians' on their taxonomy)[20] [21]. According to them, this approach would allow for two sources of 'varieties of capitalism':

> "At the heart of the varieties of capitalism are two factors. First, the geopolitical factors that explain how the global hegemons exert their powers. Second, the domestic social conflicts, to a great extent

[20] As mentioned before (in footnote 17), Medeiros (2015) uses 'Structural Keynesian' in a different way (referring to neo-Kaleckians), while Palley (2023) also uses 'Structural Keynesian' in yet a different meaning, as it distinguishes it from a 'center-periphery' approach. To make matters worse, Palley (2023) is exactly reviewing 'varieties of capitalism' literature, as are Perez-Caldentey and Vernengo (2022) and I, in this section.

[21] It is important to mention that what we called 'post-Keynesian Structuralist' tradition in section 2.3 is broader than the tradition within it that uses the Sraffian Supermultiplier. We tried to connect it to the Kaleckian-Steindl influence and the line of thinking introduced by Maria da Conceição Tavares and founding of the Campinas and UFRJ schools of economic thinking. On the other hand, authors tied both to the supermultiplier growth theory and the post-Keynesian Structuralist political economy approach, are the ones to whose analysis the discussion here is based. For this reason, from here onwards, we use the term post-Keynesian Structuralists underlying assuming a supermultiplier model. This view especially draws from the research put forward by the Group of Political Economy, or Surplus Group, at the IE-UFRJ, which also refer to their work as part of the Surplus Approach.

> class-based, that determine the political ability of certain groups to control the state and use it to promote accumulation. (Perez-Caldentey and Vernengo, 2023, p.259)

In the proposition of Caldentey and Vernengo, the Latin American Structuralist ideas of the role of a countries' position in (geopolitics and in) the international division of labor; the external constraint to growth (and the impact of the international monetary system in it); and the role of the state in allowing for growth and development; are tied to the Supermultiplier growth model. These aspects would support the explanation of the behavior of autonomous demand components (exports, government expenditure, credit-based expenditures) which ultimately would drive accumulation through effective demand. Indeed, the supermultiplier macroeconomics tradition has developed alongside the International Political Economy or the Development Economics (demand-led) Structuralist view at the Federal University of Rio de Janeiro.

2.4.2. A possible synthesis between the post-Keynesian Structuralist and the Growth Models/Regimes approach

Perez-Caldentey and Vernengo (2022) argue that this post-Keynesian Structuralist view would be incompatible with the neo-Kaleckian tradition (in its post-Kaleckian variation) applied to the GM approach. Since income distribution has a direct impact on investment in the latter, while on the post-Keynesian Structuralist view income distribution and inequality would not affect investment, they would "matter through their indirect political impact on autonomous non-capacity-creating spending" (p.258). However, as we have discussed, the neo-Kaleckian tradition itself has moved closer to the supermultiplier model in its growth theory (Lavoie, 2016; Hein, 2018; Dutt, 2019). While, on the other hand, the neo-Kaleckian growth regimes literature has sparked new important attention to the role of income distribution in growth trajectories, something post-Keynesian Structuralists had undermined before. As Carlos Medeiros puts it:[22]

> "The main merit of the contemporary approaches on growth regimes was to *introduce income distribution and labor relations to the analysis of development trajectories*. However, due to its ambiguities regarding the connections established between profits and investment – admitted in theory, but in practice not verified –, the main proposition that emerges from this literature is the description of the connections (and conflicts) between distribution and exports in the national trajectories of growth. But […] *the external integration and*

[22] This and all other quotes of sources written in Portuguese are translated by me freely.

the function exerted by exports in the growth trajectories [of a country] have structural and technological dimensions non-reducible to changes in distributive patterns." (Medeiros, 2015, p. 29, emphasis is my own).

This master's dissertation differs from Perez-Caldentey and Vernengo in arguing that a synthesis between the neo-Kaleckian-based GM approach and the supermultiplier-based post-Keynesian Structuralist approach is possible. It entails, however, a better treatment of the role of the external sector on demand-led growth, as argued by Medeiros. In terms of the theory of accumulation, this synthesis finds ground on the already ongoing synthesis around the supermultiplier model mentioned before. Which is itself essentially built on the conciliation of the Keynesian multiplier effect and the investment acceleration effect highlighted by Kalecki (1936), without incurring into diverging instabilities[23]. In terms of political economy, both traditions link growth directly to Kalecki's 1943 thesis on the political aspects of full employment. That is, the idea that capitalism is a system that may run under high growth and full employment without incurring into supply restrictions but does not do so due to the social class conflict between capital and labour. As Medeiros recognizes, the demand and growth regimes literature bring this back to the forefront of the discussion of development trajectories. While the post-Keynesian Structuralist literature extends this class conflict to the state and to the international sphere, while linking it back to the structure of production of each country.

In that last point, this synthesis would also bring the approach closer to topics important for CPE before the 1980s: the role of the state and of exports in driving growth. Baccaro and Pontusson (2016) aimed at doing that with the inclusion of the export-led growth in the notion expressed by the neo-Kaleckian model. They also cite the possibility of a state-led growth, although this was undermined due to the comprehension that neoliberalism had weakened the role of state in the countries it was interested in. The support of the supermultiplier theory would then give direct importance to the role of the state (and of the social blocs forming the government) in leading growth. While the external sector also gains much more support on the post-Keynesian Structuralist view and changes the fundamentals of the causality between export and growth in relation to the neo-Kaleckian growth model, as we will see more in depth in section 3.4.

[23] That is, the model is able, under realistic assumptions, to conciliate these conditions without incurring into Harrodian Instability. For more on this, see Freitas and Serrano (2015).

Another consequence of adopting the supermultiplier model (be it neo-Kaleckian or Sraffian) as the background theory of accumulation instead of the post-Kaleckian (Bhaduri and Marglin, 1990) model is undermining the role of profits in driving investment when there is no demand. This distinction seems to go in line with the empirical evidence (Medeiros, 2015). Moreover, by disregarding the role of profits on investment and by reviewing the role of the wage share on exports, this synthesis poses an analysis that goes in the exact same direction of Lavoie and Stockhammer (2013) of a *wage-led growth project*. Or, if one wants, a *wage- and state- led growth project*.

This dissertation thus follows Medeiros (2015), Stockhammer (2023), and Perez-Caldentey in their efforts in relating the GM and the post-Keynesian Structuralist approaches, and their laying out of common grounds and possible differences. It follows Medeiros (2015) in pointing to the treatment of the external sector as the main difference between the traditions. With the argument that a better treatment of the external sector is a crucial aspect of a possible synthesis between the approaches to comparative political economy.

3. The External Sector and the Domestic Market in Demand-led Growth

As we have seen so far, the adoption of post-Keynesian economic theory by Comparative Political Economy authors has brought back the external sector into the discussion of distribution and growth experiences (Baccaro and Pontusson, 2016). Following from the comprehension that developed countries would have entered a finance-dominated accumulation regime post-Fordism, an 'export-led mercantilist' sub-regime would have emerged as a counterpart to 'debt-led consumption boom' sub-regime and as a result of the lack of domestic wage demand (Stockhammer, 2013). On the other hand, as pointed out by Medeiros (2015, Ch.1): "there is not in the current literature and studies applied to national experiences any consensus to what is understood as 'export-led growth' and its productive configuration" (p.31). Inspired by the recent intention in bridging the CPE literature to post-Keynesian Structuralism (Perez-Caldentey and Vernengo, 2022; Stockhammer, 2023), this section revisits the role of the external sector on economic growth and development, as well as its relationship with domestic national markets based on the contributions of post-Keynesian Structuralist authors. With the goal to clarify the concept of an 'export-led growth regime' under demand-led economic theory.

The Chapter goes as follows. First, we contextualize the debate on the role of the external sector that dominates the Development Economics debate since the 1980s, relating it back to Prebisch's structuralist thesis of the underdevelopment of Latin American. Then, we revisit the role of exports and imports in demand-led growth theory, also giving attention to the related concern on domestic economic structure. After that, we review and discuss the relationship between the external sector and matters of income distribution and of financial accounts, as usually highlighted in the neo-Kaleckian literature. Lastly, in light of all the elements discussed before, we build a theoretical foundation of the role of the external sector in driving the growth of domestic markets, introducing two possible theoretical misinterpretations of the external sector's impact on overall growth: *export-led stagnation* and *false-positive export-led* growth.

3.1. The Development Economics debate: export-orientation and import-substitution

Since the 1980s, the World Bank has started pushing underdeveloped countries to halt 'state interventionism' and open for trade liberalization (World Bank, 1981; Mkandawire, 2014).[24] The rapid growth of the so-called 'Asian Tigers' – South Korea, Taiwan, Hong Kong, and Singapore – since the 1950s, supposedly following a similar 'export-orientation' as Japan and Germany, served as support for a push for development strategies to focus on 'export-orientation' against 'import substitution' (World Bank, 1993). This doctrine of the economic benefits of opening for trade was used to the rapid expansion of financial and trade globalization that had already started in the 1980s and accelerated in the 1990s and 2000s. One could say that "[Since the 1980s], development policy has been dominated by the paradigm of export-led growth" (Palley, 2011). This paradigm, pushed by the World Bank, IMF, and the WTO and backed by neoclassical trade theory, does not highlight the role of export itself on growth, but rather the importance of the lack of external incentives (tariffs and devaluated exchange rates) and the importance of external openness (both commercially and financially) to a more efficient allocation of resources (Medeiros and Serrano, 2001).

The arguments within neoclassical economics for this 'export-oriented' or 'export-led' strategy are not so much based on neoclassical growth theory as that usually disregards open economy issues (McCombie and Thirlwall, 2002) but on neoclassical trade theory. As pointed out by Palley (2011), we highlight three main arguments pro-trade between developing and developed nations in neoclassical trade theory. The first and the groundwork of most of the field rests on Hecksher-Ohlin's reinterpretation of the Ricardian comparative advantages argument, arguing that countries with different endowments of capital and labor will always benefit from trade from being able to specialize and be more efficient on the sector correspondent to their endowment (Samuelson, 1948). Secondly, and used in the 1970s to push against import substitution by new industrializers, was the political economy argument that trade protection created incentives for rent-seeking behavior with inefficient industries taking rents from the state (Krueger, 1974). And more recently, in new (new) trade theory, the argument that trade created incentives for knowledge

[24] As Mkandawire (2014) puts it: "Development economics simply ceased to serve the needs of the establishment upon whom its rise had been so dependent." (p.178). He refers to the field of Development Economics as being instrumental in the after second world war period to keep Third World countries close to the capitalist great powers and keep them away from soviet influence.

absorption and spillovers which could accelerate productivity growth (Grossman and Helpman, 1991).

It is easy to see the problems with these neoclassical trade theory arguments from a heterodox perspective. Its main defect lies in its roots in Ricardian comparative advantage. It disregards the external constraints emerging from specializing in lower income-elasticity goods (Prebisch, 1949) because it takes money as a veil. That is, Ricardo's argument assumes the Quantitative Theory of Money as its argument rests on the fact that money influxes from selling more expensive goods leads to inflation and changes in exchange rates, which then reestablish relative prices that benefit the country that was sending influxes in the first place. Without considering that money influxes do not have to lead to inflation but could rather be used as new finance lent elsewhere (Shaikh, 2016, Ch.7). Keynes also rejected the comparative advantage argument simply because in a world of demand shortage (when Ricardo's Say's Law is overcome) trade can lead to lower domestic output through demand leakage (Palley, 2011). This does not mean that industrial policies for trade protection cannot render rent-seeking behaviors or that there cannot be knowledge spillovers from trade, it just means these effects will depend on the specific policies applied and national political economy contexts, and cannot be taken as universal results. In fact, all late industrializer from the US to China (passing by Germany, Japan, and the Asian Tigers), used some sort of protectionism (Chang, 2002). Moreover, it should strike the eye that the Asian tigers (all countries with specific pro-NATO geopolitical positions) are the only countries outside of Europe and Israel which have become advanced economies since the end of World War II (Medeiros and Serrano, 1999).[25] We come back to this issue when we go into the political economy debate in Chapter 5.

More importantly, this discourse by the World Bank points out to a false dichotomy between 'export-orientation' and 'import substitution' (Medeiros and Serrano, 2001). The import substitution strategy, although applied to many countries in Sub-Saharan Africa and Asia, is usually associated with Latin America, due to CEPAL's strategy between the 1950s and 1970s (Palley, 2011; Serra and Tavares, 1970). But if we go back to the thesis presented in section 2.3, CEPAL's

[25] Here it is considered the IMF definition of 'advanced economy', which depends on per capita income. As put forward by Medeiros and Serrano (1999) these countries would have been 'invited to develop'. China's case although also being geopolitically benefitted (Medeiros, 1999), may be a more complex case to which we will come back to in Chapters 4 and 5. Nevertheless, due to its still low per capita income, it is still not regarded as an 'advanced economy'.

founding structuralist thesis about underdevelopment is not only independent from the import-substitution strategy, but it is also directed at exports. As we have seen, in Prebisch (1949) the main halt to development was that Latin American countries exported lower income-elasticity goods than those of its developed counterparts. This is a sufficient motivation for the need of industrialization, it is directly focused on improving exports to expand imports, and it is independent of the tendency observed by Prebisch of falling terms of trade (Medeiros and Serrano, 2001).

Medeiros and Serrano also point out that the specific choice of import-substitution as a strategy for industrialization in the 1950s had two motivations. . The fact that the current 'cyclical center', the US, (different from the UK) also exported big amounts of primary goods and the fact that developed countries had imposed protection on their agricultural sectors post World War II. This meant that there was no perspective that Latin American exports would present great dynamism to allow for more imports, which meant imports should be chosen carefully. The logic of import substitution was exactly of importing as much as the country could under its financial constraint, trying to best allocate the currency on the import of capital goods necessary for a structural change directed at industrialization (Prebisch, 1951; Tavares, 1963).

In fact, all development experiences in the post-war era had a high degree of state interventionism and an orientation towards changing the country's position in the international division of labor. The degree and form to which each national economy implemented policies on both directions can be better tied to their economic structure of production (Medeiros and Serrano, 1999). As pointed out by Medeiros and Serrano (2001) the choice of industrial incentives by the Japanese Ministry of Commerce and Industry in 1970 was explicitly directed at sectors with higher income-elasticity of demand and faster technological gains. The same idea proposed decades earlier by Prebisch.

The purpose of this section was to clear out the controversies on this dichotomy between 'export-oriented' and 'import-substitutions' types of development. Although not present in the CPE literature we are dialoguing with, its very dominant role in policy debates often misleads authors. Now, to better fundament how external and domestic demand interact, we must review the role of exports and imports in demand-led growth theory. With the goal of structuring concepts for a better reading of growth experiences in open economies and better formulation of policy strategies.

3.2.Exports: source of demand and of international currency

Macroeconomically, exports have two roles on national economies: they are a source of demand and a source of international currency that can be used to import foreign goods or service international financial liabilities. While the weight of exports on final aggregate demand may vary between countries, the use of exports to access an international accepted currency and thus import is crucial to all countries, except those trading on their domestically issued currency (Medeiros and Serrano, 1999). In this section we look at how these two roles of exports enter into demand-led growth theory.

Let us suppose an open economy with government, without persistent capital flows. We can describe these two roles, in a short-run static model by the equations:

$$Y = C + I + X - M = \frac{I + G + X}{1 - c + m} \quad (1)$$

$$Y_{BP} = \frac{X}{m} \quad (2)$$

The first equation is Keynes' (1936) multiplier equation, in which aggregate demand (Y) equal the sum of consumption (C), investment (I), government expenditure (G), exports (X) and imports (M).[26] While consumption and imports are considered to be proportional to income, such that $C = cY$ and $M = mY$. The second equation is Harrod's (1933) trade multiplier, in which Y_{BP} is the level of income that make imports equal exports $mY_{BP} = X$. The premise behind equation 2 is that quantity movements can bring alone the trade balance to equilibrium. Although static, it can be considered as a longer-term consideration as price adjustments are disregarded. We can see the two roles of exports are present already in the seminal contributions of Keynesian literature.

We can express the same ideas in terms of growth rate if we consider dynamic equations. To do so we must consider the variation of the capital stock. The question (within post-Keynesians) thus becomes the determinants of investment. We start by considering the simplest case in which investment is fully induced by aggregate demand $I = hY$, as is taken in the Kaldorian tradition of

[26] For simplicity, we assumed out taxes. If included it would affect the multiplier negatively.

the Thirlwall's (1979) Law and in basic Sraffian Supermultiplier models.[27] So we can rewrite equation 1 as:

$$Y = \frac{G + X}{1 - c + m - h} \tag{1'}$$

If we define the (super) multiplier as $SM = \frac{1}{1-c+m-h}$, and $Z = G + X$. We can then write the dynamic form of equations 1' and 2:[28]

$$g_Y = g_z + g_{SM} \tag{3}$$

$$g_{Y_{BP}} = \frac{g_X}{\mu} \tag{4}$$

In which μ is the income-elasticity of imports and g variables represent the growth rates of their subscript. If we consider σ as the proportion of exports in autonomous demand Z, we have $g_z = \sigma g_X + (1 - \sigma) g_G$. If we assume that the (super)multiplier is somewhat constant and structural to the economy,[29] then we have:

$$g_Y = g_z = \sigma g_X + (1 - \sigma) g_G \tag{3'}$$

We can now turn to analyze the equations we got considering different strands in post-Keynesian growth theory. First and foremost, it is explicit that equation 4 represents Thirlwall's Law (Thirlwall, 1979; Thirlwall, 2011), the rate of growth of output compatible with a balance of payments constraint in the long run. This literature assumes exchange rate movements are unable to equilibrate long-run balance of payments disequilibria as that would assume eternally (de)valuing the domestic currency. It also builds on empirical evidence (Kaldor, 1978; Thirlwall,

[27] In the Sraffian (and in the neo-Kaleckian) Supermultiplier tradition the dynamics of the model towards the long-run equilibrium is given by $\dot{h} = h\gamma(u - u_n)$, with $0 < \gamma < 1$. Which means the rate of change of the propensity to invest responds (steadily) to the differential between the current rate of capacity utilization and the normal (desired) rate of utilization. Thus, capturing the accelerator effect on investment (Kalecki, 1936; Harrod, 1939). We do not consider this here as it goes beyond the scope of this dissertation. See Freitas and Serrano (2015) for a more detailed discussion.

[28] Equations 3 and 4 are found by taking the log and the derivatives of equations 1 and 2. They are dynamic in log form. The passage from 2 to 4 follows Thirlwall (2011, footnote 2, p.13).

[29] As mentioned in the footnote before, h adjusts to bring the model to equilibrium. However, the supermultiplier is taken to be constant at the equilibrium. In fact, we can see our analysis as looking at trends, as we are not so worried about adjustment mechanisms here. It is also assumed here that m does not change, such that income elasticity of imports is equal to unity. In sections 3.3 and 3.6 we explore the situations when that is not the case.

2011). This can be seen as the formalization of Prebisch's thesis (Thirlwall, 2011; Perez-Caldentey and Vernengo, 2019). Bhering et al. (2019) show these results are compatible with persistent capital flows. Equation 3 would be compatible with Thirlwall's law by taking exports as the only autonomous component of demand and income elasticity of imports as the only changing component of the supermultiplier, by its effects on the propensity to import. This tradition then finds the values of equations 3 and 4 to always coincide. Medeiros and Serrano (2001) point out that this tradition "generalizes to all countries the particular case of some economies in which exports are the main component of autonomous demand" (p.1)

More recently, supermultiplier models with government expenditure and exports were built reaching similar results to equation 3 (Morlin, 2022; Dvoskin and Torchinsky, 2023; Emboava Vaz, 2023), with long-run growth being led by exports and government expenditures. Although we here presented only these two expenditures, there could be other domestic autonomous expenditures apart from government expenditures. Emboava Vaz (2023), for example, includes consumption out of interests on public debt. However, these models must impose certain assumptions to the behavior of σ, the proportion of exports in autonomous demand. That is, because the autonomous expenditures are growing at different rates, this variable necessarily becomes endogenous.[30] These models set that in equilibrium $g_X = g_G$, exports and government expenditure grow at the same rate in the long run, such that the proportion of each one on GDP remains stable. This would mean that long-run growth rate would be the same as the one defined by Thirlwall's Law, and equations 3 and 4 would be the same. A maximum level of external debt acceptable by international creditors would force government expenditure down when it was above the growth rate of exports. On the other hand, there is no clear mechanism to make government expenditure, or domestic demand more generally, raise to that level determined by the growth rate of exports. Although some mechanism would be needed as we do not see any component of demand disappearing in the long run (Allain, 2022), it may very well be the case that the country maintains growth rates below that of the external constraint for long periods of time, due to policy choice possibly related to desired levels of public debt or international reserves (Emboava Vaz, 2023).

[30] Its behaviour would follow a pattern like: $\dot{\sigma} = \sigma(1-\sigma)(g_X - g_G)$. Which imposes either $g_X = g_G$ or a very specific pattern of the ratio σ.

This theoretical finding from the formal models is compatible with open economy post-Keynesian growth theory. Freitas and Dweck (2013) point out that in the supermultiplier model a national economy would follow either a balance of payments constrained, or a policy constrained ('pure') demand-led growth process. Although the Thirlwall tradition never explored much the possibilities of other demand components besides exports leading growth, it also seems like a similar idea was present in that literature. McCombie and Thirlwall (2002) make the remark that not all economies are balance of payments constrained, being possibly constrained by policy or by resources. Thus, we can see there seems to be a convergence between the Kaldor-Thirlwall and the supermultiplier tradition in understanding the balance of payments as a ceiling to growth rates, but not its only determinant, with domestic autonomous expenditures also having a central role on growth. This would mean that although equations 3 and 4, theoretically, should converge in the very long term, equation 3 may have a persistent lower result than that of equation 4. We could express this with the definition:

$$\bar{g}_Y \leq g_{Y_{BP}} = \frac{g_X}{\mu} \tag{5}$$

In which $\bar{g}_Y$ represents the average rate of growth of an economy.

This formal presentation of the balance of payments constraint highlights the role of export growth in relaxing the external constraint. If we consider, as does Thirlwall (2011) that the rate of growth of exports depend on the increase in foreign income (Y_F) and on the income elasticity of exports from the country (ε), then we can rewrite equation 4 as:

$$g_{Y_{BP}} = \frac{g_X}{\mu} = \frac{\varepsilon g_{Y_F}}{\mu} \tag{4'}$$

From equation 6 we can see that when $\mu > \varepsilon$, $g_F > g_{Y_{BP}}$. That is, when income elasticity of imports of the country is bigger than the income elasticity of its exports, then the country's maximum growth rate (to not incur into an external crisis) will always be lower than the growth rate of income from the rest of the world (its trade partners, to be precise). This is Prebisch's thesis in a nutshell. The consequences of these findings are quite alarming. They mean that in an integrated global economy in which countries trade on a foreign currency they do not control there will always be imbalances in growth rates related to the need to access goods outside the country on the process of growth and development.

While the Thirlwall tradition often abstains from other sources of autonomous demand apart from exports, other traditions in post-Keynesian economics abstain from the external constraint. It is the case, for example, of the neo-Kaleckian open economy growth model (Blecker, 1989, 2002). Coming back to the passage from equation 1 to 3, neo-Kaleckian open economy models have two differences to what we presented: private investment is not considered fully induced by the rest of demand and exchange rates have positive impacts on (net) exports both by its variation and by its level. As we discussed in Chapter 2, in neo-Kaleckian growth models long run growth is led by autonomous investments, or animal spirits,[31] which means exports have a residual influence on demand growth only.[32] The neo-Kaleckian open economy supermultiplier models however do not have this issue (Nah and Lavoie, 2017; Emboava Vaz, 2023), with exports leading growth. This result comes from the focus of the neo-Kaleckian open economy model on distribution issues for open economies. Something we analyze in section 3.4, along with the role of exchange rates, loosening the assumption we kept here of devaluations having no effect on exports.

Other contributions in later Structuralist tradition also undermined the external constraint under the premise that a strong developmentalist state could be able to loosen the external constraint by providing profitable opportunities for FDI and by administrating imports to the specific needs of the country, as in the import substitution strategy (Tavares, 1963). Although correct in theory, this strategy undermines the role of outflow of capitals tied to FDIs and overestimates the potential of the state (Medeiros and Serrano, 2001). If an FDI investment sends profits back to the company's headquarters, depending on the profit rate of the investment and the share of which is taken from the country, the outflow of capitals will impose greater external restrictions in the future. Nevertheless, it is true that the attraction of capital may ease the external constraint, especially in the short run (Emboava Vaz, 2023). But on the other hand, capital inflows

[31] As pointed out by Lavoie (2016), Amadeo (1986) the one to build the 'canonical Kaleckian model' called this term 'animal spirits' in the purpose of leaving the model simple and able to adapt to other mechanisms such as the impacts of profit rates, profit shares, credit, monetary conditions or others. As pointed out by Freitas and Serrano (2017), however, this takes out of the model the accelerator effect of investment highlighted by Kalecki (1937).

[32] It was pointed out to me by Fabio Freitas that this also leaves an open mechanism in the open economy neo-Kaleckian model, as export growth has to adjust to the animal spirits, growth rate of sales, without a clear economic mechanism for that.

always come with corollary capital outflows in the future as debt service. Exports are the only source of foreign currency that does not come with a liability.[33]

In this section we have highlighted the role of exports both as a demand source and as source of foreign currency needed to loosen the external constraint to growth. While export growth may be the demand component that defines maximum growth rate, because of the balance of payments constraint, it is not the only determinant of domestic growth. It opens space for domestic expenditures. While some authors often overemphasize the external constraint growth rate as the actual rate of economic growth (Thirlwall, 1979), other authors undermine the external constraint (Blecker, 2002; Tavares, 1963). The better position seems to be that stressed by Medeiros and Serrano (2001), that exports should be seen as the demand component able to open space for domestic expenditures, but not as driving growth by itself. Here it is important to mention that equation 5 also highlights the degree to which exports drive growth essentially depend on its proportion to autonomous demand.

3.3.Imports: a source of supply

Imports are a source of supply. That is commonly represented in the literature by pointing out that import is a demand leakage, a point made by Keynes himself when talking about how part of the multiplier effect of an autonomous investment increase would go to foreign employment (Keynes, 1936, Ch.9). This already distinguishes imports from exports, while the latter is an autonomous increase in domestic demand, the former is an induced leakage of demand. Imports affect the multiplier in equation 1, while exports affect the numerator.

However, to fully appreciate the role of imports as a source of supply we must disaggregate:

$$M + Y = C + I + G + X \tag{6}$$

$$M = \beta(C + I + G + X) \tag{7}$$

$$M = \beta_c C + \beta_I I + \beta_G G + \beta_X X \tag{8}$$

[33] As mentioned by Kalecki (1955), even grants come often with political costs that may hinder development in the future. For him, of all sources of finance outside of exports, loans seem to be the less costly. Although post-Keynesian Structuralist authors often see FDIs as better sources of finance (Botta et al., 2022).

Where β is the imported content of aggregate demand, $\beta = \frac{M}{D}$, where D is the aggregate demand. [34] Which, as we can see from equation 8, can be decomposed between coefficients of imported content that each demand component commands. This means that each demand component has a different imported content. By taking aggregate imports one implicitly assumes that the domestic content of each demand expenditure is proportional to its weight on aggregate demand. When that may not be the case. It also undermines that part of the import content is induced by final demand and part by intermediary demand. This point has recently been made in the GM approach literature by Baccaro and Hadziabdic (2023) and it is a common topic for those working on structural decomposition based on input-output analysis (Fevereiro, 2017; Passoni, 2014).

This is especially important when we consider dynamic growth models. As we mentioned before, it was already clear to Keynes that imports represented a leakage through the multiplier effect on autonomous expenditures. When we consider the dynamics of capital accumulation, it means that the accelerator effect is also lost. The accelerator effect refers to the capital adjustment mechanism and the idea that the size of the productive capacity should keep a relation with the size of demand (or production).Thus, the effect of growth on capacity utilization not only presents a one-time increase in demand by the multiplier, but presents an accelerative effect on investment since the rate of growth of capacity (investment rate) should keep up with the rate of growth of production (Harrod, 1939; Freitas and Serrano, 2015). This means that in moments of higher growth the proportion of investment to GDP tends to be higher (one of the most consensual stylized facts of the economics discipline (Kaldor 1961)). This has a supply-side importance in terms of the industry of means of production. As pointed out by Tavares (1963), moments of accelerated growth see a more than proportional increase in investment expenditure, when the country is dependent on imported capital goods a large part of this acceleration effect is lost. This means that in moments of higher growth rates, the weight of imports in the balance of payments tends to be bigger due to the higher weight of capital goods in the basket of imported goods. On equation 8, this would mean the import content of investment, β_I, is larger than the other import contents, such that average β

[34] Note that $\beta = \frac{M}{D} = \frac{M}{M+Y} = \frac{m}{m+1}$. Although m is a function of β, they have different values, with β necessarily remaining between 0 and 1.

increases with the increase of the proportion of investment in GDP (h), making the import content endogenous to the growth process (Medeiros and Serrano, 2001).

A clear consideration of imports as a supply source helps to differentiate it from exports and to highlight how different demand components command different proportions of imports. As a supply-side factor, imports depend on the national structure of production. Countries that aim at sustaining a rapid domestic market increase need to focus on the provision of capital and intermediary goods domestically, as these represent strong and endogenous leakages.

3.4.Exchange rates and income distribution

As we have seen in section 2.2., the link between income distribution and the external sector is key to neo-Kaleckian growth theory. The pioneering contribution of Blecker (1989) introduced the idea that demand-led growth theory could be reconciled with the classical-Marxist finding that the wage-share correlated negatively with accumulation by introducing international price competition. We can see this by rewriting exports and imports as:

$$X = \left(\frac{P}{eP_F}\right)^{\eta} {Y_F}^{\varepsilon} \tag{9}$$

$$M = \left(\frac{eP_F}{P}\right)^{\varphi} Y^{\mu} \tag{10}$$

In which P are domestic prices, P_F are foreign prices, e is the nominal exchange rate, and $\eta < 0$ and $\varphi < 0$ are export and import price elasticities, respectively. Notice that it just adds prices and price elasticities do the definitions we had already brought in section 3.2 when looking only at volume changes.[35] The essential condition to make price competitiveness hold on this model is the well-known Marshall-Lerner condition, expressed by $|\eta + \varphi| > 1$. This condition says that a depreciation of real exchange rates $\left(\frac{eP_F}{P}\right)$, everything else constant, will increase the balance of trade after a first moment of decrease in the same.[36] This means that a decrease in domestic prices that increase real exchange rates will boost net exports in the medium run.

[35] Since we used the log and derivative versions on our dynamic equations, income elasticities were multipliers.
[36] The theory says that a devaluation will first have a negative effect on net exports as the new relative prices under the same volume of goods previously demanded will grant imports more expensive and exports cheaper. The condition holds that, because of price elasticities, the volume of goods demanded will change proportionally more than the change in prices, leaving higher net exports in this 'medium-run'.

Now we can consider the effect of income distribution on prices. If we assume domestic prices are a negative function of domestic real wages (w), that is, assuming that price-setting firms have a certain rigidity to their mark-ups, such that $P(w)$, with $\frac{dP}{dw} > 0$. Then a decrease in real wages would have an expansionary effect on net exports. This, however, does not necessarily mean net exports would be 'profit-led'. As pointed out by Hein and Vogel (2008), it depends on what caused the change in income distribution in the first place. Let us assume prices are not only a function of real domestic wages, but also of the nominal exchange rates (e) (through the effect on prices of imported intermediary goods) and of the mark-up firms set on prices (θ). Such that $P(w, e, \theta), \frac{dP}{de} > 0$ $\frac{dP}{d\theta} > 0$. Now let us consider the profit share (π) is also a function of the same variables such that $\pi(w, e, \theta), \frac{d\pi}{de} > 0$, $\frac{d\pi}{d\theta} > 0, \frac{d\pi}{dw} < 0$.[37] Real exchange rates and the profit share would rise together in the case of increases in nominal exchange rates or of a fall in real wages. But in the case of a fall in the mark-up, real exchange rate and net exports would increase, while profit shares would decrease. This latter case would present wage-led net exports. Nevertheless, empirically if there is any evidence is that of a positive correlation between profits and net exports (Nah and Lavoie, 2017; ILO, 2013).

However, the empirical evidence is generally very unconvincing on the generality of the expansionary effect of a real exchange rate devaluation. In fact, the evidence seems to show that different countries and conditions may render different effects of real exchange rate devaluation on aggregate income, with unconvincing general results in either direction (Lizondo and Montiel, 1989; Kim and Kim, 2015).[38] An important literature after Diaz Alejandro (1963) and Krugman and Taylor (1978), have pointed out to the contractionary effect of exchange rate devaluations. As they put it: "neglecting the contractionary impacts of devaluation amounts to ignoring income effects, especially those transferring real purchasing power toward economic actors with high

[37] Prices increase with nominal exchange rates because it increases the relative price of imported inputs used in the production, increasing costs. With a constant mark-up, that leads to higher prices a higher profit-share. Similarly, higher mark-ups lead to higher profit margins for the same costs, so it increases prices and the profit share. Real wages on the other hand correlate negatively with the profit-share, but everything else constant correlates positively with prices. Hein and Vogel (2008) also highlight the case in which an increase in foreign prices (a depreciation) may increase the wage share if companies are not able to translate this increase to domestic prices, squeezing the mark-ups.

[38] On this note, the finding by Baccaro and Hadziabdic (2023) on the relevance of price competitiveness on determining export-led growth should be taken with attention. Their method of a simple regression between growth rates of imported-adjusted exports and exchange rates undermines the role of all potential underlying variables that could be influencing both variables, and may suffer from double causality, as the variation of the trade balance under flexible exchange rate regimes would also affect real exchange rates back.

marginal propensities to save" (Krugman and Taylor, 1978, p.2). This is a very Kaleckian argument in fact. A devaluation immediately increases prices of imported goods, diminishing domestic income, and increasing the profits of export sectors. If wages do not follow this price increase, as they usually do not, there is a fall in real wages. While some export sector capitalists gained new profits, wage earners lost real income. A devaluation is then a redistribution of income from households that spend most of their income to actors (domestically or externally) that spend a smaller share of their income. This dampens domestic aggregate demand in the most Kaleckian fashion. Although it is widely accepted that devaluation poses a pro-profits redistributive role, the tradition after Blecker (1989) assumes this domestic market dampening effect is smaller than the Marshall-Lerner effect that raises external demand.

The empirical findings of country-specific or unconclusive effects of devaluation on aggregate demand makes sense theoretically, among other things, by the expected influence of the productive structure on this effect. As we just showed, the Marshall-Lerner effect depends on import and exports price-elasticities. Which, by definition, depends on what is being exported or imported. Peripheral countries exporting agricultural goods for example will tend to have low price elasticity of exports as they are price takers (dos Santos, 2015). While their import necessity may very well not be much price sensitive, as they need goods by definition not produced internally, like capital goods for underdeveloped countries (Dvoskin and Torchinsky, 2023). This may also explain why most of the open economies characterized as profit-led seem to be small open economies (Hein, 2023).

As of now we have just looked at short and middle-run effects of devaluation and income distribution on net exports. If investments depend on profits and exchange rates have positive effects on profits, one could also expect exchange rate devaluations to have expansionary effects on investment in the short-run (Blecker, 2016). This result, however, seems to have even less empirical evidence than that of the effect of a devaluation on net exports (Medeiros, 2015; ILO, 2013), and it is also not so emphasized in the literature. It is important to notice this causality channel would also undermine the leakage of the accelerator effect mentioned in section 3.3. Especially for developing countries an increase in investment often comes with higher import necessities, which would decrease net exports. Even Bhaduri and Marglin (1990) when considered the possibility of profit-led growth, mention it would be more unlikely in an open economy.

The Marshall-Lerner is a level (and multiplier) effect, but not a permanent effect. When it comes to the long-run, the conclusion that an undervalued exchange rate have permanent effects on output, that is, that it affects trend growth rates, depends on another mechanism. Indeed, the New Developmentalist tradition, which is also inspired by Latin American Structuralism, has given great attention to the role of exchange rate *levels* on long-run demand-led growth *rates* (Bresser-Pereira, 2020). Their argument is that the maintenance of an undervalued domestic currency with low wages, may increase international competitiveness, allowing countries to absorb a larger external demand and open external space to industrialize first and then start building a stronger domestic market. Although the argument on price competitiveness is similar to that of Blecker (1989), the neo-Kaleckian author also considers this international competitiveness effect of lower wages as more of a short to medium run effect, with economies being more wage-led in the long-run (Blecker, 2016).

From a Structuralist perspective, as pointed out by Ferrari et al., (2013), long run export growth can be interpreted by decomposing the income elasticity of exports. We could do that by looking for each group of goods exported by the country: (i) the variation of the participation of the countries' exports in that goods' international market;(ii) the weight of that product's market in total export markets;(iii) and the share of total global income going for exports. The last two variables are out of the control of domestic economies for most countries. The causality would then have to be that the maintenance of undervalued exchange rates would increase the participation of the country in the market of goods they export by lowering its costs in international terms. Ferrari et al., (2013) finds that effect is possible, but very uncertain, probably being overestimated in the New Developmentalist literature.

This would point out to the same conclusions found by the Thirlwall model and by Prebisch already in the 1940s. That price effects have very limited and short-lived effects on growth. Although it is probably the case that increasing competitiveness by dampening wages, as done by most of the periphery under globalization, has some relevant effects on attracting foreign direct investments and improving net exports (especially by dampening imports), this effect should be taken into context and not be overestimated. Other characteristics such as the country's productive structure, domestic market potentials, institutions, skill-level of the labor force, and demographics should also be affecting such international competition, rendering very different development

experiences to those that went for price competitiveness by lower wages (Palley, 2011). More specifically, while competing through lower wages may have allowed countries to enter global value chains on labor-intense sectors, it does not allow countries to enter sectors with higher value-added and higher income elasticity of exports, which demand industrial policy (Medeiros, 2015).

In general, as we have seen, we cannot take the effects between distribution and the external sector, neither in the short nor in the long run, disregarding the composition of the trade balance and the structure of production. A problem of theoretical grounding of the demand and growth regimes literature, originating from the neo-Kaleckian open economy growth theory (Blecker, 1989), is that its 'export-led regime' is theoretically grounded on international price competition, undermining all questions of domestic structure of production and integration in international markets in international competition (Medeiros, 2015). Authors in the neo-Kaleckian tradition have highlighted the more prominent role of non-price competitiveness as well (Kohler and Stockhammer, 2022), but because the interrelation between the role of exports and of domestic demand is not clarified, there is still a theoretical contradiction between 'export-led growth' and domestic demand 'wage-led growth', at least in the theory. We come back to this in section 3.6 and 5.1.

Lastly, and coming back to Blecker's (1989) original point. The opposition observed by Classicals and Marxists was between the real wage and profit rates, more than between wage and profit shares. Real wage gains may be substantial even with decreasing wage shares depending on the pace of productivity growth. Between 2000 and 2008, many countries classified by neo-Kaleckian growth regimes as (profit-led) export-led had substantial increases in real wages, especially in Asia and Latin America. In China, the biggest export-led country, real wages grew more than 3 times during that 8-year span, being followed by increases in the wage share after the 2008-crisis (Medeiros, 2012, 2015). As we come back to on Chapter 4.

3.5.Financial balances: saving vs. financing

Keynes' most important contribution arguably was bringing money's importance to the forefront of Economics.[39] He clearly explained that in a monetary economy money is not a veil, it

[39] Marx had done something similar in the 19th century drawing from the Banking School when he was building his theory of crises. Nevertheless, he did not advance that to his reproduction systems nor used it for a theory of employment.

moves expenditures through time breaking the old dogma that 'supply creates its own demand'. For this reason, money, finance, and its flows have always been crucial to all Keynesians. Financial balances, with its flows and stock variations, however, gained special prominence after the New Cambridge contributions (Godley and Cripps, 1983) and the Stock-Flow-Consistent method (Godley and Lavoie, 2006). The fundamental basis of the Keynesian view of finance comes from the difference between the concepts of *saving* and *financing* (Graziani, 1996). In the demand and growth regimes literature, influenced by these theoretical traditions, financial balances take central role in identifying growth regimes (Hein and Mundt, 2012). In this section we look closer at this use of financial balances, holding its results should be taken with attention.

Financial accounting can be expressed by the identity between domestic and external savings:

$$S_{Pr} + S_{Pu} - I_{Pr} - I_{Pu} = -S_X \tag{11}$$

$$(S_{Pr} - I_{Pr}) + (T - G - I_{Pu}) = (X - M + R_X) \tag{12}$$

$$FB_{Pr} + FB_{Pu} = -FB_X \tag{13}$$

That is, the sum of domestic private savings (S_{Pr}) and public savings (S_{Pu}) (total domestic savings) minus the sum of domestic private investment (S_{Pr}) and public investment (S_{Pu}) must equal the current account result, which is by convention the negative sign of foreign savings (S_X). This latter one being composed of the trade balance and net income inflows (R_X). These accounts can be expressed as financial balances of each sector of the economy (FB). In this context a current account surplus would mean a negative external financial balance, meaning that in overall the country is sending savings away. As we can see, the financial balances express each sector's *savings*, but not its *financing* (Graziani, 1967). While saving is simply income not consumed, resources not used, financing is a cash-flow concept, it is the access to purchasing power in the form of an acceptable mean of exchange. Investment for Keynes, and expenditures more generally, require financing and not saving. One can spend borrowing from his own deposit or by newly created money from credit. The same could be said about the open economy.

This has been strongly highlighted by Keynesian researchers at the Bank for International Settlements (BIS) for the analysis of current account results (Borio and Disyatat, 2011, 2015). [40]As they put it:

> "Saving alleviates an economy's *resource constraint*: if people did not abstain from consuming, they would not release real resources that could be used to invest; cash flows alleviate an economy's *financing constraint*: in their absence, no spending could take place. This applies both domestically – to a closed economy – and across borders. And it is what makes it misleading to think of the current account – the gap between domestic saving and investment – as telling whether a country is lending (if in surplus) or borrowing (if in deficit). The current account is simply telling us whether a country is, on net, releasing resources to the rest of the world (if in surplus) or drawing on it for those resources (if in deficit). But the corresponding expenditures could be financed *entirely* at home or abroad, *regardless* of the current account position."
> (Borio and Dysiatat, 2015, p. 2, emphases in the original)

The distinction can also be expressed as the difference between *net* capital flows (the counterpart to the current account result) and *gross* capital flows (capital and financial accounts and variations in foreign reserves). Taking current account results undermine the fact that financial flows have their own determinants. A point also often highlighted in post-Keynesian literature (Medeiros and Serrano, 2001; Kohler, 2020, Emboava Vaz, 2023). The difference between net and gross flows became more important in the neoliberal period, as the difference arises exactly from capital accounts liberalization.

We can illustrate it with a simple example. Let us take two countries, A and B. Country A imports US$100bn from country B, while also exporting US$100bn to country B. Country A has a strong banking system, while country B has no domestic banking system, so it borrows from country A to make its expenditures. After the transaction both countries' current accounts are balanced, they both exported and imported the same amount, there was no change in their external savings. But now country B owes US$100bn to country A, because its expenditures were *financed* by country A.

The change in the example was on the capital account and not on the current account, for this reason it was not captured by the financial balance, which only measures changes in real exchanges not on financial ones. Financial balances can be good tools to track whether real

[40] It is interesting to note that these contributions came on light of criticizing the influential (one could say political economy) hypothesis of the 'external glut' in New Keynesian economics (Bernanke, 2005). Borio and Disyatat's argument was exactly that current account surpluses from developing countries were not responsible or influential in the 2008 crisis.

demand expenditures came from domestic or foreign sources, but it cannot be used to track *how they were financed*, nor does it fully show financial fragilities and instabilities as it does not take financial stock variations into consideration. We come back to this point in Chapter 5 when analyzing the demand and growth regimes use of financial accounting in their empirical methodology.

The concept of financing also calls attention the importance of ownership of assets and liabilities in a country's international investment position. The case of China is an interesting example. In 2005, over 50% of China's exports were produced by foreign-owned companies, and more 23% by joint-venture companies (Manova and Zhang, 2009). By looking only at current accounts, China is booming exports, with big current account surpluses. But on the other hand, it would also have large FDI liabilities on its financial accounts, rendering it not so comfortable of an external financial position as shown only by the current account.

These points highlight again that the productive *and financial* structure of the economy matters for the analysis of growth trajectories. Which again can be taken back to political economy as the ownership and power structure of companies producing domestically also becomes crucial. Another point to take into consideration is that the difference between saving and financing also highlight a distributive role of financing. In our example with countries A and B, although the demand (and savings) was the same for both countries, because the form each expenditure was financed was different, the distribution effects of wealth stocks was also different. Country A gained an asset of US$100bn to be paid by country B, which holds that same amount as a liability. These stocks could also represent new expenditure flows due to interest payments. These distribution effects become even clearer when we look at the public financial balance.

Serrano and Pimentel (2019) have highlighted a result found by Kalecki (1937) and later picked up by Steindl (1990), in which the source of financing of public expenditure becomes crucial to know its effect on aggregate demand. Kalecki's argument was that even a balanced public budget could have highly expansionary effects on aggregate demand depending on how it was financed. For example, if the government taxed capitalists to give to workers, since workers usually spend a larger share of their income than capitalists, that transfer would have an expansionary effect even though the government remained with its budget balanced. The only condition for a balanced budget to be expansionary being that the propensity to spend of the taxpayers being

smaller than that of the government. For this reason, a balanced budget financed from the taxing of workers would not be expansionary, as for Kalecki workers spend all their income.[41] This again highlights how financial balances may be misleading. A balanced (or even slightly positive) public balance can still be expansionary depending on its source of financing.

3.6.Export growth and the domestic market

Now we can finally get back to the developmentalist debate on export vs domestic markets orientation under a demand-led growth perspective. We can synthesize what was presented so far in four points: (1) exports serve both as a source of demand and as a source of international currency alleviating external constraints; (2) imports are a source of supply, endogenous to the cycle and trend of the economy and influenced by the presence or not of intermediary and capital goods in the domestic economy; (3) exchange rate and income distribution effects on the external sector cannot be generalized as their result depend on the country's national productive structure and international integration; (4) financial balances can show a net balance of demand expenditures but not how they were financed, which matters both for financial sustainability and for distributional purposes. Based on these 4 points we can now come back to the intrinsic relationship between export growth and the growth of a domestic market. We first build on how growth responds to exports under different domestic contexts, highlighting the importance of the domestic demand movement, building on the concepts of *export-led stagnation* and *false positive export-led growth*. Then we turn to look at challenges on increasing the relative weight of the domestic market given a certain rate of growth of exports and the international context of trade.

3.6.1. Export-led stagnation and false positive export-led growth: when exports *help*, but do not *drive* growth

It has been highlighted that exports are not the only demand-source of growth, but that it can alleviate the external constraint. This is crucial for us to define situations in which exports may grow, easing the constraint, but not driving growth. Here there are two important concepts introduced in post-Keynesian Structuralist tradition of international political economy to which we

[41] One could go even further to say that a characteristic of post-Fordist capitalism is that workers spend even what they do not earn (Stockhammer, 2008; Serrano, 2009), with higher expenditures than disposable income, incurring into high debt levels.

are building from. The concepts of *export-led stagnation* (Medeiros and Serrano, 2001) and *false-positive export-led growth* (Serrano, 2016).

Let us imagine a country in which the only autonomous expenditures are government consumption and exports. Exports represent 10% of autonomous demand, while government consumption represents 90% of it. Now suppose both expenditures are growing at 1% a year initially, and that the marginal propensity to import is constant, such that the income elasticity of imports is equal unity, $\mu = 1$.[42] By equations 3 and 4 presented in section 3.2., we could suppose that the economy is thus growing at 1% a year and that the balance of payments constrained growth rate is also equal to 1% a year (the economy is growing at its maximum rate compatible with healthy external accounts).

Now suppose there is a positive shock and exports start growing at 10% a year. The government does not increase its expenditure. Given the weight of exports in autonomous demand, and equation 5, everything else constant, the economy would now be growing at 1.9% a year. While the balance of payments constrained growth rate would be of 10% a year. That is, even though exports increased ten times, GDP growth did not even increase two times. This is an *export-led stagnation* case. As first presented by Medeiros and Serrano (2001), for countries in which exports represent a small share of autonomous demand (and of total demand), even when exports grow rapidly, the economy will not grow unless domestic (autonomous) expenditures follow that rise. If we suppose for example that due to domestic political reasons the government of the country decides to diminish government expenditure by 2% (we had too many deficits in the past years, so they might want a surplus now to balance the budget). In this case, the economy would shrink by 0.8% even though exports are growing by 10%! Of course, in the next period this would be slightly attenuated by the decreased weight of government consumption on autonomous demand, but very slowly (in our example government consumption would still represent 89% of autonomous demand in the next period).

Now let us suppose that the government sees that there is more external space - because exports grew, and the balance of payments constrained growth rate rose to 10% - and it decides to also raise government consumption to 10%. The economy would now be growing 10% a year. In

[42] Income elasticity of imports equal $\frac{\Delta M}{\Delta Y}\frac{Y}{M} = \frac{m}{m} = 1$, when $\frac{M}{Y}$ is constant.

terms of correlations you would see, what is usually seen empirically for developing countries, that GDP and export growth correlated with each other. On the other hand, while exports are contributing only 1% of GDP growth, government expenditures are contributing 9%! If we ran a Granger causality test export growth would precede government expenditure and GDP growth pointing to a granger-causality from exports to growth. But it was the decision of the government to increase the expenditures that contributed to 9% of GDP growth rate. This decision could also not be made, so it is not the 1.0% that exports contributed that essentially drove the growth process seen (although it contributed). This would be a *false-positive export-led growth* case (Serrano, 2016).

Serrano also highlights that there could be direct economic channels between the growth of exports and the growth of government expenditures. There could be tax revenues coming from exports which ease the public budget and under domestic fiscal rules allow the government to increase expenditures. Or the country can have had experiences with balance of payments crises which lead it to see the easing of external conditions as a possibility to increase fiscal expenditures, as in our example. Serrano points to Argentina in the 2000s as an example of this phenomenon.

Of course, both cases of export-led stagnation and of false-positive export-led growth assume a large domestic market (government expenditure was taken as the example, but other domestic autonomous expenditures could be considered as well), but with exports playing a big role in both cases. These examples highlight two key takeaways for development strategies: export growth is crucial for the growth of other demand components, and the bigger the domestic market smaller is the contribution of exports in driving growth on its own. What this post-Keynesian Structuralist tradition then points out is that as capitalist economies, peripheral economies are also demand-led, but due to its underdeveloped domestic market and more importantly due to its production of lower income elastic products, it suffers from a greater financial constraint than industrialized nations, which can only be changed by supply (structural) changes (industrialization) (Prebisch, 1949). This conclusion is general and not restricted to peripheral countries. Its thesis is that all nations organized under a capitalist production structure present a demand-led accumulation process,[43] and all nations trading on a currency they do not issue are prone to

[43] This conclusion follows directly from the argument from Kalecki and Luxembourg that once one considers the role of money in the capitalist system, capital's expanded reproduction depends on the expenditures that create new purchasing power for commodities to realize their exchange. This in a way would mean demand and supply emanate

financial constraints to growth emanating from the need to import coming from the increase in income. This last constraint being especially important in the development of a domestic-oriented market.

3.6.2. The challenges of growing a domestic-oriented market under an external constraint

Our analysis has highlighted that export growth is necessary to open space for the growth of a domestic-oriented market. Using the analyses, we developed in the previous sections of this chapter; we shall now take a closer look at other factors which dictate the relationship between export growth rates and the maximum possible growth of the economy. More specifically the productive structure and international integration governing the income elasticity of imports; the short-run effect of devaluations; and the role of financial transfers.

In the last subsection, on our examples of export-led stagnation and false-positive export-led growth, we assumed an income elasticity equal to 1.[44] We shall now relax this hypothesis. Let us bring back equation 4 from section 3.2.:

$$g_{Y_{BP}} = \frac{g_X}{\mu} = \frac{\varepsilon g_{Y_F}}{\mu} \qquad (4')$$

By equation 4, we can see there is an intrinsic relation between the maximum growth of total demand $g_{Y_{BP}}$ and the growth rate of exports g_X, which intrinsically depends on the income elasticity of the country's imports (μ). That is, when $\mu < 1$, when a country's imports increase less than proportionally with the increase of its national income, then the domestic-oriented market may grow faster than the export-oriented market, since $g_{Y_{BP}} > g_X$. It is important to highlight that it *can* grow, but if it will grow depends on the choice of expansion of domestic expenditures. When

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the contradiction between labour and capital. It is not unfit with this post-Keynesian Structuralist analysis the notion that productive bottlenecks and demand pressures on existing capacity may lead to (demand-led) inflation as some supply-factors cannot adjust quickly enough to the existing demand. But it seems to me that this post-Keynesian structuralist thesis implicitly assumes that the goods and services needed to service demand would exist in the long run as effective demand would conduct new capacity creation. Under this context, when growth would not be restricted financially (through the balance of payments), it would be restricted by class conflict. As "who likes growth is the working class" (Serrano, 2019), an idea based on Kalecki's political economy interpretation of capitalism (Kalecki, 1943, 1971).

[44] It is interesting to note that the Supermultiplier models with exports and government expenditure also assume income elasticity equal to one (Morlin, 2022; Dvoskin and Torchinsky, 2023; Emboava Vaz, 2023). Indeed, this is a condition for the stability of the equilibrium in that model. Such that in equilibrium one would have to see $g_X = g_G = g_Y = g_M$. Which also imposes a stable growth rate of the trade balance..

$\mu = 1$, as in our example, the domestic-oriented market can grow as much as exports, but not more without entering persistent current account deficits (and eventually an external crisis). Now, when the country's income elasticity of imports is higher than 1, $\mu > 1$, then we have $g_{Y_{BP}} < g_X$. Total demand necessarily runs below export-growth in the long-run, which means the domestic demand would grow at lower rates than exports. Otherwise leading the country to persistent long-run trade deficits and eventually to external crises.

One reason why we could see an import income elasticity below 1 is that with the increase in income there is a more than proportional increase in the demand for non-tradable services, which by definition have to be provided domestically. This is certainly the case for many kinds of services (e.g. hairdressers, bakery, transport, etc.). On the other hand, as discussed in section 3.3 in terms of goods, there is a tendency for peripheral countries to have its imports increase more than proportionally to income, as the country will start importing intermediary, capital, and also consumption manufactured goods from abroad. It will also depend on how open the country is for trade. One of the main effects of structural adjustment programs pushed by the World Bank and the IMF for developing countries in the 1980s and 1990s was a great increase in the amount of goods imported by peripheral countries, especially in Latin America and Sub-Saharan Africa (Medeiros and Serrano, 2001). This would mean that under greater trade integration, there would be good reason for μ to increase, possibly becoming higher than 1. On the other hand, there would also be a reason for exports to grow faster than before. This is why here we are discussing the *relative size* of the domestic-oriented market (goods and services commanded by domestic demand) vis-à-vis the export-oriented market (goods and services commanded by external demand) in the process of development.

Now let us consider a country that wants to expand its maximum growth rate of the domestic-oriented market, either because $\mu > 1$, and thus $g_{Y_{BP}} < g_X$, or because it wants to decrease the weight of exports in total demand. [45] There seems to be four options a country would have in this situation: (i) trying to diminish μ by structural change or controlling imports (protectionism); (ii) trade more with less developed countries to increase the ratio of trade income elasticities $\frac{\varepsilon}{\mu}$; (iii) recur to successive devaluations; or (iv) incur in current account deficits taking

[45] When discussing the case of Brazil, Serrano and Summa (2015) affirm categorically that "imports grow faster than aggregate demand in the long run" (p.811). This, for example, would impose $g_{Y_{BP}} < g_X$ for positive growth rates.

loans and other financial flows from the rest of the world to ease the financial constraint that the balance of payments represents. All four policies exposed were more or less already proposed by Prebisch (1949). Note that options (i) and (ii) can be seen in equation 4', while options (iii) and (iv) cannot. In light of what we discussed in sections 3.2, 3.4, and 3.6 options (iii) and (iv) represent only short or medium run alternatives.

Here we are temporarily leaving the Idea of *regimes* – as institutional and demand configurations that allow for a certain pattern of growth – to enter the idea of *development strategies* – as policy choices to seek a certain regime of accumulation. It is clear that options (i) and (ii) go on the direction of minimizing center countries as trade partners, which is often not so easy politically. Strategy (i) is 'import-substitution' in a nutshell. By controlling what may or may not be imported the country tries to use its $\frac{1}{\mu}$ share of export growth to import essential goods, while trying to develop the domestic industry to increase ε and decrease μ. This strategy suffers from the problem of technologic lagging behind, which is at the core of the center-periphery dichotomy. It is the fact that the center has more advanced technology and productive economic structures that makes it the economic center of the capitalist system in the first place. In this realm, geopolitics can play a big role as technology transfers may come with it. Medeiros and Serrano (1999) point to South Korea, Taiwan, West Germany, and Japan as beneficiaries of the geopolitical position in that sense. We come back to this on Chapter 5.

Strategy (ii) seems to have been a long-term objective of many countries in the periphery but has often stumbled also on geopolitical interventions. The divide of Africa by European powers not only in the 19th century, but also during the whole 20th century was an example of this. Just as the paternalistic geopolitics of the US over Latin America. The globalization expansion, on the other hand, seems to have opened new opportunities for South-south integration, which have escalated since the 2000s.[46] China in the past 20 years seems to have made great use of this strategy, becoming the main commercial partner of almost the whole developing world. We also come back to that on Chapter 5.

[46] The Mercosur, the South American trade area partnership, seems as one of the organizations lagging behind on these efforts. The ASEAN and AfCFTA which have been expanding lately seem to be finding more successful results. Lastly, the NAFTA seems to be in the opposite direction of what is proposed by this strategy. By increasing the trade with the US, Mexico has diminished its $\frac{\varepsilon}{\mu}$ ratio.

Strategy (iii) suffers from economic and political pressures not to be implemented both externally and domestically. Externally, it is not in the interest of center countries to let other countries depreciate their currency in relation to the dollar, as it may affect their price competitiveness. There may also be strong speculative pressures against sustained devalued currencies. The currency crises of the 1980s and 1990s seem to have served as examples of possible devastating effects of this strategy. Internally, this strategy also intensifies the distributional conflict as it decreases real wages (Krugman and Taylor, 1978). Moreover, as we discussed in subsections 3.1 and 3.4, these effects may not even work stimulating demand, depending on the country's economic structure. Even when they stimulate demand its effects are more likely to be stronger in the short-term which would mean the maintenance of this patter would impose several devaluations in the long-run. With the end of the Bretton Woods system, the currency crises, and the generalization of flexible exchange rate regimes, what seems to have become the dominant strategy concerning exchange rates in the periphery is using interest rate differentials to keep a sort of managed regime, which allow countries to attract more capital flows (Aidar and Braga, 2020; Itzetski, Reinhart and Obstfeld, 2021).

We can then come to strategy (iv), that of easing the financial constraint through (gross) financial flows from elsewhere. That is, from taking current account deficits financed by capital/financial account surpluses or the expenditure of foreign reserves. This strategy seems to be the most complementary to the functioning of the center-periphery dynamics itself. As peripheral countries would borrow from center countries to import more from these countries. In fact, this seems to have been the history of capitalist development itself. If we look at Latin America, as an example, the whole expansion of its economies during the 19th and the beginning of the 20th century was led by FDI flows (mainly from England). While these countries maintained current account deficits with England (importing more than exporting) they could finance that through FDI flows (Medeiros and Serrano, 1999). For British companies the periphery represented a great investment opportunity as they received both greater export-demand for their products and profit rates from their capital investments in these countries. In the most recent period of financial globalization, the expansion of financial and bonds markets, tied with low international interest rates, have led to great capital inflows in developing countries. Which meant countries could sustain current account deficits for a long time without major problems. This again highlights the difference between saving and financing from subsection 3.5. Some peripheral countries, Brazil as

an example, were even able to combine current account deficits with the accumulation of reserves. We come back to this external dynamic of the 2000s in Chapter 5.

Nevertheless, as mentioned in section 3.2, and formally presented in Dvoskin and Torchinsky (2023) and Emboava Vaz (2023), although financial flows present a viable short term flexibilization of the external constraint, they are not a long term flexibilization of the constraint. In other words, they do not influence growth rates, but only on levels. The idea is that a capital inflow becomes an external debt which forces country to pay higher interests on loans (or send profits on FDIs), and eventually pay back the liability. When the external debt to exports is decreasing, that is, when exports grow faster than the servicing of the external debt, then that allows for higher levels of output (and of domestic demand), but for it to allow to higher growth rates of output, it would have to suppose and increasing limit of the acceptable external debt by creditors or a decreasing interest rate on the external debt (Bhering et al., 2019). On the other hand, as highlighted by Emboava Vaz (2023), the fact that countries were able to build foreign reserves and assets may have important effects on average growth as it may protect countries from temporary decreases in the external constraint, by spending reserves. Also improving their liquidity positions.

It seems like all countries that successfully industrialized since Great Britain have successfully implemented a mix of the four strategies exposed here (of course, with many other policy tools as well (Chang, 2002)). Which also means that all countries that industrialized had to incur into some political economy tensions or partnerships with the preceding industrialized nations. This highlights the Regulationist, SSA, and Structuralist views on the importance of considering international division of labor, finance, and power in political economy analysis, in opposition to VoCs narrower focus on national structures. On the other hand, recent tendencies in the neoliberal globalization seem to have made the first strategy, of protectionism, much harder (at least between 1980s and the 2010s). On the second strategy, it seems like trade integration has benefited more North-South than South-South trade, with the exception of Asia. The third strategy started taking a secondary, although important role, with more managed-flexible exchange rate regimes. The fourth strategy, on the other hand, seem to have gained great prominence with lower international interest rates and increased capital flows allowing countries to ease their external *financial* constraint.

These reflections point out the many challenges of building a domestic-oriented economy, that is to increase the relative weight of domestic expenditures on GDP under a very internationally integrated economy. This is certainly the case of all economies that integrated the capitalist system as providers of certain inputs to industrial countries. The development of domestic markets during late 19th century and the 20th century seems to be tied either to moments of autarky with little trade between periphery and center, to high and unsustainable external debts, or to countries that indeed developed with most of its industries directed at foreign consumption markets. In the past 20 years, the rise of China seems to have created new dynamics to that expansion. As we will see later. Population should also matter. A small open economy may grow with export-orientation and find enough market demand elsewhere to increase the country's GDP per capita to 'developed country' levels even with an extreme external orientation. This seems to be the case of South Korea and Taiwan. Countries like the BRICS, Indonesia, Pakistan, Nigeria, etc, which have much larger populations will probably have to build larger domestic markets to bring their GDP per capita to 'welfare' levels. It does not seem to be a surprise then that most profit-led economies on empirical literature on distribution regimes are small open economies (Hein, 2023)

Nevertheless, the clarification of the relationship between the external sector and domestic market highlights how difficult it is to distinguish between a domestic-oriented and an export-oriented development strategy. As the growth of exports seems to be a precondition for the expansion of domestic markets. In a highly integrated world, a development strategy aimed at decreasing inequality and building a strong domestic market needs to at the same time increase its exports and depend less on imports. In general, this highlights the dynamic of the composition of demand, between domestic and external sources, as a crucial factor in observing growth trajectories. Here changes in this composition were presented as representing *development strategies*, but it could very well be the case that these changes do not express necessarily a *strategy*, but rather the result of a country's correlation of power leading to certain demand *regimes*.

4. Finance-dominated Capitalism, the Revival of American Hegemony, and the Decoupling of the Periphery

This dissertation has proposed that a synthesis between the neo-Kaleckian 'Demand and Growth Regimes in Finance-dominated Capitalism' and the post-Keynesian Structuralist 'Revival of North American Hegemony' political economy approaches to growth and distribution is possible. We have so far seen how the analytical treatment of the external sector by post-Keynesian Structuralists may lead to different conclusions about the demand-led growth process. To illustrate this point both a global and country-specific political economy analyses are presented, in chapters 4 and 5, respectively. This chapter thus intends to present an initial attempt to link the macroeconomic, political economic, and historical analysis of both schools to present a view of what characterizes the global regime of accumulation that arose in the end of the 1970s and has remained dominant at least until the end of the 2010s.

The intention is not to present a novel, seminal analysis, but just present an interpretation of the aspects surrounding this post-Fordist regime of accumulation based on grounding contributions from the 'finance-dominated capitalism' literature (Stockhammer, 2008, 2009; Hein, 2012; Lavoie and Stockhammer, 2013) and from the post-Keynesian Structuralist literature which followed the contribution of Tavares' (1985) *'The Revival of American Hegemony'* (Medeiros and Serrano, 1999, 2001; Tavares and Belluzzo, 2004; Serrano, 2004; Medeiros et al., 2016). With special attention given to the period of the 2000s, where the integration of both literatures seems the most fertile. This highlights how the Structuralist perspective may enhance the political economy analysis of the capitalist system.

4.1. The Fordist regime, US American capitalism, and Cold War geopolitics (1945-1970)

The period after World War II until the beginning of the 1970s is often referred to as the 'golden age of capitalism' for developed capitalist economies within the post-Keynesian literature (Lavoie and Stockhammer, 2013). A period that conciliated a wage-led regime – structural features that make demand and production correlate with the wage share of income – with the dominance of pro-labor policy. Thus, leading to a virtuous cycle of high growth rates, high (and often full) employment, and low income inequality. The period saw a higher bargaining power of labor (with stronger unions) and more Keynesian policies with welfare states providing public services,

redistribution of income towards lower income groups, and high levels of government expenditures. This was the Fordist regime of accumulation (Gramsci, 1934; Aglietta, 1979), also closely associated with Kalecki's idea of 'reformed capitalism' (Kovalick, 2001). A class compromise between organized labor (unions) and capitalists would have allowed for a period of accumulation directed towards mass-consumption favoring worker consumption and a strong welfare state.

The idea of the Fordist regime was always closely associated with US American capitalism and its role as a hegemonic power.[47] Ford Motor Company was one prime example of an American *big business*, large industrial corporations with extensive (often monopolistic) market shares obtained from strong market concentrations that followed the crises at the end of the 19th century. For decades, these large corporations developed alongside big banks and financial institutions until the Great Depression and the implementation of the New Deal. The new economic policies that came with it greatly benefited the big industrial companies against financial capital (Tavares and Belluzzo, 2004). The New Deal also presented a new inclusion of worker's political participation and unionization to the US American economy. The first 'Keynesian' experience, in Roosevelt's USA, was then a coalition between organized labor (trade unions) and industrial capital against financial capital. After the Second World War, when the US emerges as the sole hegemonic power in the global capitalist system under the dollar-gold monetary system of Bretton Woods, this coalition allows not only for the consolidation of the power of the US, but of the newly formed 'West' against the 'socialist East' (Tavares and Belluzzo, 2004).

The rapid growth of the capitalist powers that lost the war and integrated the new capitalist bloc cannot be dissociated from American foreign policy (Medeiros and Serrano, 1999). West Germany and Japan received not only great financial and technological support from the US, but also great interconnection with American companies and access to the American consumer market, the largest and most important of the world. While, on the other hand, the US supported (together with the Soviet Union) the fight of peripheral countries to withdraw from British and French empires, economically weakening their victorious Allies (Tavares and Belluzzo, 2004). It is also

[47] The term gained prominence after the text 'Americanism and Fordism' by Antonio Gramsci (1934). He analyzed the organization of production in the Ford Motor Company and how its practices of mass standardized production fostered a reorganization of social life beyond the car factories, reshaping Western capitalism. This period of reorganization of production would have started at the end of the 19th century.

important to mention that the American hegemony over the other former Western superpowers also had financial reasons, as pointed by Tavares and Belluzzo. During the Second World War the US had financed the war efforts of Britain and sold massive amounts of weapons to all allied forces. At the end of the war all countries held huge amounts of debt with the country, which supported the US case in Bretton Woods for a dollar-gold system. Against British (Keynes') proposal of a global trade currency based on a basket of currencies.

The 'golden age of capitalism' in the West was the age of decolonization in Africa and in Asia. While the independence movements in Africa went through longer and more treacherous fights for independence – with many countries still holding colonial trade agreements with their colonizers to this day – in Asia geopolitics was different. If the support for West Germany followed right after the war with the Soviet threat, the economic support for Japan (and later South Korea and Taiwan) followed the Chinese Revolution (Tavares and Belluzzo, 2004). Tavares and Belluzzo argue that while geopolitics in Europe was 'frozen' by the Cold War and the iron curtain, in Asia it was very active. With the fear of the spread of socialist revolutions in the region after China (as indeed happened in Korea and Vietnam), American foreign policy in the area was of great economic support for its allies and all countries that sided with it, with political and military interventions only in the cases of Korea and Vietnam.

Latin America geopolitical position was very different. Closer to the US and under its political and economic influence already for more than a century, American foreign policy in the region was of political and military intervention under any possible threats of socialist uprisings or unallied governments. Economically, however, the American large corporations now searched for new markets. Latin America, and specially Brazil, Mexico, Chile, and Argentina, saw some industrialization process led by American (and to a lesser extent European) companies which fed into low costs (through low wages), but with a consumption market in the upper income groups of society. Part of the region experienced a period of rapid growth and industrialization, but marked politically by increasing inequality, many military coups (political instability), and periods of strong repression (Tavares and Belluzo, 2004; Perez-Caldentey and Vernengo, 2022).

As we can see, the period pointed as the Fordist regime of accumulation in the West cannot be dissociated of Cold War geopolitics. The coalition between workers and industrial capital materialized under the New Deal and Roosevelt's government allowing the US to reestablish high

growth rates and social cohesion before and during the Second World War. This 'new form of capitalism' was partially maintained in the US, while fostered in Western Europe, both by the US and by Social-Democratic parties and movements that gained prominence. It was fundamental for the high growth and low income inequality of Western Europe. On the other hand, that cannot be dissociated from American economic, technological, and military support, motivated by the soviet threat. According to Serrano, something that was already observed by Kalecki in one of his last texts:

> "When Kalecki recovered the discussion about the political aspects of full employment in an article of 1971 (Kalecki and Kowalik, 1971), the success of this post-war architecture makes him coherently argue that, indeed, there was a 'crucial reform' in the capitalist countries. The economic and social performance of the capitalist countries regulated by the state in the geopolitical context of the Cold War, according to Kalecki, cleared out simultaneously the possibilities of economic collapse, of wars between the main capitalist countries, and also of socialist revolutions in the advanced countries, where the prosperity of workers was ever-increasing. According to [Kalecki], the capitalist countries had 'learned the trick' to avoid the crises and disorder of unregulated capitalism through state intervention." (Serrano, 2004, p.190)

This also allowed for a period of larger developmental states in the peripheral capitalist economies (Mkandawire, 2014). The period also saw a reorganization of international division of labor, with different regions presenting different geopolitical and economic support depending on Cold War strategies. Africa faced bloody independence wars and the first efforts to establish national institutions that allowed for independent development, while it remained being a supplier of primary goods (Mkandawire, 2014). American allies in East Asia quickly industrialized directed at the American market, also increasingly economic integrating the continent in terms of industrial inputs. And Latin America besides continuing being a supplier of cheap primary inputs, also became an attractive demand market for American industrial corporations to move to.[48]

4.2.The crisis of the Fordist regime and the emergence of neoliberalism (1970-2000)

A notable fact about the 'Fordist regime' of the post-war era was that high growth rates with high rates of employment did not lead to a strong distribution conflict or inflation. This fact

[48] Medeiros and Serrano (2001) note that it was already in Prebisch (1949) the notion that the US represented a different type of dynamic center to the capitalist system than that of the UK. Under the Pax Brittania in the 19th century, the periphery was formed to provide cheaper inputs for British industry and some consumer market for its manufactured goods. While the millennial Eastern empires were destroyed (Tavares and Belluzzo, 2004). The US, on the other hand, was (and is) a large agricultural productor, competing with the periphery on many primary goods. On the other hand, was with the US that actual factories owned by the center countries would start moving to the periphery.

could be associated with the fixed exchange rate regime and a tight political control of the US over the oil market, thus greatly controlling costs (Serrano, 2004). The period always saw a sluggish inflation tied to union efforts to translate productivity gain into wage earnings, but it did not accelerate. In his 1971 article, Kalecki had already mentioned that the new 'reformed capitalism' seemed to depend on a certain level of 'social conformism' which could be changing with the social movements of the end of the 1960s.

Serrano (2004) argues that with the social unrests in the late 1960s, both by the youth and the trade unions, there was an aggravation of the distributive conflict which already in the early 1970s led to a decrease in profit shares of income. This led to an acceleration of growth, with higher consumption and investment remaining strong even with lower profits, following the increase in demand, also benefitted from lower interest rates. That is, despite the political dissatisfaction of capitalists, Nixon's first government had kept expansionary macroeconomic fiscal and monetary policies. Inflation, however, was higher in the US than in the other capitalist countries, which under fixed exchange rate regime tended to impact price competitiveness putting even more pressure on profit margins, and leading export sectors to pressure for a devaluation of the dollar.

The dollar-gold system, however, which had allowed the US to exert its financial and economic dominance in the post-war era also restricted a devaluation of the US dollar in two ways: the US could not incur into current account deficits, and it had to set a fixed dollar price on gold (Serrano, 2004).[49] Moreover, other countries could and had devalued or valued their currency in relation to the dollar, while the dollar could not do so. In 1971, Nixon unilaterally announces the end of the dollar-gold system and the implementation of import tariffs on the goods imported from other capitalist countries which would remain until they reached a deal on exchange rate levels, which only happened in 1973. The end of the dollar-gold system implemented in Bretton Woods is a crucial factor to understand the regime of accumulation that arose later.

[49] Here it is important to mention Serrano's point that although the US could not incur into persisting current account deficits, it could and was already incurring into persistent and growing capital account deficits (due to FDIs, aid, and loans). These financial flows could be made in dollar and represented long-run capital flows with short-term counterparts. As the US issues dollars, the flows in dollars could be given without altering the relation between the dollar and the gold as it was not entering current accounts. Again highlighting the point made in section 3.5.

The 1973 oil embargo that followed the Fourth Arab-Israeli War alongside with the beginning of use of flexible exchange rates led to strong external shocks on costs in all major capitalist countries. With strong unions, the pass-through of these costs to prices involved a distribution conflict, which led to inflation. The rise in oil prices also led to a redistribution of income to oil producer countries. Capitalist countries then entered 'stagflation' with lower growth rates than the previous decades and much higher inflation. This situation became worse with the Irani revolution which led to the price shock of 1979, leading oil prices to triple and bringing new instability. The 'Fordist regime of accumulation' that had started being pressured by domestic social unrest already in the late 1960s, entered a deeper social conflict in the 1970s with the falling apart of two pillars of distribution conflict then: fixed exchange rates and stable oil prices. Although this hit all center capitalist countries, the US was the only one that could not manipulate their currency in relation to the dollar. The other countries that could, were able to avoid part of these external shocks.

By the end of the 1970s, it looked like the US was losing dominance. It was not the socialist bloc, which was facing great economic deceleration and political problems. The main contenders were West Germany and Japan, which had been growing much faster than the US for a few decades. As Tavares puts it:

> "If the United States had not succeeded in molding the private Japanese economy to its set of interests and if British and German policy had not been so conservative, the United States would have had to confront two blocks, European and Asian, with claims to economic independence. It must be stressed that at the time, [end of the 1970s], the interests at stake were so obviously in conflict that the world trends were polycentric, and it seemed impossible for the United States to succeed in reasserting its hegemony, although it continued to be the dominant power." (Tavares, 1985, p.139).

In 1979, Paul Volcker announced at the IMF that the US would not allow its currency to keep devaluing nor would allow for a new monetary international system. The record interest rate hikes implemented by the US from 1979 to 1982 had the strategy to restore the hegemony of its currency on the world through 'strong-dollar diplomacy'. It slowed down growth in the United States and in the whole world to do so (Tavares, 1985). The hike in the rates of the US attracted capital flows from the whole world, devalued all other currencies in relation to the dollar and led to a strong slowdown in global demand (following the Monetarist playbook). Japan, France, and other nations tried to follow an independent monetary policy and resist these conservative policies,

but they were unable to do so. The strength of the Fed in attracting capital flows was so strong that it led to an alignment of monetary, exchange rate, and even fiscal policy in all developed nations (Tavares, 1985). For the peripheral countries the impact was even worse. Highly reliant on foreign capital, and with large liability stocks due to the shocks in the 1970s, Latin American and Sub-Saharan African countries entered deep external debt crises.

As Tavares could see already then: "since 1984, in the very words of its financial elite, the United States has been establishing a new division of labor and boasts of being the 'trade locomotive' of world recovery" (Tavares, 1985, p. 141). Reagan's administration was able to take hold of the world economy with what Tavares calls an 'upside-down Keynesian policy combined with hardline monetarism': redistribute income to the richest, increase the fiscal deficit, and hold high interest rates. As contradictory as this policy kit seemed, it worked for its purpose of reestablishing American hegemony. Because it forced international financial capital to be regulated under the Fed (many banks even moving to New York), it sustained demand expansion through military expenses, and it allowed a cheap technological upgrading in the US. With the valuation of the dollar, all imports became much cheaper, to the degree that the US could modernize its technological sector with the best technological products from West Germany and Japan at the cheapest prices. At the same time, the US tripled its trade deficits after 1982 which points out to a great shift in the role of its external sector from the regime before. While in the more than two decades before the US was exporting its technology and industry, sustaining current account surpluses with the developed allies, now it started sustaining current account deficits. Focusing on high technology industry while letting old industries compete with its partners.

On a world scale, this new international division of labor then meant international competition in lower technology-intensive industries, with specialization in the US and a few allied competitors – like Japan, Germany, the UK, and (to a lesser extent) South Korea and Taiwan. All peripheral countries that entered debt crises were forced into 'structural adjustment programs' of trade and capital opening and weakening of state structures. With the decadence of the Soviet Union's economy, other peripheral countries that relied on that economic partnership also started suffering increasing pressures of economic integration into the new 'globalized neoliberal economy'. This took off more rapidly in the 1990s and represented a fierce competition on the

lower ends of production, based on cheap cost (labor) for the attraction of foreign capital (Stockhammer, 2010).

Domestically in the center countries this represented the breakdown of the Keynesian social coalition of the Fordist period. Smithin (1996) called this period the 'revenge of the rentiers'. Which alludes to the incredible rise in interest rates which greatly benefited the financial capital with assets' earnings tied to those interest rates. In a way, this period represented a shift in power from a coalition of large industrialists and organized labor to one of financial capitalists and new technologic industrialists against the whole working class and at the expense of 'old industries' (Tavares, 1985; Stockhammer, 2008). This new technology industries tied to the revolution in communication and information technologies. Stockhammer (2009) synthesizes this as an institutional shift towards a 'neoliberal mode of regulation'. Apart from the weakening of labor unions through international competition and the rule of law, the state's purpose was reduced to that of price stability through monetary policy, with a series of privatizations and deregulations (specially of financial institutions).

This rise of finance led many authors to pose that this period was one of *financialization* (Stockhammer, 2008; Hein, 2012). Under the most common used definition in this literature: "financialization means the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies" (Epstein, 2005, p. 3). The very broad definition is used to try to encompass different views spanning from the increasing economic role of finance. From its role in corporate governance (shareholder value orientation) to the increasing political and economic power of a class group (Hilferding's view of finance capital), going through the dominance of capital over bank markets and the explosion of new financial trading and instruments. This can be seen by the great expansion in financial markets, in new types of financial institutions, and in general by the increasing power of property owners over workers. The relevant fact being the increasing dominance of finance. Thus, the proposition of the emergence of a 'finance-dominated regime of accumulation' (Stockhammer, 2008).[50]

[50] Boyer (2000) had presented before Stockhammer the idea of a *finance-led* accumulation regime. The choice of Stockhammer to differ from the contribution of Boyer is to highlight that although finance *dominates* the accumulation regime, it does mean that it *leads* to production growth. Boyer's finance-led argument meant that accumulation (and thus growth) was being led by finance under new neoliberal regulations. Stockhammer presents the idea of a finance-dominated regime as a regime in which growth is sluggish and unstable, and may not even exist.

This regime would be marked by ‘moderate GDP growth’, or stagnationist tendencies, and a high degree of fragility. Macroeconomically, it would entail low investment, a substitution of wage-based for credit and wealth-based consumption, and high and more volatile capital flows between countries (which also lead to volatile exchange rates) (Stockhammer, 2008; Hein, 2012). Lower investment being a result of the dominance of capital markets over firms. Leading to lesser internal means of finance to spend on investments, ‘shareholder value orientation’ which prioritizes short term profits, and a higher rate of return on equity and bonds (Hein, 2012, Ch. 6). Moreover, the increased availability of financial assets and real estate credit-based residential investments also tended to increase housing prices (Kohler and Stockhammer, 2020).

This regime would be financially unstable for a set of different regions. First, because of generalized financial instruments lead to higher speculation. Second, because of the institutional deregulation of financial markets presented before. Third, due to the mounting household debts which come from increasing credit-based consumption. Forth, due to increasing current account deficits and surpluses between countries. This last point should be closer examined. As we mentioned before, the US, since 1980s was able to stablish persistent current account deficits (as it was able to sustain capital account deficits before that). This is only possible by the US as it is the issuer of the global accepted currency (Serrano, 2004). Nonetheless, sustaining high stable current account deficits is not the same as sustaining continuously increasing current account deficits. We will come back to that when we look at the period of the 2000s.

As we have seen, the turn of the 1970s to the 1980s destroyed the ‘reformed capitalism’ of the post-War in developed countries. It was first pressured by domestic social unrest, but then shattered by the withdraw from fixed exchange rate regimes and the hikes in oil prices which together brought stagflation. The end of the dollar-gold Bretton Woods system affected the stagflation period in the 1970s, but more generally it allowed for the ‘revival of the American hegemony’ against its main capitalist competitors. Forcing the capitalist world into a new regime of accumulation in which financial and communication and information industries rose as the dominant ones. This new regime came with a strong offensive against labor organization across the world. This led to a great increase in income inequality in the center countries and a ‘race to the bottom’ in the periphery with mobile capital looking for cheap cost opportunities to move its lower end industries. This was especially harsh for Latin America and Sub-Saharan Africa, with

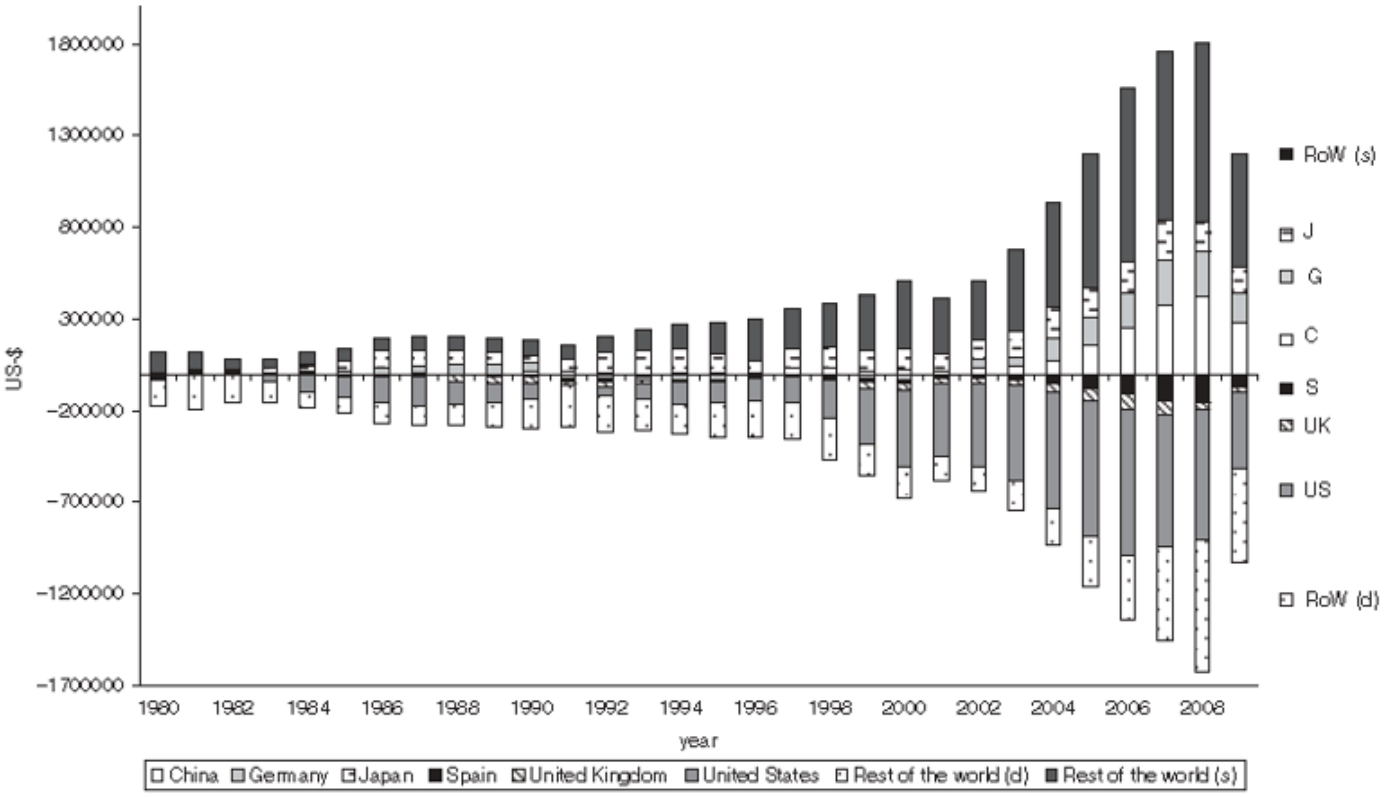
two decades of external crisis and then strong liberalization, which stagnated GDP growth and led to higher inequality. In Asia, on the other hand, many countries benefited from their high concentration of cheap labor for FDI attraction. But it was not just that.

As we mentioned, Japan, South Korea, and Taiwan were greatly benefited by Cold War politics in the post-War era. But it was not just them. China also benefited from it from the 1970s onwards (Medeiros, 1999). It was in the interest of the US and Kissinger's geopolitics to divide the socialist bloc. That is why, since the beginning of the 1970s still under the Fordist regime of accumulation, the US started economically integrating with China, granting the country great FDI flows, and access to the US American market. By the 1980s, when neoliberal globalization was just starting, the Soviet Union was already very weak economically and China had already advanced in its trade integrations with the capitalist world. Moreover, it benefited from the proximity with Japan and South Korea for the provision of capital and intermediary goods. China grew fast in the 1980s and 1990s being the greatest receptor of the global dissemination of capital from the center countries. It linked that to technology transfer policies, state control over strategic industries, regional integration, and a diverse set of industrial policies (Medeiros, 2012; Andreoni and Tregenna, 2020). This helped the development of the region and slowly built China as a big player in the international economy.

4.3.China, the rise of the rest, and setbacks in neoliberal globalization (2000-2020)

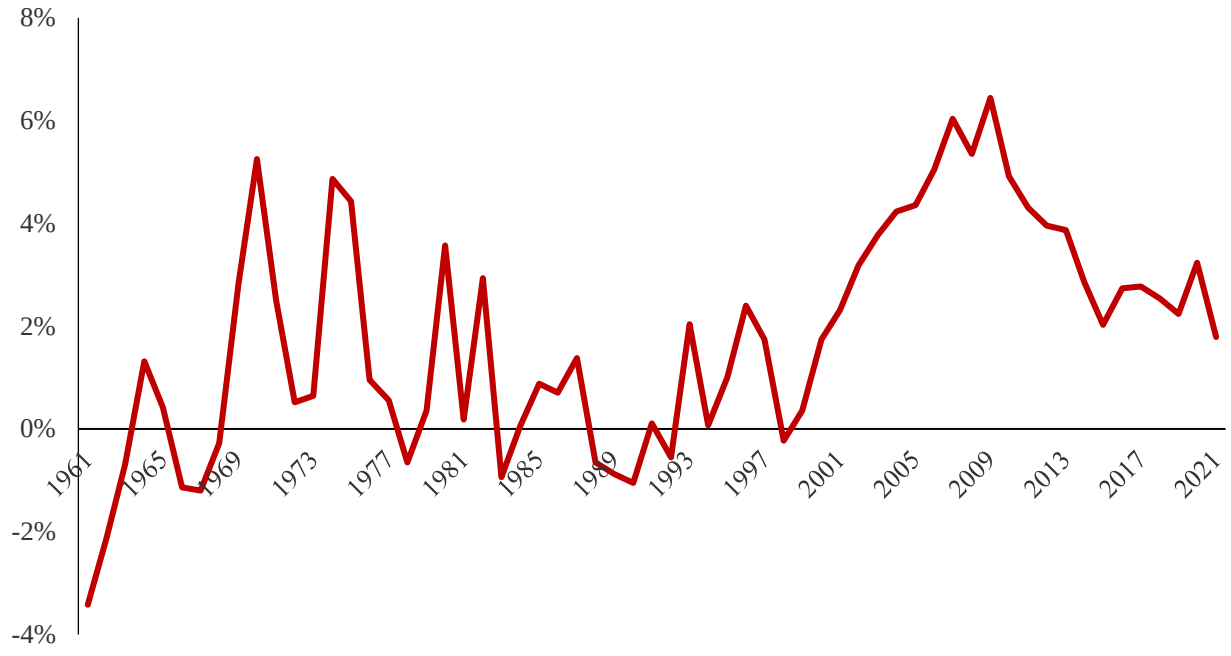
The period of the 2000s is especially interesting for the integration between both literatures. The finance-dominated capitalism literature has focused mainly on the period that led to the 2008 crisis and its effects in the subsequent period for developed countries (Stockhammer, 2013; Hein, 2012). While the post-Keynesian Structuralist literature has focused on the rise of China, changes in international financial conditions, and the effects of both on the periphery (Medeiros, 2015; Medeiros et al., 2016). Complementing each other's views on the political economy of the 2000s. The peculiarity of the decade can be shown with two graphs:

Figure 2. *Current Account Balances, 1980-2008, US million dollars*



Source: Hein (2012). Based on IMF data.

***Figure 3**. Growth Rate Differentials between Low- & Middle- Income and High-Income Countries (year over year % variation, 1961-2021)*



Note: Aggregations by the World Bank depending on country's size and their classification

Source: Emboava Vaz (2023). Based on Workd Bank Data.

Figures 2 and 3 clearly show two abnormal patterns that developed in the 2000s up to the Global Financial Crisis. Figure 2 points out current account deficits and surpluses were high and growing all the way up to the crisis. As we have already discussed, the end of the gold pegging allowed the US to sustain current account deficits for longer periods of time. As we can see in Figure 2, its current account deficits have been negative since the beginning of the 1980s, with amounts accelerating in the 2000s. Although China and Germany became big receivers of such deficits from 2005 to 2008, current account surpluses have been more broadly distributed. The role of the US in sustaining such deficits on the other hand is clearly the most important one.

Stockhammer (2010) and Hein (2012) argue that increasing current account deficits were a consequence of debt-led consumption on the 2000s. With the fall in wage shares and stagnation of state demand, demand for growth would have to come from other sources. The great deregulation of financial and credit markets throughout the 1990s, with decreasing interest rates, and stagnant real wage income, pushed households for credit-based consumption. Without much

national investment in the previous decades, with many lower end consumption goods migrating to the East, consumption in the US was now brought from abroad, especially from China. The boom phase of the economic cycle of the 2000s with higher sales expectations, credit, and income growth was then accompanied by increasing current account deficits in the US. Europe saw something similar inside the Eurozone, with countries like Spain expanding credit-based consumption with countries like Germany and Austria sustaining high exports and current account surpluses. The magnitudes, however, are different. The US current account deficits are much larger and more persistent than in other countries, exactly because the US' current account deficit was financeable domestically.

The current account surplus in countries like China and Germany would be a sort of "necessary counterpart at the global level" (Hein, 2012, p. 120) of the current account deficit in the debt-led countries. These countries would be 'export-led mercantilists' because they would grow out of other countries' demand, since with financialization they would also not have their own domestic demand due to the weakening of labor. On the other hand, Mederios et al. (2016) make the point that China (and a large part of the periphery) was able to decouple from the center countries because of domestic demand. With stronger domestic demand in the period, the country grew at much faster rates than the export demand from center countries (US and Eurozone) would allow. In this sense, the argument by Stockhammer and Hein that the current account surpluses were a counterpart for current deficits from debt-led countries seems on point, but the next step of assessing China as growing dependently on external demand seems misleading. As we will see in Chapter 5.

Medeiros et al. (2016) argues that the rapid growth of China and its high demand for commodities (especially metals) increasing commodity prices were two of the main reasons for what we see in Figure 3: the highest sustained growth difference between developing and developed economies in the post-War period. Since the 1960s, the growth of the periphery would be more or less tied to the growth in center countries. This is directly related to the external constraint we discussed throughout this dissertation. On the other hand, it seems that the periphery has decoupled from the center's growth during the 2000s. Indeed, Latin America and Sub-Saharan Africa experienced their highest average growth rates in at least four decades, boosted by the loosening of external constraints and increasing commodity prices. While South Asia and East Asia

completely decoupled from West's growth rates, with a virtuous cycle of average growth way above world average, combined with structural change towards manufacturing (even if often low income elasticity manufacturing). It was this virtuous cycle from China (and to a lesser extent India) that allowed for the growth of regions specialized in primary goods. As they put it:

> "If the United States were the 'cyclical center' for the vertically integrated sector of Chinese exports, it was the growth of [China's] domestic market induced by Chinese investment that has become in the last years the new cyclical center for primary good producers. It is this second dimension of the Chinese industrial production (enlarged by Indian demand) that induced the expansion of natural material exports dispersed across the world" (Medeiros et al., 2016, p. 26)

Here there is a point of contact between both literatures. The financial deregulations and innovations combined with the weakening labor in the US pushed high credit-based consumption (to sustain consumption patterns), with increasing household debt and sustained current account deficits in the US. This allowed for the expansion of exports elsewhere and the maintenance of current account surpluses across the world. China, combining the external good conditions with massive domestic expenditures (especially investment), grew at record rates increasing the global demand for primary good exports across the world, and intermediary goods from other Asian countries. The period of finance-dominated capitalism in the West allowed for the 'rise of the rest' in the periphery. With the world having two main demand and growth engines: the US and China.

There is yet another aspect of the role of finance on the growth of the periphery which is crucial. Medeiros et al. (2016), although analyze mainly the growth of China and the rise in commodity prices, also point to other two reasons for the 'decoupling of the periphery': low interest rates in the center countries, and larger capital flows to peripheral countries. These two last aspects are directly related to finance-dominated capitalism in center countries. The fall in interest rates in the US is correlated both with the expansion of consumer credit and the expansion of capital markets. The former as a necessity to keep consumption patterns under stagnant real wages and the latter one being associated with a greater political economy influence of financial capital linked to equity markets and generally speculative financial markets. Lower interest rates push capital flows towards these other riskier markets, including that of emerging countries. The opening of financial/capital accounts and expansion of cross border lending and borrowing also came with the expansion of finance and lower interest rates at center countries. The 2000s saw a

record flow of these capitals to emerging economies. This was essential for emerging countries with trade deficits (like Brazil, India, South Africa, Turkey, etc) to surpass the external constraint.

As we have discussed throughout this dissertation (and especially in sections 2.3, 3.2, and 3.6), the main factor tying the growth rate of the periphery to that of the center is the external constraint. With income elasticity of imported products being higher than that of exported products, a country trading on a foreign currency will always grow less than its trade partners, otherwise incurring into a financial constraint. This constraint was lifted to a large extent for the periphery in the 2000s. A main reason being the gross financial inflows, influenced by lower interest rates at the center. But not only. The maintenance of huge current account deficit in the US, which allowed for surpluses elsewhere; the rapid expansion of China, sustaining increasing commodity prices and export demand; and the increase in South-South trade integration; all contributed to the loosening of the external constraint. This helps explain the dynamics shown in Figure 3, the decoupling of the periphery.

The arguments of the finance-dominated capitalism literature about the role of financial developments and weakened labor in pushing countries to follow a credit-based consumption boom with high and increasing deficits contribute to the understanding of the periphery's decoupling. Medeiros et al., (2016) give little importance to the massive current account deficits by the US in the period in loosening the external constraint. This effect is important both directly by keeping current account surpluses in the trade relation of peripheral countries with the US and indirectly by allowing China to grow at faster rates while accumulating foreign reserves. While low interest rates from the Fed might very well be tied to financial developments and the role that credit assumed in that economy.

On the other hand, the focus on developed countries by finance-dominated capitalism literature leads it to misleading conclusions about growth in the periphery in the 2000s. Although it is true that huge current account deficits in the US allowed for counterpart surpluses elsewhere. The development of domestic markets emerging countries, and especially in China, cannot be dismissed. By combining better external conditions with high domestic demand, China and other emerging economies (as we have seen for Brazil between 2006 and 2010) were able to become an engine of growth for the whole world in the 2000s. The capital account openings, which had led to harsh balance of payments crisis in the 1980s and 1990s, allowed for higher growth rates in the

2000s. This can be associated with four shifts in the management of balance of payments by peripheral countries (Medeiros et al., 2016). (i) the adoption of managed exchange rate regimes (through interest rate differentials); (ii) taxation and subsidies on certain commodities; (iii) the anticipation of external debt payment and creation of sovereign funds; and (iv) the accumulation of international reserves, even in countries with current account deficits. One could also add the increase in the share of domestic currency denominated external debt in total external debt. With all of this, we can see that the global regime of accumulation that emerged in the 1980s shifted the dynamism of the world economy towards the South with a special tendency towards the East.

It is important to note that although the 2008 crisis started changing these dynamics it did not do it abruptly, as seen in Figure 3. Generally, the crisis was harsher in the center (where it started and where financial markets were more integrated) than in the periphery. Although the first reaction of capital flows was to go back to the US (exactly where the crisis started) and out of emerging markets, this soon reversed. With record low interest rates and unorthodox monetary policies allowing for great global liquidity, emerging markets became good opportunities again. This kept both record low international interest rate levels and capital flows to emerging countries until 2015. On the other hand, with the credit crunch in the US its current account deficit greatly decreased and global demand generally decreased. This became stronger after 2011, with the end of fiscal stimuluses, the deepening of the Euro Crisis and the first signs of slowdown in China. Commodity prices that were increasing since 2003 were now stable.

Without the same export demand, especially with the decrease in the US deficit, peripheral countries had to focus on developing domestic markets. Government deficits generally increased in emerging economies (Ackay et al., 2022). South Asia and East Asia were able to sustain high growth rates, although lower than before the crisis. Between 2009 and 2014, growth decelerated generally in Latin America and Sub-Saharan Africa with this deterioration of external demand and lesser economic autonomy given this regions' dependence on commodity exports. In the center, the US showed some signs of recovery rather quickly, while Eurozone entered a harsh crisis that would extend until mid-2010s. Figure 3 shows that the period presents a continuous decrease in the difference of growth rates between developing and developed countries until 2015.

In 2015, the Fed ended the Quantitative Easing program it had implemented after the crisis and announced that interest rates would start increasing again. This led to a capital outflow from

emerging economies. Commodity prices also started falling that year and China was showing some signs of economic slowdown which led to capital outflows there. As a response, China spent 1 trillion in US dollar reserves between 2015 and 2016, sustaining its exchange rate and domestic demand. Now with increasing wage shares, China was quickly increasing its domestic market, now fueled more prominently by the domestic engines. In 2018, the US announced a first large package of tariffs on Chinese goods, starting the US-China trade wars that have been ongoing. Globalization of trade that had already decelerated started stagnating.

Sub-Saharan Africa saw a decrease in its growth rates, but with the increase of Chinese direct investments still contributing to growth its average growth rates still remained above that of high income countries. The center countries had entered what was called 'Secular Stagnation', a period of low growth with low inflation (Summers, 2014). Latin America, on the other hand, entered a deep crisis since 2015, with recession in many countries. The analysis for these shifts being controversial. Although there was a clear setback in terms of export demand, especially with the fall in commodity prices in the region, gross capital flows remained strong, with little sign of an external financial constraint. The region seems to have had problems shifting from Chinese export demand to domestic demand sources.

In general, there are less literature on the macroeconomic and political economy shifts around the world in the decade of the 2010s. At first glance it seems that the decade was marked by a form of stalemate between the growth engines that led to the crisis and the emergence of new configurations. Average world growth in the decade was the worst since the second world war, with an especially sluggish growth in the Euro Area and Japan, but also in the US. Low- and Middle-income countries as a group grew in average 4.6% between 2015 and 2019, against 5.9% in the 2010-2014 period and 6.4% in the 2000-2008 period. All higher than the 3.5% average in the two decades between 1980 and 1999.[51] The decoupling of the periphery seen in the 2000s does not seem to have faded away completely, but it seems to have become more unevenly distributed across regions in the 2010s. South and East Asia continued to grow at much faster rates than the

[51] Here it follows the World bank data for Low- & Middle-income countries, which aggregates countries according to their size which gives greater weight for emerging economies. It also follows World Bank classification for the countries. Low-income economies on their own grew in average 2.15% in 2010-2019, 5.3% in 2000-2008, and 2.5% in 1982-1999 (series starts in 1982).

rest of the world and seem to have become a dynamic manufacturing center of the world.[52] The end of the decade seem to point to the US-China conflict as the political economy dispute at the global stage.

In terms of social coalitions, finance does not seem to have lost political influence in the US and Europe as it would have been expected after such a financial crash. Organized labor also remained fairly weak in these countries after the 2008 crisis. The main shift, seeming to be the emergence of far-right political movements able to captivate the working class, now much less present in trade unions and left-leaning organizations. High levels of private debt and high inequality gained new attention, although have remained throughout the whole decade at alarming levels in center countries. Secular stagnation seems to point out that these countries have still not been able to form new modes of regulation able to bring higher growth rates and deal with the increasing social unrest. With the pandemic in 2020, and the government responses to it, these countries have seen some new space for state action on social expenditure and industrial planning. On the other hand, after the beginning of the war in Ukraine in 2022, another direction seems to be of state demand through the military complex which escalated in both the US and in the European Union. Although the dynamism of the US military complex had never stopped it seems to be accelerating in prominence. Public investment on the ecological transition has also gained new momentum in these countries (Gramkow et al, 2023). Nevertheless, it is still soon to assert whether there is a new regime of accumulation being formed. Finance and Information industries, the dominant powers of the neoliberal regime, do not seem to be losing any ground.

On the other hand, one might argue whether China is now becoming a new 'dynamic center' of the global economy. Having surpassed the position of periphery, and even that of an emerging market. It seems to be the case that Asia has an economic dynamism connected but not dependent on that of the West any longer. The incredible amount of international reserves and continued current account surpluses (although much lower) still grant good external space for China. Moreover, its expansion alongside Russia and India of trade in non-dollar currencies may be weakening the dollar power. Nevertheless, the US still controls the international monetary system,

[52] South Asia presented an average growth rate of 6.2% in 2010-2014 and 6.4% in 2015-2019, while East Asia and Pacific presented 8.1% average growth in 2010-2014 and 6.5% average growth in 2015-2019 and. Both series exclude high income countries in these regions. As a comparison, high-income countries grew in average 2% in 2010-2014 and 2.1% in 2015-2019; Sub-Saharan Africa grew in average 4.6% in 2010-2014 and 2.4% in 2015-2019; and Latin America & Caribbean grew in average 3.6% in 2010-2014 and 0.9% in 2015-2019. All based on the World Bank data.

and the US dollar is still by far the most used currency worldwide. It seems once again, like in the 1970s, the American hegemony is being challenged. This time with the challenging of the neoliberal or finance-dominated accumulation regime. Without a consolidated alternative in sight. Very interesting times for political economists.

5. Identifying Export-led Growth Regimes

Now that we have clarified the role of the external sector on growth and distribution from the post-Keynesian Structuralist perspective and presented a global view of capitalism in the last decades, we may now come back to the identification of countries' specific experiences and the concept of 'export-led growth regime' presented in section 2.2. Proposing how its empirical methodology of identifying growth regimes may be altered to better capture the role of the external sector. To illustrate the impact of these differences, we look at the examples of Brazil and China in the period from 2000 to 2019.

5.1. The concept of export-led growth regime

There is no consensus in Macroeconomics nor in Development Economics of what characterizes 'export-led growth'. Some characterize it as a 'growth regime' (Stockhammer, 2009; Hein and Mundt, 2012; Baccaro and Pontusson, 2016) others characterize it as a 'development strategy' (Felipe and Lim, 2005; Palley, 2011). As we have seen in section 2.2, in the post-Keynesian demand-led growth literature, inspired in the French Regulation School the "macroeconomic dynamic (described as the accumulation regime) is embedded in a particular institutional setting (the 'mode of regulation')" (Stockhammer, 2009, p.3). This means the 'accumulation (or growth) regime' would be expressed by a particular macroeconomic dynamic. Under a demand-led view of growth in capitalist economies, this would mean a particular setting of demand composition and growth rates. This macroeconomic dynamic could express a deliberate strategy put forward by the country's institutional setting or just a result of it. With 'institutional setting' here broadly encompassing the political economy of the country, as discussed in chapter 2. Here we take the concept of 'export-led' as a growth regime, as it is more general than a growth strategy, which implicitly presents the pattern observed as a deliberate choice.

On the other hand, here a confusion may emerge. As presented in section 3.1, in the literature that takes export-led growth as a development strategy it is often counterposed to a 'import-substitution' strategy. While the demand and growth regimes literature takes the 'export-led growth regime' looking at net exports, which means they are not looking only at export contributions but also to import macroeconomic contributions to growth. Which would mean both 'export-orientation' and 'import-substitution' would be observed jointly. Although the use of net

exports, considering exports and imports to contribute in the same way to demand dynamics is misleading as presented in chapter 3, the choice of the approach to look at total external sector's contributions is not a problem. As we have presented in chapter 3, both export growth and diminishing the imported content of domestic demand are complementary in loosening the external constraint and allowing for development. For this reason, in this subsection we mention both the contributions of export by itself (as it represents an autonomous component of demand) and of the external sector as a whole.

As we have seen in section 3.2., the Kaldor-Thirlwall model assumes all countries are export-led, in the sense that in its model growth is led only by exports in all countries (Thirlwall, 2011). We have already seen that this is an underwhelming definition, as it takes for granted that other demand components would necessarily follow the growth of exports without a good reason to suppose that is always the case. It is also important to note that the fact that the model only looks at export growth, as it is interested in the balance of payments constraint, does not mean the authors suppose this is what happens in reality. There are some indications that the authors in this tradition take that as only one case scenario of demand-led growth (McCombie and Thirlwall, 2002), as we mentioned in section 3.2. Income elasticity of imports is also important in determining growth in this tradition as it affects the balance of payments constrained (and effective) growth rate in the model.

On the other hand, as we have seen in section 3.4, the neo-Kaleckian open economy model assumes a country is export-led when its regime is profit-led due to the external gains from international price competitiveness. That is, since growth is led by investment and net exports affect growth through its effect on capacity utilization, a country may be export-led to the degree in which the structural parameters of that economy show that a positive effect of lower wages (through higher profits and decreased real exchange rates) on net exports and investment is greater than the negative effect of lower wages on domestic demand and the resulting multiplier and accelerator effects. It thus depends on the effect of lower real wages on inducing investment and net exports. We have seen that while the effect of lower wages on investment seems to have low empirical relevance, its effect on net exports cannot be taken as a general result. Its generalization overestimates the role of price competition and undermines the structure of production (what the country trades) and its international integration. This tends to favor small open economies with

more complex exports, as usually found empirically (Stockhammer and Onaran, 2013; Hein, 2023). Besides that, the neo-Kaleckian definition uses net exports, undermining the different roles exports and imports have in demand, as explained in chapter 3. On the other hand, the neo-Kaleckian definition has the benefits of being theoretically grounded on somehow structural parameters, which qualify a rather stable regime, and of linking the demand contribution to income inequality/political economy. Although it is not those parameters that are analyzed on the empirical literature when clustering export-led experiences, as we will see in the next section.

Based on the neo-Kaleckian tradition, Hein (2011) and Hein and Mundt (2012) explore the concept of an export-led regime in finance-dominated capitalism. It starts from the understanding that the post-Fordist period in developed countries has favored capital over labor. By consequence, growth has slowed down in these countries and demand has depended on other sources besides wage-consumption and autonomous corporate investment. This would create an 'export-led mercantilist regime' which is 'seemingly profit-led' because both net exports and profits grow at the same time, while it would only mean a situation of 'profits without investment' (or without growth) (Hein, 2023). This can be expressed with the use of Kalecki's gross profits equation:

$$\Pi = I + C_\pi + (X - M) + G - S_w \tag{14}$$

$$\frac{\Pi}{K} = r = g + \frac{C_\pi}{K} + \frac{(X - M)}{K} + \frac{G}{K} - \frac{S_w}{K} \tag{15}$$

In which Π is profits, I is the sum of both private and public investment, C_π is consumption out of profits, $(X - M)$ is net exports, G is government consumption (taxation is disregarded), and S_w is savings out of wages. It shows that the profit rate (r) may rise without a real rise in the rate of accumulation (g) with higher net exports. Here the inspiration for the use of net exports as the important variable of the external sector in the neo-Kaleckian tradition becomes clear: it is one of the determinants of profits. On the other hand, as we showed in sections 3.1 and 3.2 in terms of production, exports are a source of demand while imports are a source of supply, with different impacts on demand. Moreover, the determinants of accumulation are usually not considered independent in neo-Kaleckian open economy growth models (Blecker, 2002). So, this profit equation should be taken with attention, as g would also depend on $(X - M)$. In the canonical open-economy neo-Kaleckian models (Blecker, 2002) net exports and investment grow necessarily at the same rate in the medium-run. This means that either the sale expectation of firms would have

to converge to the growth rate of net exports, or net exports would have to converge to the growth rate of sales expectation (autonomous investment). Thus, there would not be net exports without investment in the medium-run, as both grow at the same rate in this theory. This again brings us to the points made in sections 3.1 and 3.4 that this theoretical background leads to the conclusion of export-led regime as a profit-led regime, in which net exports drive growth through price competitiveness effects mainly.[53]

Baccaro and Pontusson (2016) pick up this concept of export-led growth, as determined by being able to have a price-sensitive export composition. Such that the decrease in wage shares observed in advanced economies would have allowed for the expansion of exports. This leads them to test the correlation between movements in real exchange rates and the exports of their selected countries and open up balance of payments to relate price sensitiveness to composition of the export basket. Here, even more directly, the export-led 'growth model' is interpreted as the one in which the country was able to grow pursuing price competitiveness actively. Although there is an interesting component of technology and structural composition of production taken into account, it is underlying considered to determine growth only to the extent it allows for price-elastic higher positive effects on net exports.

As expressed in chapter 3, the view of what we call the post-Keynesian Structuralist tradition is that exports have a role in leading autonomous demand and growth, but also a role on loosening the external constraint. Which means growth would be in theory led by exports when it is the biggest contributor to the growth of (autonomous) demand, but all sustained growth regimes are also dependent on a minimum export growth rate which allows other domestic expenditures to increase. Differently from the neo-Kaleckian tradition (and in line with the Kaldor-Thirlwall

[53] It is important to note that industrial policy, technology, and structural change affecting non-price international competitiveness is not strictly incompatible with neo-Kaleckian theory. It is just not what has been emphasized in the tradition, different from the Thirlwall, Structuralist, and Supermultiplier traditions. In part, this is due to the fact, exposed in section 3.4, that these models have the intention to show that the Marxist results of profit rates and growth being correlated were possible under demand-led growth theory. The Supermultiplier tradition, influenced by Sraffa, Marx and the Classicals, assumes independence in the long run between the rate of accumulation and distribution, while assuming a negative relationship between profit rates and real wage (class conflict). For this view, the direct link between higher profits and higher accumulation in the Classicals was only explained by Say's Law. Under the principle of effective demand, growth (quantities) is determined by autonomous demand in this tradition. Distribution would have three relations to it. The first one is on the conflict over autonomous expenditures (government expenditure for example); the second one very close to Kalecki is the short-run effect of higher wages on demand stimulation (an effect on the multiplier); the third one, close to Kalecki (1943, 1971) is that higher quantity and thus higher employment may increase labor's power on the political conflict over wages, increasing real wages and diminishing profit rates. Price competition is deemphasized in this tradition.

tradition), this line of thought highlights the different roles export and import serve, with imports being a demand leakage through the multiplier and accelerator effects, while exports are an autonomous demand which induces other components. For this reason, a decrease in the imported content of total demand, also contributes to GDP growth. It is important to note that these definitions do not depend on a specific post-Keynesian growth model, but only in the very simple Keynesian idea of the multiplier (equation 1 in section 3.1).

This would seem to point to an economy being export-led when there is growth and (import-adjusted) exports are the biggest contributor to demand (and GDP) growth given its weight on autonomous demand and its own growth rate. This definition would consider the cases we highlighted in section 3.6. Export-led stagnation – when export grows but the economy does not due to a lack of domestic demand – would be considered an export-led regime, but for a situation of stagnation or recession. And a false-positive export-led case – when exports grow but their contribution to growth is lower than the contribution of domestic demand sources – would not be considered an export-led regime because the contribution of exports to growth would be smaller. One should note, however, that in both these cases the share of exports in (autonomous) demand may be increasing.

Indeed, the literature on export-led growth as a development strategy, highlights the role of an increasing share of exports in GDP as a defining feature of such a strategy (Akyüz, 2011). This makes sense under our analysis, as presented in section 3.6, because the relative weight between (import-adjusted) external and domestic demand is an important component of the growth regime (the macroeconomic dynamic) as it expresses the changing composition of aggregate demand on a certain period. This can be seen by the example of Medeiros (2012). When looking at China post 2008 Crisis, he finds that although exports have a large participation in China's GDP, they do not necessarily lead the growth in the country after the 2008 crisis, finding that GDP's growth rate would follow the growth of state-owned companies' investments more closely than that of exports. Indeed, during that period the share of exports to GDP in China has greatly decreased, which would point out that domestic demand was in average growing faster than exports. As we will see in subsection 4.4.2. This would highlight *another type* of false-positive export-led growth, with the opposite causality of that presented by Serrano (2016). Exports may be the demand component contributing the most to growth while have its share of autonomous

demand decreasing (when it starts as being a very large part of total final demand). This would point to the importance of looking at the relative share of exports in demand to understand, as we discussed in section 3.6, whether the growth trajectory is one increasingly directed towards foreign markets or if it is also able to develop national demand markets. This is a choice of classification which follows from our definition of 'growth regime' focusing on the macroeconomic dynamic (both demand growth and its changing composition) resulting from the power relations in the country.

We could then point to two conditions for a growth process to be characterized as a export-led growth regime: (1) (import-adjusted) exports must be the main contributors to growth; and (2) export share in autonomous demand must be increasing or left stable. If condition (1) is not met exports are not the main drivers of growth, although they may very well be opening external space for the domestic components of demand to grow and lead growth. This is the first false-positive export-led case as introduced by Serrano (2016). If this condition is met but condition (2) is not met it may mean that export is leading growth in the sense that it is the main demand contributor to growth, but it also means that it is *increasingly less* of a driver, that is, that the country is growing the domestic market quicker than it is absorbing demand from elsewhere. In a way, this represents a regime (or a strategy, when the result of deliberate policies) which is directing growth towards inside, with exports serving the role of allowing for the growth of the domestic market. This is what we introduced in this section as the second case of false-positive export-led growth, inspired by the analysis of Medeiros (2015).

Furthermore, an important feature of export-led sustainability seems to be the characteristic of the products exported. The presence of more high income elastic and technological-intensive goods point to a more stable growth process as they will be less vulnerable to periods of global slowdown and price volatility, and less prone to long-term external constraints as we have seen. The import basket, or the domestic content of production, is also very important as it may show a country may incur into balance of payments problems in the future due to the lack of certain products that are more income elastic once it grows more.

When it comes to the financial external constraint to growth, the stability of a certain regime of growth should examine both financial sustainability and financial liquidity. A regime in which the share of exports in GDP is decreasing means that domestic expenditures are growing faster

than export revenue. In the very long-run this may lead to an external constraint to growth depending on the income elasticity of imports, as we discussed in section 3.6.2. A country with relatively high income elasticity of imports (higher than one, which means imports increase faster than total income), or more generally a country with sustained current account deficits trading in foreign currency has an unsustainable position in the long-run. As we have seen, with capital inflows, these inflows become liabilities and when the interest (or profit) transfers over these liability stocks becomes higher than the rate of growth of exports they stop contributing positively to the balance of payments (Bhering et al., 2019). On the other hand, previously accumulated asset stocks and the access to these capital flows (for example through implementing high interest rate differentials), preserve a country's financial liquidity, which may allow the country to sustain current account deficits for relative long periods, although not indefinitely (Emboava Vaz, 2023). A country with large foreign reserve stocks and low short-term liabilities for example, presents high liquidity and thus can be seen relatively stable, although not fully sustainable in the long term. In light of what we discussed in section 3.5, this highlights again the role of looking at gross capital flows and external financial positions to assess a country's financial sustainability.

Summing up, a truly 'export-led growth regime' under the view of the external sector put forward by the post-Keynesian Structuralist tradition would mean a country that has (import-adjusted) exports as the main demand contributor to growth, and with an increasing share of exports in total demand. The sustainability of an export-led position depends on exporting high income elastic goods. While the sustainability of domestic-oriented growth, depend on the external financial position of the country (and its ability to attract foreign currency if needed) and in the composition of its export and import baskets. These aspects of sustainability and liquidity are related to the financial constraint represented by the balance of payments.

It has also been highlighted in this tradition the importance of identifying whether a country is constrained by the external sector or by the political conflicts over domestic policy (Freitas and Dweck, 2013). The indicators of sustainability mentioned above go in this direction, although it is not an intention of this dissertation to create a methodology of identification of whether a country is in an external constraint or not.[54] This dissertation is in line with this view, although it focuses

[54] A general methodology in this line would have to overcome (or incorporate) the diversity of institutional features influencing a country's international financial position and how different exchange rate regimes (influenced by interest

on the perspective of what is *leading* growth, taking the external constraint as an important and necessary feature in the relationship between the external sector and the domestic market. And this relationship as the fundamental theoretical feature for the identification of 'export-led regimes'. Or if one wants, as mentioned in section 3.1, of correctly identifying to which (demand) market – domestic or foreign – the growth or development process is more directed towards, being expressed by the *changing composition* of demand. With a necessary complementarity between both because of the external constraint.

A problem that could be mentioned on this definition of export-led *regime*, however, is that it is only loosely related to structural features that would characterize a stable regime of accumulation. The weight of exports on demand could increase in one year and decrease in the next, and the same could be said for its contribution to demand growth in relation to other components. Although certain tendencies should last at least a few years. Nevertheless, this should not necessarily be seen as a problem. The point here is to shift the focus to what is actually leading growth, away from whether certain demand parameters imply a certain type of necessary growth sources (as in the neo-Kaleckian concept). As we have seen, often these parameters disregard structural (supply) features, and they may themselves change quickly over time. The idea of a 'regime' can then come back again to a certain national development 'strategy' or political coalition that allowed for a certain process of capital accumulation.

Indeed, the idea of 'regimes of accumulation' associated with a 'mode of regulation' from the Regulation Theory is closer in the post-Keynesian Structuralist tradition to the historical-structural analysis of the international environment on one hand (international monetary and financial conditions, structure of trade, geopolitics, etc) and the domestic political conditions on the other hand (policy-making, structurally-linked groups of interest, political events, etc.). This latter element goes hand in hand with the Gramscian idea of 'social blocs' advanced by the Growth Models literature (Baccaro and Pontusson, 2018). One example is when they cite the role of export manufacturers in Germany. They are a group economically linked to the structure of production (the manufacturing sector) that may constitute with its alliances (also with the state) a 'social bloc' able to drive a certain form of accumulation. While the study of geopolitical aspects hindering

rate differentials in the free or managed regimes) would affect it. Although a national analysis may be done more easily.

growth, is characteristic of Latin American Structuralism and can greatly benefit CPE, as we have seen in Chapter 4.

We can now look at how different methodologies incorporate these theoretical definitions of export-led growth. Showing how the adding of some of the considerations made here may change the identification of growth processes done by the literature.

5.2.National Income and Financial Accounting methodology of regime clustering

Within the approaches we called post-Keynesian in Chapter 2, we saw there were three different frameworks applied to the empirical cases of classification of countries' growth experiences: Growth Models approach, (neo-Kaleckian) demand and growth regimes, and (Sraffian) Supermultiplier growth decomposition. With the latter being historically linked to the post-Keynesian Structuralist view, as posed by Perez-Caldentey and Vernengo (2022).[55]

As we have already seen, the first two approaches are based on the literature that identifies that capitalism entered a finance-dominated accumulation regime after the 1970s, with tendencies for global imbalances leading to debt-based consumption-led and export-led (mercantilist) demand and growth regimes/growth models. Baccaro and Pontusson (2016) although using these definitions, do not present a structured methodology of classifying countries experiences within this taxonomy. Instead, they argue whether the country would be in one of the two growth models by looking at a series of stylized facts: growth rates of net exports and household consumption, household-debt, export and import composition, correlation between real exchange rates and net exports, sectorial growth (manufacturing and services), productivity, and wage variables. The 'demand and growth regimes under finance-dominated capitalism' literature on the other hand, have based their empirical analysis on demand-sided growth decomposition exercises, coupled with the analysis of financial balances. They call it the National Income and Financial Accounting methodology (Hein, 2023).

Hein (2011) and Hein and Mundt (2012), are the ones to introduce this methodology, based on the neo-Kaleckian analysis of finance-dominated capitalism (Stockhammer, 2008; Hein, 2012).

[55] Hein (2023) uses the terms Kalecki-Steindl and Sraffian Supermultiplier approaches. I abstain from that naming due to the theoretical influence of Kalecki and Steindl also on the post-Keynesian Structuralist tradition (and consequently on the Supermultiplier tradition), as mentioned in section 2.3. Although as presented by Hein the form these authors influence both traditions is different.

The idea is that under this period of capitalism there would be two polarized growth regimes as we have explained in section 2.2: 'debt-led private demand boom' and 'export-led mercantilism'. As a matter of identification, it further highlights the intermediary cases of 'weakly-export led' and 'domestic demand-led'. The classification goes as follows:

***Table 1**. National Income and Financial Accounting method, regime classification*

Export-led mercantilist (ELM)	-Positive financial balances of the private sector and private household sector -Negative financial balances of the external sector -Positive balance of goods and services -Positive growth contribution of net exports
Weakly export-led (WEL)	Either -Positive financial balances of the private sector -Negative financial balances of the external sector -Positive balance of goods and services -Negative growth contribution of net exports or -Negative but improving financial balances of domestic sectors -Positive but declining financial balances of the external sector -Negative but improving net exports -Positive growth contribution of net exports

Domestic demand-led (DDL)	-Positive financial balances of the private household sector and positive or balanced financial balances of the private sector as a whole -Balanced or positive financial balances of the external sector -Growth is almost exclusively driven by domestic demand -Around zero growth contribution of net exports
Debt-led private demand boom (DLPD)	-Negative or close to balance financial balances of the private sector -Positive financial balances of the external sector -Significant growth contributions of domestic demand and private consumption in particular -Negative growth contributions of net exports

Source: Hein (2023).

The contribution of each demand component to growth is calculated as:

$$Y_t = C_t + G_t + I_t + X_t - M_t \tag{16}$$

$$C_{t,contr} = \frac{C_t - C_{t-1}}{C_{t-1}} * \frac{C_{t-1}}{Y_{t-1}} = \frac{C_t - C_{t-1}}{Y_{t-1}} \tag{17}$$

$$Y_{t,growth} = C_{t,contr} + G_{t,contr} + I_{t,contr} + NX_{t,contr} \tag{18}$$

In which equation 16 is a version of equation 1 without the multiplier and defined in time. Equation 17 is the contribution of consumption to growth in the methodology, as an example of the contribution of a component just like each component's contribution expressed in equation 18 is calculated. All expenditures are considered after taxes. The financial balances are calculated just like our equations 12 and 13 presented in section 3.5.[56] We present them again:

$$(S_{Pr} - I_{Pr}) + (T - G - I_{Pu}) = (X - M + R_X) \tag{12}$$

[56] It is important to note that although all government expenditures should enter the public financial balance, as it is usually taken empirically as the consolidated sector's expenditures, when treating demand contributions public and private demand are considered jointly.

$$FB_{Pr} + FB_{Pu} = -FB_X \quad (13)$$

By an accounting definition the financial balances sum up to zero. As just any creditor needs a debtor, one sector's positive balance means another sector's negative balance.

As highlighted by Campana et al. (2023) and Hein (2023), this methodology does not imply any background theory, although most authors that use it come from the view of the finance-dominated capitalism literature. For this reason, these decomposition exercises are often coupled with other statistics tied to that theory. This also means that any theory can be applied over the methodology, as it is basically an observation of national account and financial balance statistics. In fact, the national accounts are just presented as they are, they do not imply any 'multiplier' mechanism as in Keynes. That is, it is implicitly assumed that all demand components contribute equally to GDP growth. Once one assumes, as in Keynes, that for example, private consumption and imports are derived or induced expenditures, then their contribution to GDP growth would change.

Where there is an implicit theory, however, is on the regime classification derived from these statistics and on the meaning given to financial balances. As pointed out by Hein (2023): "looking at these two sets of indicators provides some information on the main sources of demand and growth, on how demand is financed, and countries can be allocated to the regimes applying the criteria summarized in [Table 1]" (p.17). Here, Hein is careful in highlighting these indicators just provide *some information*. This is especially important on the analysis of the financial balances. As we discussed in section 3.5, financial balances only express the sources of demand (the expenditures), but they *do not express how they were financed*. This is the point made by the literature stressing the importance of considering gross and not only net capital flows (Medeiros and Serrano, 2001; Borio and Disyatat, 2015; Kohler, 2020). For example, an investment on domestic capital goods financed by a domestic bank or the same investment financed by foreign banks would have the same effect on the external financial balance but are financed from different countries. The treatment of financial balances is especially important to the period post Bretton Woods and with financial globalization in which capital accounts are open and international reserves vary a lot. It has been in this period that net and gross capital flows have greatly differed (Hein, 2012). This differentiation is especially important for the analysis of the external financial balance.

As we can see in Table 1, the classification of countries in 'demand and growth regimes' is based mostly on the contribution of net exports in comparison to domestic demand, and in the sign of the financial balance of the external sector (which is necessarily the opposite sign of the domestic financial balance). With the sign of private sector balance (or even household sector) having to be distinguished from the public sector in certain cases. On one hand, this definition takes net exports, without considering the different roles export and import have on demand contribution, as discussed in chapter 3. And on the other hand, in light of what we just discussed, it seems to consider it in two different manners. The external sector financial balance is not anything else but the net export balance plus net income inflows, the (opposite sign) current account balance. While the net exports contribution is a dynamic effect of the trade balance, the financial balance is a level effect of it plus the role of income transfers. Although the income transfers are often not given so much attention in this literature.[57]

Let us now have a closer look to each demand and growth regime. By looking at equations 16-18, we can re-analyze what the conditions mean. The 'export-led mercantilist' regime expresses a country which net gives away savings to the rest of the world (and net receives demand) by maintaining a positive and growing balance of trade (exports larger than imports) and not having enough income outflows to offset the trade balance. The term 'mercantilist' is a reference of the goal in mercantilism (fostered by some physiocrats) to build wealth from maintaining exports larger than imports. The term was also used by Keynes in Bretton Woods to argue for an international system that punished countries that sustained persistent trade balance surpluses as that would impose persistent trade deficits on other countries, bringing financial instability. The finance-dominated capitalism literature seems to draw on this idea to argue that this is a source of global instability. As seen in Chapter 4, this does not have to be the case if the country sustaining the trade deficit is the one that issues the global currency not pegged to gold, something that did not exist in Keynes' time. Nevertheless, the implicit assumption in the 'export-led mercantilist

[57] It is important to note that income transfers are especially important when looking at developing countries given FDI outflows and interest payment on external debt. The little attention given to it in this section is only to simplify some of the arguments. As it does not receive great attention in the literature, this is not a costly simplification. It should be noted however, that income accounts should not be neglected when interpreting growth or development experiences.

regime' is that it characterizes a country that in a certain period in average grew with an increasing participation of net foreign demand in its final demand.[58]

The 'weakly export-led' and the 'domestic demand-led' regimes are considered intermediary regimes, not linked directly to the theory of polarizing growth patterns in finance-dominated capitalism.[59] The first case of weakly export-led characterizes an economy which in a certain period has in average a positive but decreasing trade balance (and net income outflows not larger than the trade balance). While the second weakly export-led case characterizes an economy that has an average negative net exports but with decreasing trade deficit (and net income inflows not larger than the trade balance). As with the export-led mercantilist regime, we can see that what is implicitly assumed in the definition of these regimes is that the level and direction of change of net exports are the defining feature of the 'export-led' regimes. This becomes even clearer when we abstract from income flows. If net exports are positive and increasing then the economy is 'strongly export-led', if net exports are negative with a decreasing deficit or if net exports are positive with decreasing surpluses, then the economy is 'weakly export-led'.

The 'domestic demand-led', as a consequence, denotes an economy in which net exports are relatively stable ('around zero growth contribution of net exports'), the trade balance plus net income outflows result in balanced or negative current accounts, and has a decreasing private debt (or increasing private assets). The 'debt-led demand boom' regime characterizes an economy with negative net exports and increasing trade deficit (and income inflows not large enough to overcome the commercial deficit), and an increasing or stable private debt. Both regimes also include significant growth contributions of domestic demand, which would be necessarily the case for a growing country with no or negative and decreasing net exports. The 'debt-led demand boom' regime also characterizes that this domestic demand should have a significant part being private, although not specifying its size.

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[58] Both the 'export-led mercantilist and the first 'weakly export-led' cases also assume a positive balance of *private* and not of *domestic* financial balance more generally. However, a country with negative external balance and a negative private balance, would imply a public balance positive of enough magnitude to support the negative balances of both sectors. This is a very rare and unlikely situation as countries do not usually run very high public surpluses for long time. There is also no classification for this case, and it is not discussed in the literature. For this reason, we gave less attention to this characteristic of the classification.

[59] As Hein and Mundt (2012) mention when introducing the four regimes classification applied to the G20: "It goes without saying that classifying such a heterogeneous set of economies as the G20 into four categories is somewhat arbitrary by necessity" (p. 34).

What we have shown is that the level and dynamic effects of net exports are the main defining characteristic of the regime clustering. If we disregard income flows (or consider their magnitude is not large enough to overcome commercial balance results), assume out the rare case of sustained public surpluses large enough to sustain private and external deficits, and assume the country is in average growing in that period, then we could simplify Table 1 as:[60]

Table 2. *An alternative (simplified) presentation of the conditions for the regime classification put forward by the Nation Income and Financial Accounting methodology.*

Export-led mercantilist (ELM)	- Positive and increasing net exports - Decreasing private debt (or increasing private assets)
Weakly export-led (WEL)	Either - Positive net exports with a decreasing trade surplus Or - Negative net exports with a decreasing trade deficit
Domestic demand-led (DDL)	- Negative or balanced and relatively stable net exports - Stable or decreasing private debt (or increasing private assets)
Debt-led private demand boom (DLPD)	- Negative net exports with an increasing deficit - Stable or increasing private debt - Increasing share of private demand in GDP

Source: own elaboration.

Table 2 illustrates that the clustering ultimately depends on the behavior of net exports and of private debt. With net exports being the main determinant of the regime. This is in line with the

[60] It is important to mention that these assumptions are not far from the analysis put forward in this literature. Income flows affecting current account results are rarely mentioned or taken into much consideration, and no case of average positive balance of the public sector with negative balances of private and external sectors was found in our review.

finance-dominated capitalism literature. Moreover, if we look at the two main regimes, we can see the global imbalance observed by the finance-dominated capitalism literature is taken in dynamic form. The ELM regime presents a growing trade surplus while DLPD presents a growing trade deficit. Keynes' argument was of the *static* problem of sustained current account deficits, something also presented in Prebisch, as we have seen. Here, it is even worse, there is a *dynamic* problem of growing deficit and surpluses. Although even growing deficits would not be necessarily a problem for the global currency-issuing hegemon, it is clear that it is not expected that a situation of growing deficits/surpluses to GDP lasts for a very long time.

On the other hand, the focus on net exports also imposes limitations to this methodology. On the one hand, as we discussed extensively, it does not take into account the different roles played by exports and imports in Keynesian economics. But another evident problem is that it makes the clustering very sensitive to *average signs* of a volatile variable with values possibly around zero.

It is important to note that this is a limitation of any methodology looking at averages to take a view of a whole period when the characteristics marking the regime are not expected to be stable for long periods. In this way, the methodology of the demand and growth regimes literature holds only loosely to the theoretical basis of the neo-Kaleckian open economy canonical growth model in which 'structural' parameters indicate whether a fall in wages would increase net exports and investment. The methodology more generally takes the approach of looking at the dynamics of trade balances (and the current account more generally), understanding that credit-consumption and net exports were necessarily demand sources over the weakening of labor in that period.[61] Thus, since it also does not look at 'structural parameters', this empirical methodology is also prone to the problem of not referring to 'regimes' in the sense of structural, somehow stable, and historic determined characteristics of a country.

The current methodology of 'demand and growth regimes' clustering has done an important step on trying to develop an empirical, simple, methodology to characterize growth or development trajectories into stylized regimes. Also presenting a demand-led decomposition methodology

[61] That is, the clustering of regimes does not check it, but underlying assumes the point made by finance-dominated capitalism literature that there was a fall in the wage share and a negligeable change in government demand. Implicitly regarding net exports and credit-based consumption as the main sources characterizing the growth regimes (thus the attention given to current account results and private debt).

which presents an alternative to the supply-side decomposition presented in section 2.1. It seems successful in stressing the role of the two main variables underpinning the 'global imbalances' in finance-dominated capitalism literature. On the other hand, it still suffers from some problems. The use of net exports as the main determinant of the results disregards the different roles exports and imports hold on the production system from a Keynesian perspective and leaves the clustering prone to be very sensitive to the choice of periods.[62] The external financial balances have to be taken with care, although it shows demand sources (whether a country net received or conceived savings) it does not give information on how these sources were financed. In general, the methodology also has given little attention to the comparative and related role between external and domestic components, highlighted throughout this dissertation.[63]

5.3. Sraffian Supermultiplier growth decomposition methodology

The other empirical methodology of assessing growth trajectories in this literature is the decomposition methodology introduced by Freitas and Dweck (2013), based on the supermultiplier. The characteristic feature of this method is that it applies the Keynesian idea of a 'multiplier', that there are induced components – which affect the multiplier – and autonomous components of demand – which affect demand growth directly. The autonomous components are exports (X), government consumption (G), government investment (I_G), residential or household investment (I_H), credit-based consumption (CC), and state-owned companies' investment (I_S),.[64] While the induced components are household consumption ($C_H = (1-s)Y$), imports, and corporate investment($I_c = hY$). This latter being the main difference with the basic Keynesian multiplier, and it comes from the Sraffian Supermultiplier growth model (Serrano, 1995; Freitas and Serrano, 2015). Freitas and Dweck analyze the effect of imports on the multiplier through a

[62] A practical example of this is the different clustering of Brazil in Ackay et al (2022) and Campana et al. (2023) for very similar, but different periods.

[63] This could possibly explain why so many emerging countries are characterized as domestic demand led, which is not so common with Western European and North American countries (Ackay et al., 2022). Given their peripherical positions these countries tend to have negative or balanced current account results, and balanced or negative net exports. The classification would then not be describing the dynamic of domestic demand leading growth, but only reinforcing its external position, expected for peripheral countries.

[64] Some contributions also include consumption out of public salaries and out of public transfers, as autonomous elements of demand (Labat and Summa, 2023; Haluska, 2023).

domestic-content variable (δ), such that $\delta = 1 - \beta = \frac{Y}{D}$.[65] All expenditures are considered after taxes. We can then express the system as:

$$SM = \frac{\delta}{1 - \delta(c + h)} = \alpha \tag{19}$$

$$Z_t = G_t + X_t + CC_t + I_{G_t} + I_{H_t} + I_{S_t} \tag{20}$$

$$Y_t = \frac{\delta Z_t}{1 - \delta(c + h)} = \alpha Z_t \tag{21}$$

Where equation 19 and 20 represent the supermultiplier and the autonomous expenditures. Equation 21 is a modified version of equation 1, considering what we mentioned before about the demand components analyzed in this theory. The decomposition of growth can then be seen:

$$\begin{aligned} g = {} & \alpha(1)\frac{G(0)}{Y(0)}g_G + \alpha(1)\frac{I_G(0)}{Y(0)}g_{I_G} + \alpha(1)\frac{X(0)}{Y(0)}g_X + \alpha(1)\frac{CC(0)}{Y(0)}g_{CC} + \alpha(1)\frac{I_H(0)}{Y(0)}g_{I_H} \\ & + \alpha(1)\frac{I_S(0)}{Y(0)}g_{I_S} + \alpha(1)\frac{C_H(0)}{Y(0)}g_c + \alpha(1)\frac{I_C(0)}{Y(0)}g_h + \frac{\alpha(1)}{\delta(1)}g_\delta + \alpha(1)\frac{E(0)}{Y(0)}g_E \end{aligned} \tag{22}$$

Where g is the real GDP growth and E is inventories, g with subscripts means the growth rate of that variable, and the number in parenthesis symbolizes the period of analyses. It is easy to see that equation 22 is analogous to equation 18 with the consideration of the multiplier and the breakdown of investment and consumption compositions. As mentioned by Hein (2023), this means that the theory imposes to the data which expenditures are considered autonomous and which are considered induced. This allows for a differentiation of how different expenditures have different effects on growth. As one can see in equation 22, while autonomous demand's contributions depend on their own growth rate, induced demand's contribution depend on the growth rate of its ratio to GDP.

[65] As we mentioned after equation 8 in section 3.3., m, β, and δ can be related as $m = \frac{\beta}{1-\beta} = \frac{1-\delta}{\delta}$. Since all variables are just equations of each other, they can all be can be used interchangeably, as in terms of growth decomposition their contribution to growth is the same (the change in imports affects all equally). The benefit of using domestic content is that it is the share of demand going to the domestic market, so it is necessarily between 0 and 1 and it may be seen as a variable affected by policymaking directed at structural change. I use domestic-content here as it is the variable used by Freitas and Dweck (2013).

As we mentioned in section 3.3, a problem is that not each demand component commands the same amount of foreign goods. That is, in the methodology of Freitas and Dweck (2013) it is implicitly assumed that all demand components have the same import content. Passoni (2014) and Fevereiro (2017) distinguish the domestic content of each demand source using input output tables. A point also recently made by Baccaro and Hadziabdic (2023). Although certainly the best way to calculate demand components contributions to growth, as explained in section 3.3, the difficulty in this method is that it involves much more data. Being necessary to estimate such domestic contents from available input-output tables sustaining certain assumptions about the chaining of sectors and the treatment of intermediary goods.

Freitas and Dweck (2013) then go on to classify the demand contributions, looking at how much of the growth came from the change in the autonomous variables and how much came from changes in the supermultiplier. Then, it also clusters the contributions by sectors. The growth contribution of the public sector (government consumption and investment, plus state-owned companies' investments), private sector (wage and credit consumption, household and corporate investment, and inventory changes), and the external sector (exports and domestic content). Although no regime is identified based on these contributions, Freitas and Dweck mention that economies would follow either a balance of payments constrained demand-led growth process, or a policy constrained (pure) demand-led growth process, as explained in section 3.2. No methodology is mentioned on how to identify whether a country is in one or the other situation in a certain period. Although the role of the external sector as a financial growth constraint through the balance of payments is considered in the political economy analysis.

When comparing the two methods analyzed here the Supermultiplier decomposition methodology has the benefit of better treating the external sector and considering the multiplier effects of certain demand components. On the other hand, it lags behind the national income and financial accounting methodology in terms of comparative political economy analysis, as it does not have (at this point of the research agenda) a methodology of identification of different growth regimes or patterns that may be comparable between countries. Although its analysis for the case of Brazil considers the external financial constraint to growth looking at financial variables, those are not incorporated in the methodology itself, as it is in the national income and financial

accounting methodology. Such financial variables could give a notion of underlying stocks that could affect the sustainability of observed growth patterns.

5.4. Are they export-led? Applying the insights on growth patters to the cases of Brazil and China

We have gone through important aspects of the treatment of the external sector, discussed the concept of an export-led regime under these considerations, and critically assessed both the National Income and Financial Accounting and the Sraffian Supermultiplier methodologies. This section will illustrate these considerations with the cases of Brazil and China. The first clustering of 'demand and growth regimes' considering peripheral countries done by Hein and Mundt (2012) applied the methodology to the G20 for the period 2000-2008. Ackay et al. (2022) then applied the methodology to eight large emerging economies for two periods, 2000-2008 and 2009-2019. Brazil, China and Russia were the only economies analyzed in both studies and classified as 'export-led'. While Russia is a very complicated case with an important embargo and political specificities, Brazil and China give us great examples of how the 'export-led' classifications play out in assessing development patterns. Moreover, for the period 2000-2008 Brazil was classified as 'weakly export-led' in both studies while China was characterized as '(strongly) export-led mercantilist' in both studies. Thus, giving us examples of both 'export-led' cases.

We apply the supermultiplier decomposition, considering the differences in autonomous and induced components, and highlighting each sector's – private, public, and external – contribution to GDP growth. Due to a lack of available data, we do not consider state-owned companies' investments as different from corporate investments.[66] This may bias some of our findings as we will analyze later. For a similar reason, we also do not consider component-specific domestic contents. Assuming that all demand components have proportional domestic contents.[67] For this reason, instead of considering the growth contribution of import-adjusted exports, we

[66] Note that this differentiation is also tricky and dependent on the political economy aspects surrounding the company. With financialization many (partially) state-owned companies have a strong influence of shareholders, with their functioning being closer to that of normal corporate companies, which under the supermultiplier theory would imply its investment is induced (Freitas and Dweck, 2013). This is for example the case of Petrobrás in Brazil, after 2016.[[OBS.: Na nota 12 do artigo Freitas & Dweck (2013) esta qualificação é feita.]]

[67] As we have seen in section 3.3, this should especially bias the contribution of corporate investment which tends to command more imports in peripheral economies.

consider the growth contribution of exports and of the change in domestic content. Both together presenting whether the external sector is driving growth.

Apart from the decomposition we also look at current and financial account results, as well as the levels and variation of foreign reserve stocks. We also look at the ratio of exports and government expenditure to GDP. As that may help observe the relative weight change of exports and government expenditure in each period. For the case of Brazil, we also look at public debt stocks, as its second period is classified as DDL with high public debts by Ackay et al. (2022). For matters of sustainability of a certain growth pattern, it would also be interesting to look at the changing composition of export and import baskets. This would entail, however, a sectorial analysis of final and intermediate consumption patterns. For a matter of simplicity, we do not present these statistics here. Although it would be interesting for similar exercises in the future. It is also important to mention that this is not specifically important for our goal: to show that once the interrelation between external sector and domestic markets is fully considered, seemingly 'export-led' growth may have greater participation of other domestic demand components (with a big role of the state in particular).

The exercise is done on Brazil and China for the period from 2000 to 2019. We divide it in the periods of 2000-2008 and 2009-2019 to follow the literature we are comparing with (Hein and Mundt, 2012; Ackay et al., 2022). But we also subdivide the second period between 2009-2014 and 2015-2019. For the case of Brazil this break seems especially important. 2015 has seen a political shift to a more neoliberal policymaking in the country and it also marks the first year with a fall in commodity prices (although those grew until 2011 and stagnated between 2011 and 2014). But this break also seems important for the case of China. In 2015, the country started spending a large amount of its foreign reserve stocks against a possible external financial problem brought by capital flight. Reserve stocks have not increased much in neither country after 2015. This may also be tied with another feature that makes 2015 important. The year marks the end of the quantitative easing and other monetary stimulus implemented after the 2008 Global Financial Crisis and the Eurozone crisis, and the announcement of the beginning of a hike cycle in US interest rates.

Data on national accounts for Brazil are taken from the World Bank Database and for China from the IMF Database. The breakdown of investment between corporate, household, and general

government investment is taken from the OECD database.[68] It is assumed that all household investment is in residential investment (or just generally that household investment can be taken as an autonomous expenditure). Data on credit-financed consumption is taken from the Bank of International Settlements, with the calculation following the method by Girardi and Pariboni (2016). We use data for consumer credit to households adjusted for breaks. The credit flows are calculated from the difference between end of year stocks.[69] Data on current and financial account, as well as international investment positions are collected from the IMF database. All variations and contributions are taken in real terms, with volume variations.[70]

The results of the growth decompositions can be seen in Tables 3 and 4 below:[71]

[68] The share of each sector on investment is not available for Brazil in 1999 (necessary to calculate variation with 2000) it is assumed the shares of each sector on investment is kept constant between 1999 and 2000.
[69] The series of credit to households for China starts in 2006. But there is a longer time series for credit to private non-financial sector. Credit to households before 2006 is estimated assuming that the share of credit to households in total credit to private non-financial sector remains stable in the period of 2000-2006.
[70] The data for demand components is deflated to their own implicit deflator at the source (World Bank, IMF). Contributions are taken as averages of yearly contributions. This is just an approximation and thus not represent actual contribution for long periods, since an exponential process takes place. Nevertheless, since the periods are short, there is not too much implication of taking the average of yearly results. The problem of doing a geometric progression of the averages of volume variations is that each components variation will not match total GDP variation due to accumulated relative price effects (Freitas and Dweck, 2013). On the other hand, deflating by the GDP price deflator will include changes in relative prices, which would especially bias exports and imports, the object of our analysis.
[71] M on the tables reflects the contributions of imports measured by the contribution of changes in the domestic content, as explained before.

Table 3. *Growth Decomposition Brazil and China 2000-2008 and 2009-2019*

	Brazil		China	
	2000-2008	2009-2019	2000-2008	2009-2019
GDP	3,8	1,3	10,5	7,8
Domestic Sector	2,6	1,0	6,1	6,0
Private Sector	1,0	0,7	2,3	3,1
C_H	-1,2	1,6	-1,2	-0,5
I_C	0,6	-0,5	0,3	0,5
CC	1,0	-0,2	0,4	1,6
I_H	0,0	0,3	2,3	2,0
inventories	0,5	-0,6	0,6	-0,4
Public Sector	1,6	0,3	3,8	2,8
G	1,2	0,5	2,8	2,2
I_G	0,4	-0,1	0,9	0,6
External Sector	1,2	0,3	4,4	1,9
X	1,9	0,5	5,8	1,8
M	-0,7	-0,2	-1,4	0,1
Total	3,8	1,3	10,5	7,8
Classifications in Ackay et al. (2022):				
	WEL	DDL	ELM	WEL

Note: inventories also include statistical discrepancy

Sources: WB, IMF, BIS, OECD.

Table 4. *Growth decomposition with alternative periodization for post-Crisis: 2009-2014 and 2015-2019*

	Brazil		China	
	2009-2019		2009-2019	
	2009-2014	2015-2019	2009-2014	2015-2019
GDP	2,8	-0,5	8,7	6,7
Domestic Sector	3,3	-1,8	6,8	4,9
Private Sector	2,0	-1,0	3,8	2,4
C_H	2,2	0,8	-0,7	-0,2
I_C	-0,3	-0,7	0,1	0,8
CC	-0,1	-0,3	1,6	1,5
I_H	1,1	-0,5	3,3	0,4
inventories	-0,9	-0,2	-0,5	-0,3
Public Sector	1,3	-0,8	3,0	2,6
G	1,0	-0,1	2,4	2,0
I_G	0,3	-0,7	0,6	0,6
External Sector	-0,5	1,3	1,9	1,8
X	0,3	0,8	2,5	0,9
M	-0,8	0,5	-0,6	0,9
Total	2,8	-0,5	8,7	6,7

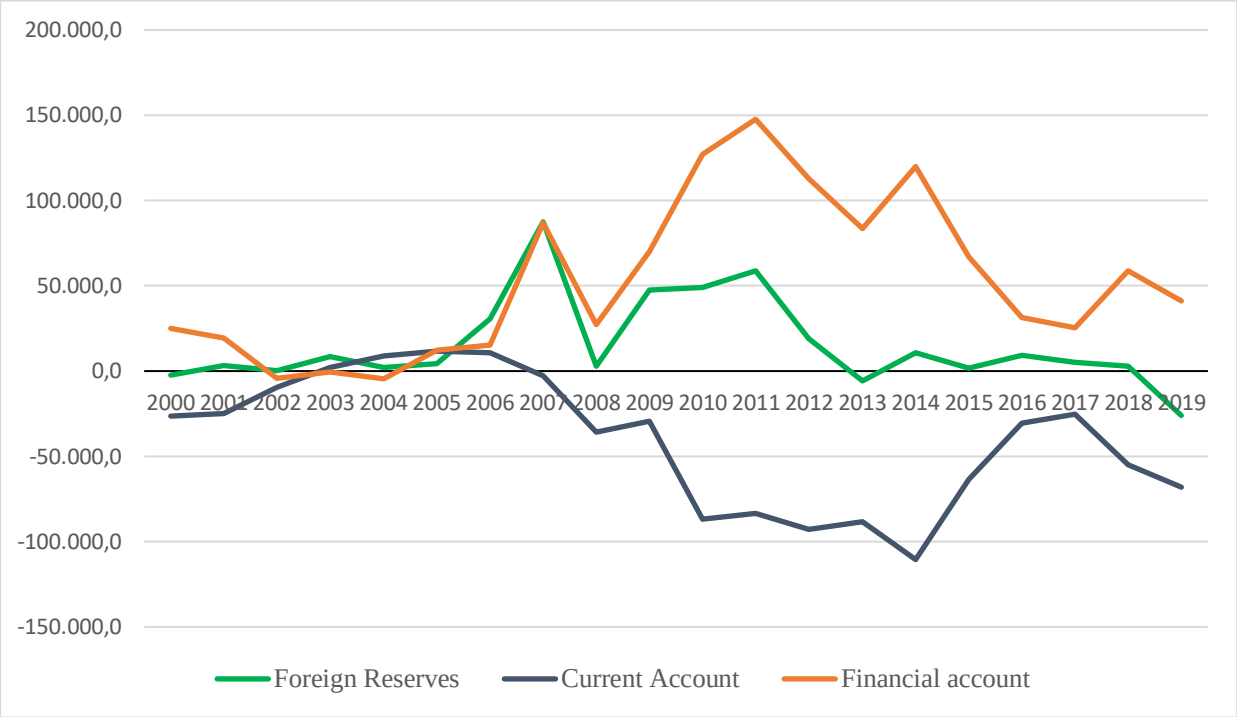
Note: inventories also include statistical discrepancy

Sources: WB, IMF, BIS, OECD.

5.4.1. Brazil: from weakly export-led to domestic demand-led?

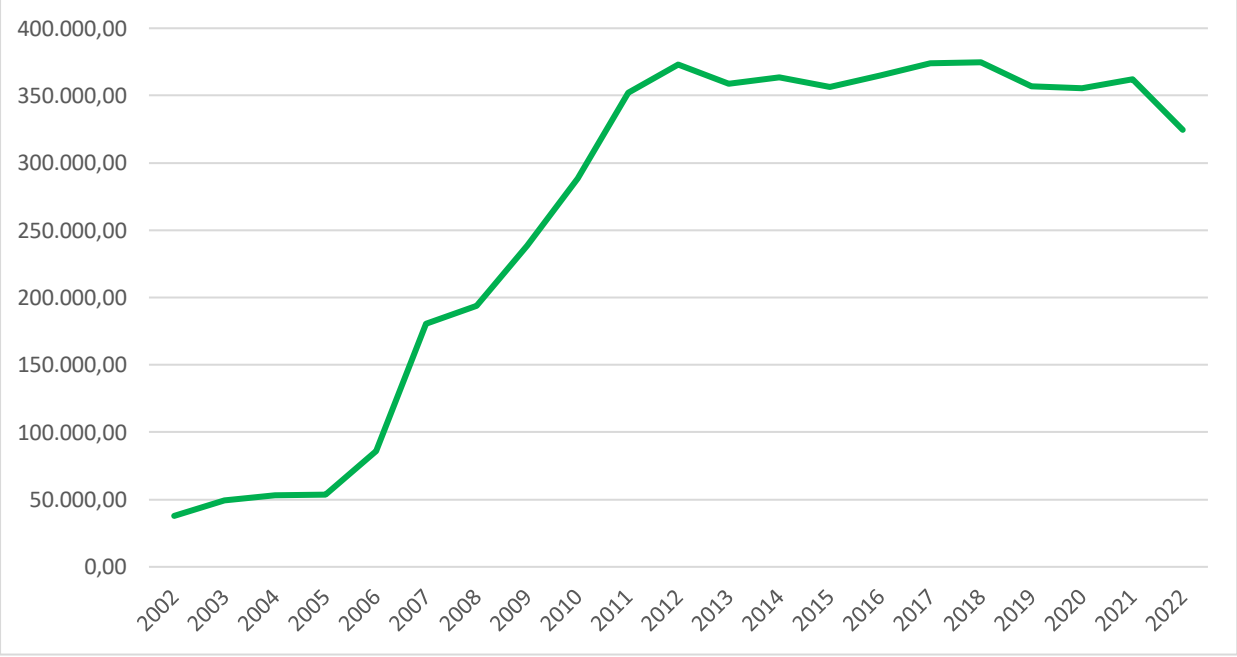
The period from 2000 to 2008 in Brazil has been classified by Hein and Mundt (2012) and by Ackay et al. (2022) as 'weakly export-led'. The reason follows their methodology: the period has seen average negative current account results (Figure 4), but with improving net exports (positive growth contributions of net exports). On the other hand, as we can see in Table 3, exports and imports contributed together to only 1.2% of the 3.8% growth the country experienced in the period. Among autonomous components, exports contributed to 1.9% of growth, while demand from the government contributed to 1.6% of GDP growth, and consumer credit for other 1.0%. From these numbers, we can already see that domestic demand contributed more to growth than the external sector, and with an important participation of state-led demand in particular.

Figure 4. *Balance of Payment Flows – Brazil (millions of US dollars)*



Source: IMF

Figure 5. *Foreign Reserve Assets – Brazil (millions of US dollars)*

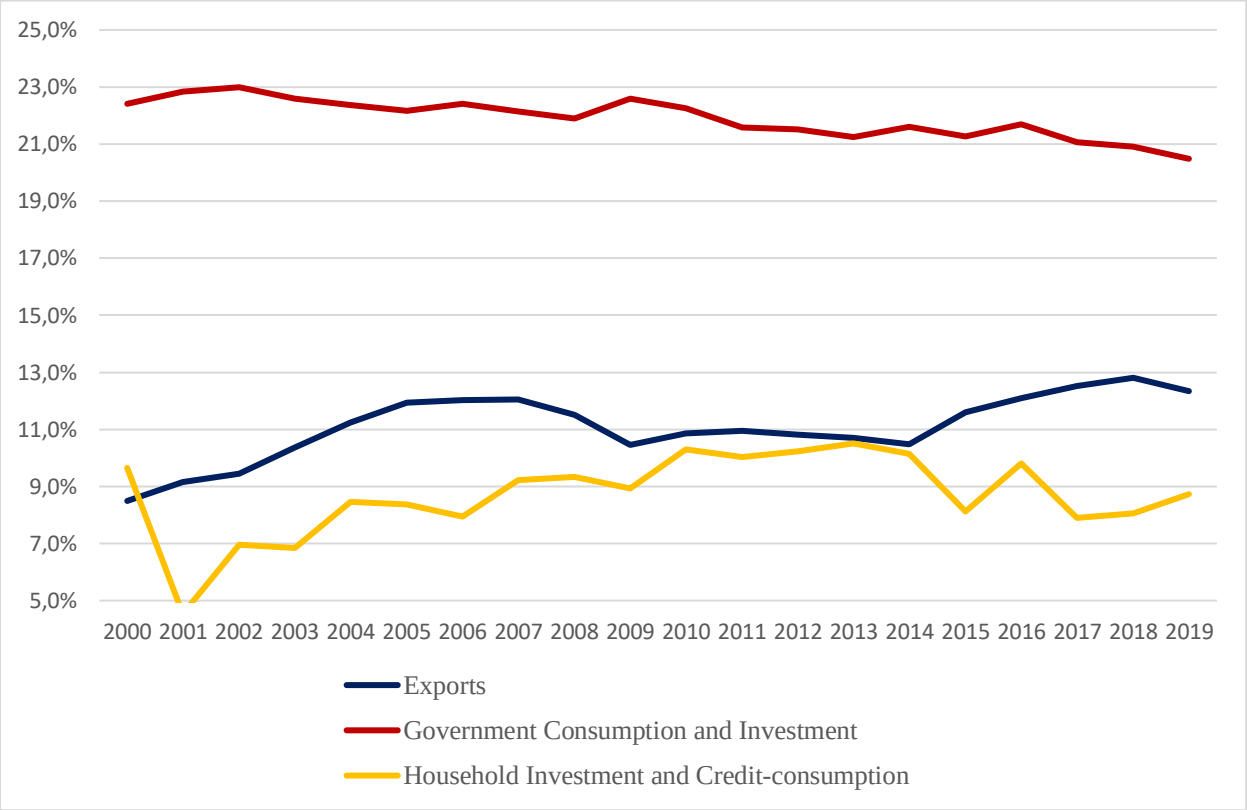


Source: IMF

Moreover, we can see that average negative current account results give us little information. First because for an important part of the period (4 years) current accounts were positive. That being the longest period with current account surpluses in the country since 1980. But secondly and more importantly, because the country was accumulating foreign reserves in the period (Figure 5). That is, there were strong capital flows from the financial account. Which means that it was moving away from a balance of payments constraint by increasing its international liquidity, which points out to better not worse sustainability of the growth pattern. At least in the relative short period analyzed.

To understand the growth process of Brazil during the period it is also important to observe the policy shifts. Literature on Brazil's macroeconomic performance in the period usually highlight an important shift in policy making in 2006 (Serrano and Summa, 2012; Carvalho, 2018). The first 3 years of the center-left government of Lula followed to great extent the macroeconomic policymaking of the previous government. Which prioritized fiscal austerity, high interest rates and flexible exchange rates. In December 2005, the government pays off its external debt with the IMF contributing to the easing of the external constraint. In 2006, there is a policy shift with the increase in fiscal policy. As a result, average growth rates also differ. The period of 2000 to 2005 has average growth rates of 3.2%, with 2006 to 2008 presenting average growth rate of 5%, even with signs of effects of the global crisis in 2008.

***Figure 6**. Autonomous Components of Demand as % of GDP – Brazil (real terms)*

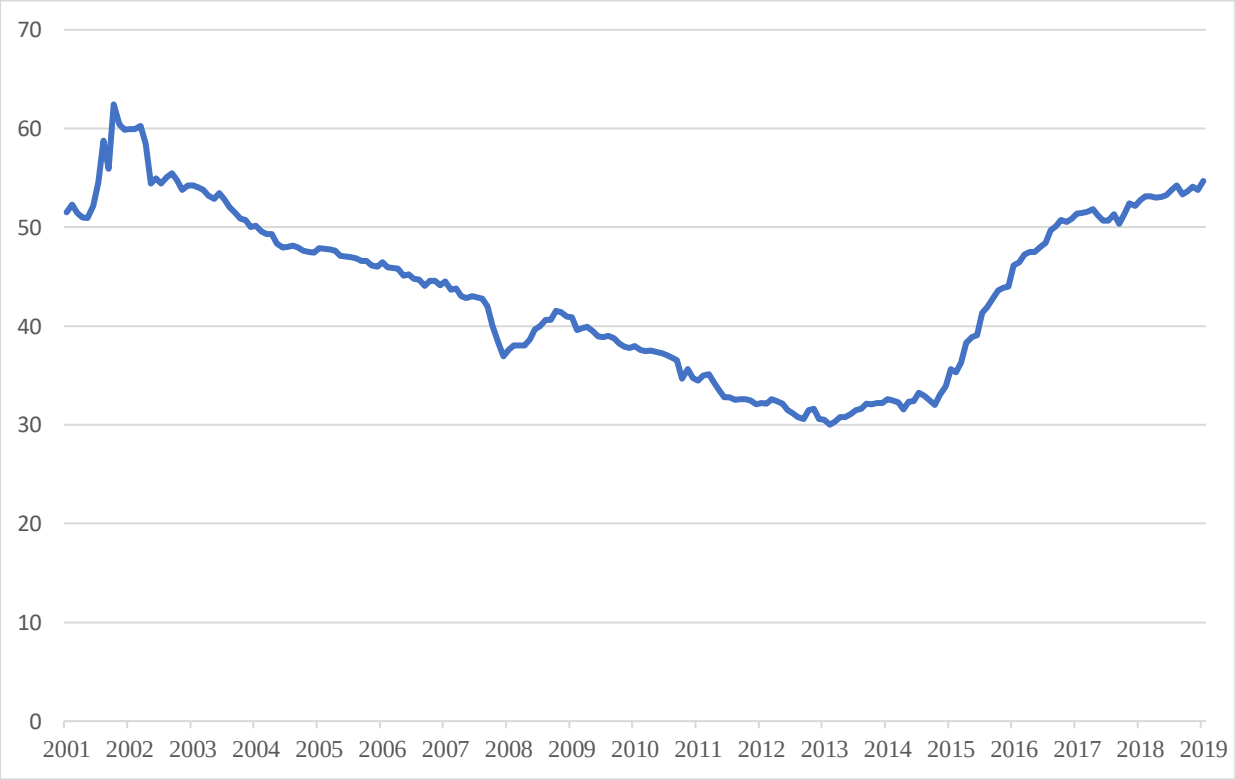


Sources: World Bank, OECD, BIS

Figure 6 shows that exports as a percentage of GDP increased rapidly between 2000 and 2005, while based expenditures (household investment and credit consumption) also increased, which led to a slight decrease in the government share of domestic demand. From 2006 to 2008, however, exports share in GDP slightly decreased while government's share remained fairly stable and household autonomous demand also increased. What this data seems to show is that the Brazilian economy was indeed growing directed towards external demand from 2000 to 2005, where exports were central contributors to growth and were increasing their importance on total demand. During the 6 years period, the external sector contributed to an average 2.5% growth, while domestic sector contributed to only 0.7%. Which under our definition expressed in section 5.1, would characterize this period indeed as export-led. On the other hand, however, this growth was undermined by fairly low growth of government expenditures which represent a much larger share of GDP, with its rate of growth contributing more to GDP proportionally than exports.

The period from 2006 to 2008 showed that the economy was able to grow much faster when domestic expenditure, and specially government expenditure, grew alongside exports. With the quick GDP growth, public debt to GDP decreased even with faster rates of growth of public expenditures (Figure 7). From 2006 to 2008, the domestic sector contributed to 6.3% of GDP growth, while the external sector contributed -1.3%, because of the great increase in imports, leaking out domestic demand. These three years are clearly domestic demand led, with special contributions by government expenditure (2.3%) and credit-based consumption and household investment (1.7%).

Figure 7. *Net Public Debt as % of GDP*



Source: Central Bank of Brazil

This period of high growth led by government expenditure with increasing exports remained until 2011. Even though GDP contracted by -0.1% in 2009, with the global crisis, it then went on to grow 7.5% in 2010 and 4.0% in 2011 on year-on-year comparisons. Brazil had passed without problems through the financial crisis and had established itself as the 6th economy in the world. With a policy that benefited from high export growth and financial inflows, loosening the external constraint, but that was ultimately oriented towards the domestic market, with the state

having a leading role on the growth regime through government expenditures and credit, alongside minimum wage policies and social transfers.

However, in 2011 external conditions deteriorated with the stagnation of commodity prices (that had been growing since 2003) and with the Euro Zone crisis affecting foreign demand. As a policy response, the newly elected government of Dilma Rousseff, also from the center-left Worker's Party, implemented fiscal expenditure cuts, and started lowering interest rates and with it devaluating the domestic currency (Carvalho, 2018). On the other hand, as we can see from figures 5 and 6, there was no lack of foreign currency, as financial flows and accumulated foreign reserves maintained a fairly loose external constraint. That is, there was enough external liquidity to sustain higher domestic demand growth, at least for some time. The policy change would then have been a political choice and not an imposition from the external conditions (Summa and Serrano, 2015). There was specially a decrease in public investment in the period. The economy decelerated to an average 1.8% growth rate between 2012 and 2014. Government expenditure had remained high in 2009 and 2010, also as counter-cyclical policies against the effects of the global crisis on exports and on general expectations. It contributed 2.3% yearly in average for GDP growth in the two years, while in Dilma's first government from 2011 to 2014, government expenditure only contributed on average for 0.8% GDP growth. The external sector contributed -1.6% to GDP growth in 2009 and 2011, due to the fall in export demand and maintenance of strong domestic demand inducing imports. The external sector as a whole did not affect GDP growth in the Dilma's first term (2011-2014).

But the more dramatic shift in policy starts in 2015, accelerating from 2016 onwards with the parliamentary coup that led to a policy of strong austerity and wage cutting. Already in 2015, with a very conservative parliament and strong political pressures, Dilma started presenting harsher budget cuts. Government expenditure's contribution to GDP growth was of -2.7%. Credit cuts, that had started in the private sector already in 2012, now also reached the public sector. With consumer credit and household investment together contributing -5.8% to GDP growth, although part of this was offset by an increase in consumption out of disposable income. The external sector improved, contributing to 5.5% of GDP growth, although the economy still saw a contraction of 3.5%. In 2016, Dilma is taken out of office on a parliamentary coup. The new government implements strong structural reforms with a labor reform that weakened the power of labor and a fiscal reform

that froze all expenditures to the level of that year (all discretionary expenditures would grow with inflation but below GDP growth). The same policy agenda kept on in 2019, the first year of Bolsonaro's government.

As we can see from Table 4, the period was of a long recession, with average -0.5% growth, although the external sector contributed to 1.8% growth. There were average decreases in all autonomous expenditures with the cuts in public investment being the strongest. It is also interesting to notice that private corporate investment followed this decrease. The argument made by those implementing the austerity policies in the period was that it would increase confidence and thus induce new investment, which did not happen.

Ackay et al. (2022) does not distinguish the different periods as we did, taking the period of 2009 to 2019 in their analysis, as they were comparing a diverse set of countries. Nevertheless, the classification of the period as 'domestic demand-led' does not seem to match what we have just shown. As we have seen, the period saw a deceleration of government expenditure, a weakening of workers in comparison to capital, and a decrease in credit-based expenditures. The classification as a domestic demand-led regime in this case seems to be biased by average effects. Because domestic demand was still strong in 2009 and 2010, and the external sector deteriorated in these first years, average results show the domestic sector contributed more than the external sector to growth in average in the period as a whole. On a closer look we see that domestic demand was strong in 2009 and 2010 and deteriorated progressively from 2011 to 2019, while external demand was very weak in 2009 and 2010 because of the global crisis and improved steadily from 2012 onwards, although not fast enough (given its weight on total demand) to compensate for the fall in autonomous domestic demand.

We can see from the example of Brazil, that the emphasis given to the level and direction of change of net exports in classifying growth regimes undermines the macroeconomic policy-making regarding domestic demand contributors and tends to offset the role of public expenditures especially. For the specific case of Brazil, as we have seen, the government represents a large share of total demand, with fiscal policy being an important determinant of growth. Moreover, the external financial variables seem to show that financial flows to the periphery in the 2000s have allowed for a greater growth of domestic demand even for countries incurring in current account deficits, like Brazil.

Nevertheless, the case of Brazil is biased to assess the quality of the demand and growth regimes methodology of clustering more generally because the periods chosen by Ackay et al. (2022) are not a good fit for Brazil specifically (their study look at 8 countries). As we have seen, between 2000 and 2005, and 2015 and 2019, the external sector was the main contributor to growth and the composition of demand benefitted exports, characterizing export-led regimes. The first period presenting small but important average annual growth of 3.2%, while the latter period representing a recession and very sluggish recovery with average annual growth of -0.3%. While in the period between 2006 and 2014, domestic demand contributed more to growth than the external demand, and increased relative to exports, pointing to a domestic demand led regime. Although the period of 2006 to 2010 saw an acceleration of autonomous domestic expenditures and 4.5% average annual growth even with a global financial crisis, while the period between 2011 and 2014 saw a deceleration of domestic autonomous demand, and average 2.3% annual growth rates.

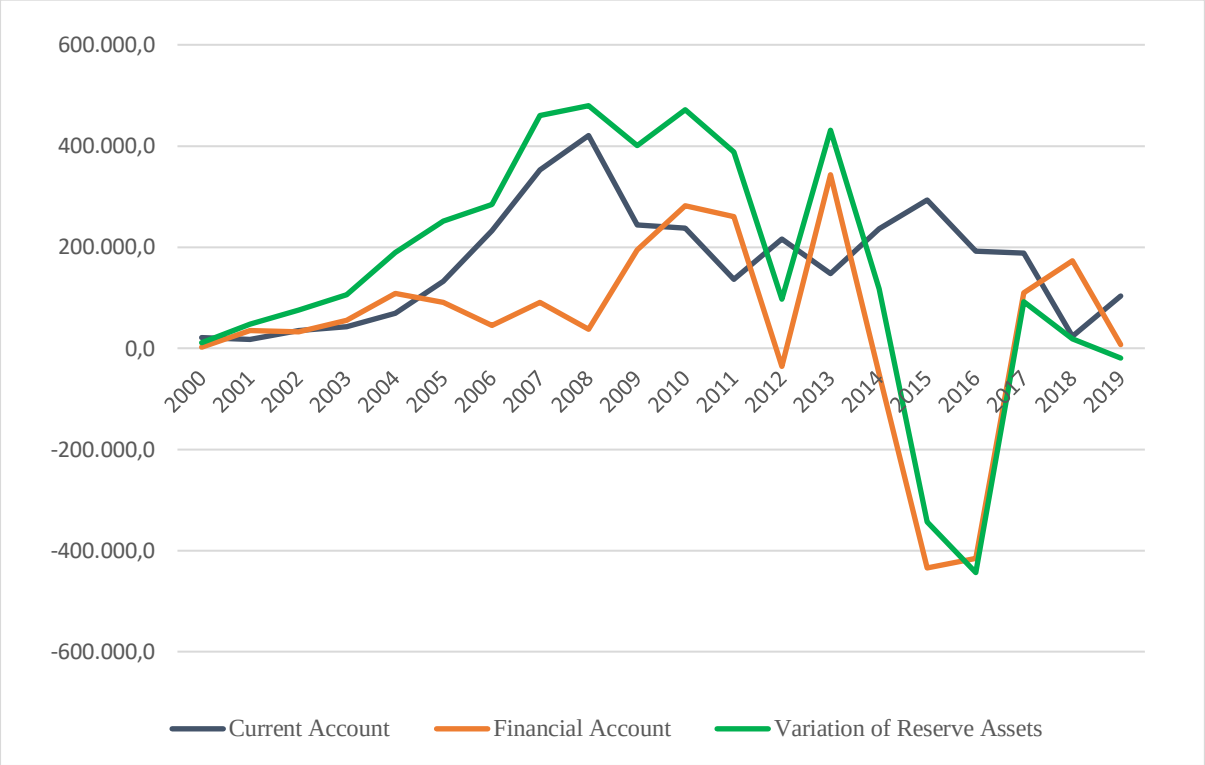
5.4.2. China: a rise based on external demand?

The period from 2000 to 2008 in China has been characterized in the literature as 'export-led mercantilist' (Hein and Mundt, 2012; Ackay et al., 2022). Indeed, exports seem to have greatly contributed to growth in the country. On the other hand, domestic demand components also seem to have contributed significantly. As we can see from Table 3, while the external sector contributed to 4.4% of GDP growth, the domestic sector contributed in 6.1%. The same can be seen within the autonomous demand components. While exports were by far the one that contributed the most to growth with 5.8%, it did not contribute more than the sum of the domestic autonomous components which contributed to 6.5% of GDP growth. Breaking down the contributions we have government expenditure 3.8%, residential investment, 2.3% and only 0.4% in credit-based consumption.

Medeiros et al. (2016) have highlighted that attributing the growth of China only to its export sector can be misleading. The rate of growth of China greatly surpassed those of the center countries to which it exported the most (US and the Eurozone). That is, if growth in China could be explained only by exports, China should have grown just as much as the countries it exports to (or its share of total export market would have to greatly increase in the period). It was able to 'decouple' from the growth of its exporting markets because it was able to also grow domestic expenditures tied to a structural change towards industrialization. They point out to three structural

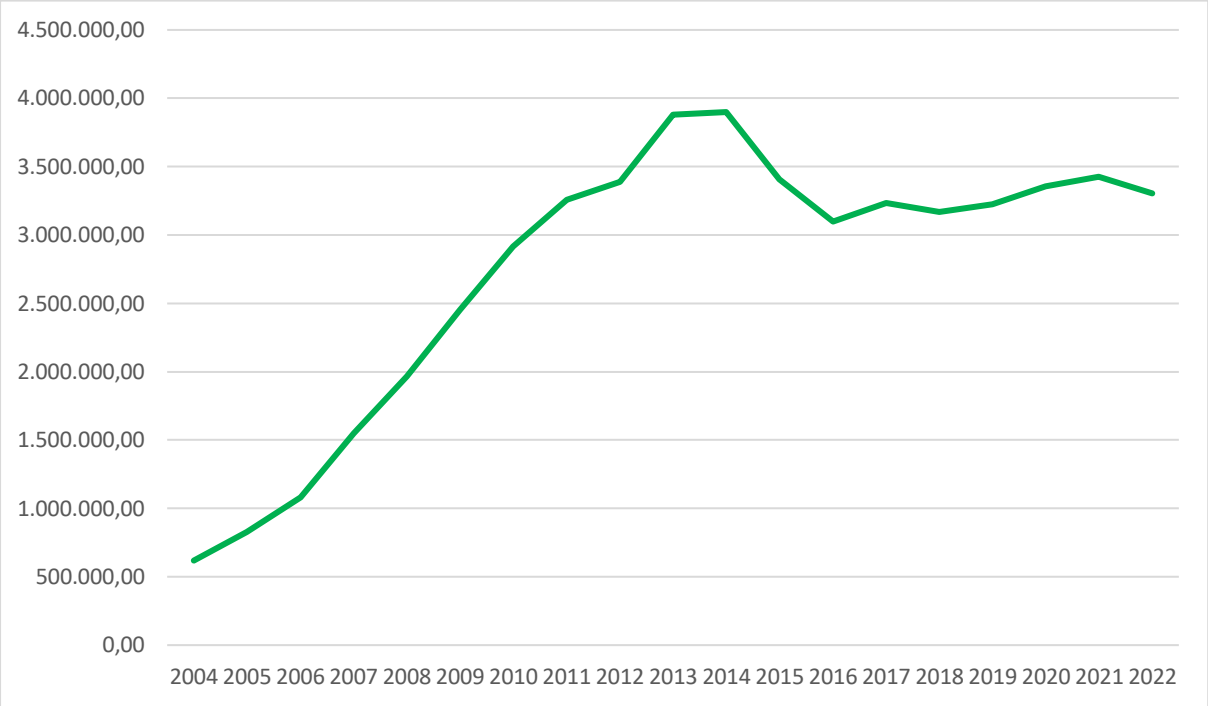
industrial growth engines in China linked to different demand sources: final manufactured goods for exports (led by exports), capital goods for heavy industry (led by urbanization and infrastructure investment, in turn led or coordinated by the government), consumption and capital goods for the growing domestic market (led by domestic demand generally).

Figure 8. *Balance of Payment flows – China (millions of US dollars)*



Source: IMF

Figure 9. *Reserve assets – China (millions of US dollars)*



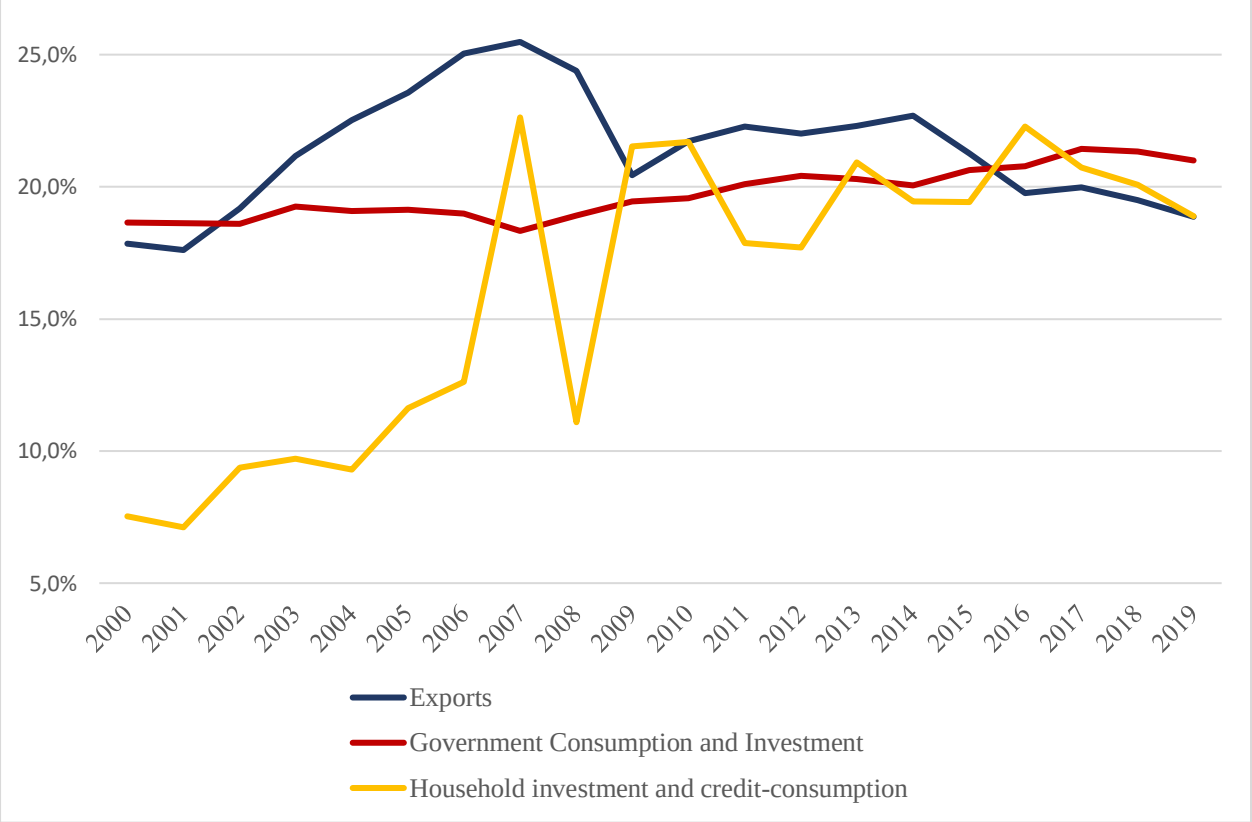
Source: IMF

In terms of external financial position, figures 8 and 9 show that the period from 2000 to 2008 saw the growth of both current account and financial account's surpluses in China. Which led to a massive and record accumulation of reserve assets. These high surpluses indeed point to a 'mercantilist' position in the sense that China did not fully use its external space for domestic growth to build a large reserve asset. possibly aiming to defend it to external shocks in the future (Emboava Vaz, 2023). After the Asian 1997 Financial Crisis, many emerging countries started building reserve assets as a hedge against possible external shocks and financial speculation, which was helped by the increase in capital flows to peripheral countries in the 2000s, as was the case for Brazil that we just saw. Nevertheless, it is groundbreaking that China had a 10.5% average growth rate in the period while not using all its external space and accumulating over 3.5 trillion US dollars.

Medeiros (1999) has argued that China was one of the last beneficiaries of the 'development by invitation' (Wallerstein, 1974) policy by the US during the Cold War. That is, that due to Cold War geopolitics and the goal of dividing the socialist world, the US not only lifted sanctions on China at the end of the 1970s, but also offered good opportunities for US American

companies to move there and good market opportunities for Chinese produced goods to be sold in the US market. This process led to rapid rates of growth in the 1980s and 1990s. But reached its peak, in terms of average growth rates, in the 2000s (even though now the basis of comparison was higher). Having become the 'manufacturing center of the world' China was able to export at record levels to the US and the Eurozone, economically integrate other countries in East Asia, and grow its domestic market. As Medeiros (2012) points out, although the wage share fell, the real wage tripled in the period from 2000 to 2008 (both are possible because productivity more than tripled). It was in this period that China was able to enter a virtuous cycle of development, with technological gains, structural change, and high growth. Of great importance to the political economy analysis that we saw in chapter 4.

Figure 10. *Autonomous Demand Components as a % of GDP – China (real terms)*



Source: IMF, OECD, BIS

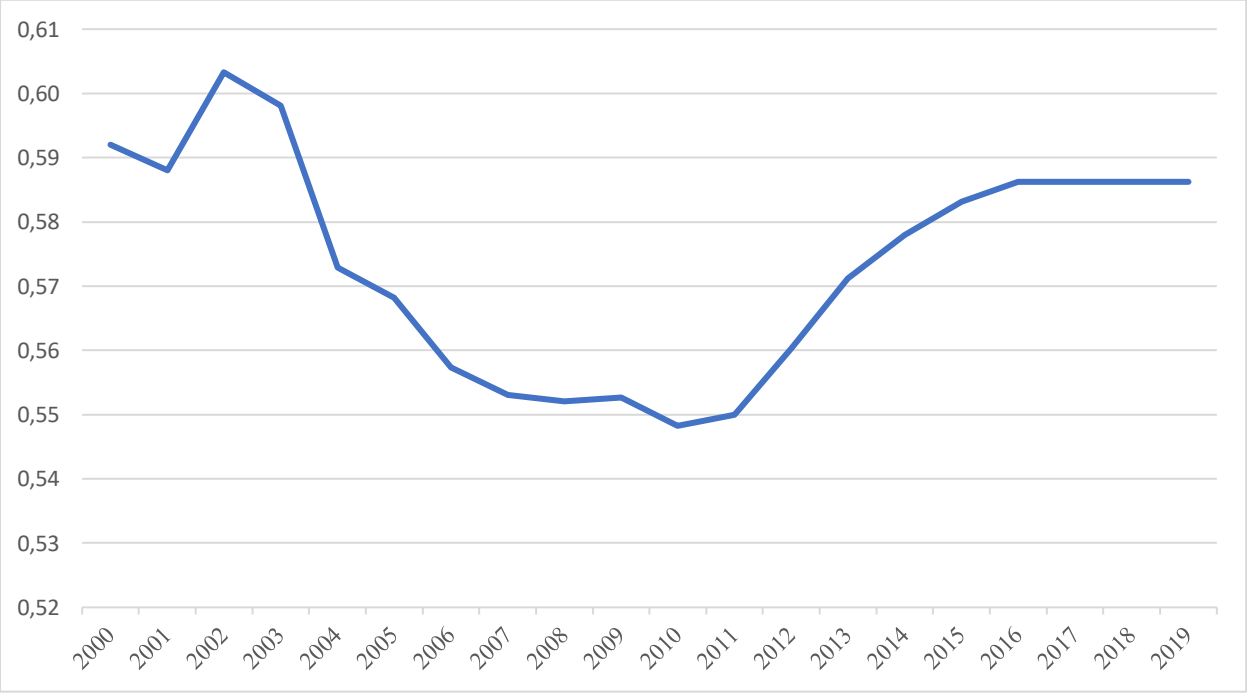
In the period of 2000 to 2008, exports were the main autonomous demand contributor to growth and exports' share of GDP grew from 18% to more than 25%. On the other hand, the domestic sector still contributed significantly more than the external sector to GDP growth.

Government expenditure remained at high increasing levels, keeping up with GDP growth and contributing to 3.8% GDP growth, household investment and credit consumption contributed to 2.7% GDP growth, especially increasing from 2005 onwards. The common interpretation, that China grew in the period by price competitiveness, dampening wages seems misleading. Although the wage share fell in the period (Figure 11), real wages tripled, growing much faster than other Asian countries in the same period (Medeiros, 2012). Of course, wages in China were still at internationally low levels, which attracted foreign direct investments since the late 1970s until the 2000s, but that was also combined with the potential of a strong demand market and with strong industrial policies that allowed China to have huge gains in productivity (Medeiros, 2012; Andreoni and Tregenna, 2020). Under the concept of export-led growth presented in section 5.1, thus, we could not classify China in the period as a clear export-led regime, as the domestic sector contributed more than the external sector to GDP growth. Nevertheless, the increase in exports in the composition of final demand, points out that the balance of power in the country fostered a growth oriented progressively towards external markets in the 2000s. It is because this outward orientation was combined with strong domestic demand expansion and capital flow attraction that China was able to grow and simultaneously accumulate foreign reserves at record rates.

After the 2008 crisis, as clearly seen in Figure 10, the situation changed for China. International organizations and post-Keynesians then stressed that China could not keep growing anymore with an external market orientation and it needed to develop a stronger domestic demand (Palley, 2011; UNCTAD, 2012). This was indeed what happened. As we can see from Table 4, in the period from 2009 to 2014 government expenditure contributed 3.0% to GDP growth, while credit-based expenditures (consumption and residential investment) contributed 4.9% to GDP growth, especially pushed by residential investment. According to Medeiros (2012), the investment of state-owned companies is also crucial to explain this shift towards domestic market growth. Unfortunately, we cannot differentiate which part of corporate investment accounts were from state owned companies. Nevertheless, it seems clear that the state's focus on infrastructure had an important impact on crowding in residential investment, and overall pulling growth in the country. We can also see from Figure 10 that the share of government expenditure (not including state-owned companies) in GDP also increased in the whole period.

There was an important shift in Chinese politics between 2012 and 2013. With the election of Xi Jinping, the announcement of the Belt and Road Initiative, new measures of state economic intervention and wage valorization. As we can see in Figure 11, in 2012 the labor share of GDP started growing again after 10 years of decrease. The government also implemented devaluations in 2014 and 2015. With the deceleration of total growth rate (in relation to the record rates of the previous decade), the shifts to more state intervention, and fears of new devaluation, there was strong capital outflows in 2015 and 2016, as shown in Figure 8. As a response, the government spent almost 1 trillion US dollars of its reserves to preserve the exchange rate levels, prevent a speculative attack, and give security to investors. While it also implemented new capital control policies.

***Figure 11**. Share of Labour Compensation in GDP at Current National Prices - China*



Source: FRED data

As we can see in Table 4, the period from 2015 to 2019 presented an average 6.7% GDP growth, against the 8.7% average in the 6 years before. The greatest difference being the deceleration of residential investment. Possibly led by the saturation of the market, and new signs of a possible real state crisis. Domestic content contributed positively to growth for the first time, with the deceleration of globalization and the development of important domestic industries in the

country. Government demand also remained strong, being the main responsible for growth in the period, contributing to 2.6% of GDP growth.

The period as a whole, from 2009 to 2019, is classified as 'weakly export led' by Ackay et al (2022). This follows from the fact that the country remains with a current account surplus, but with decreasing net exports (thus negative contributions of net exports, although very slightly). This does not seem to be the case under our analysis. Growth in the period seems to have been led by domestic demand, with government expenditures playing a big role in the whole period, while residential investment played a very important role in the years following the Global Financial Crisis. China's case exemplifies how the focus on net exports and current account results may be misleading as they undermine the role played by the other domestic demand components leading growth.

5.5. Summing up some post-Keynesian Structuralist takeaways on export-led vs. domestic demand-led growth regimes

Our exercise exemplifies that the regime classification used in demand and growth regimes in finance-dominated capitalism literature can be misleading. Its main problem is that it gives too much importance to net exports (and current account results) thus implying that it is in its sign and its rate of variation the main explanation of what is *leading* growth.[72] This classification ignores the role of capital account opening on financial accounts and, more importantly, undermines the other demand components' contributions to growth, especially demand components influenced by government policy. Like government consumption, public investment, and credit-based expenditures (influenced by monetary policy). Although such limitations would certainly be expected when trying to cluster such different countries into regimes, these specific limitations seem to arise from a general problem of how the external sector is perceived in the literature.

The approach presented here, was to first and foremost look at whether a country has its demand growth led mainly by the domestic or the external sector. Then looking at the changing composition of autonomous demand, which helps to see whether growth is progressively oriented towards domestic or foreign markets. Full export-led or domestic demand led growth regimes have

[72] It should be noted that Hein (2023) and Kohler and Stockhammer (2020) explicitly demonstrate that the 'demand and growth regimes' classification does not present growth *drivers* only growth *sources*. On the other hand, by clustering countries in regimes such as export-*led* it is implicitly assumed that such demand sources are leading growth.

to both be led by that corresponding sector and have its share in autonomous demand increasing or remaining stable in the period. The intermediate cases would then be those in which the external sector leads growth while exports decrease its share in autonomous demand or the domestic sector leads growth while exports increase its share in autonomous demand. Table 5 summarizes a classification originated from the analysis presented here of what characterizes a growth regime:

***Table 5**. Classification of growth regimes based on domestic vs. external contribution to growth and orientation of leading demand components.*

	Main contributor to growth	Composition of autonomous demand (domestic vs. external)
Export-led Growth Regime	External sector leads growth	Stable or increasingly export-oriented
Domestic-oriented Export-led Growth Regime	External sector leads growth	Increasingly domestic-oriented
Export-oriented Domestic Demand-led Growth Regime	Domestic sector leads growth	Increasingly export-oriented
Domestic Demand-led Growth Regime	Domestic sector leads growth	Stable or increasingly domestic-oriented

Source: own elaboration

Table 5 presents a new regime clustering taxonomy based on the post-Keynesian Structuralist tradition. More precisely, it is based on Freitas and Dweck's (2013) decomposition exercise and its focus on which sector of the economy leads growth on one hand. And on the other hand, it is based on the argument by Medeiros (2015) and Akyüz (2010) that the sustained increase in export as a share of GDP is a sign of export-orientation of development. It is important to note, that the orientation here is not related necessarily to a deliberate development strategy, but to the resulting macroeconomic dynamics out of a country's domestic political economy and international integration. The methodology refers to *orientation* as an expression of the dynamic of demand's composition, while it refers to a sector as *leading* growth when it is the main contributor to demand and thus GDP growth.

It is clear that Table 5 represents a first layer when assessing a country's growth pattern. That is, the first step would be to identify whether the growth regime is led by domestic or external demand, both currently and its dynamic form (if it is increasingly oriented outward or inward). The next step would then be to understand which component within each sector is leading growth. The debt-led private consumption boom regime could for example be thought of as a type of domestic demand led growth in which growth is led by credit-based private expenditures resulting in increasing private debt. While state-led growth could be seen (as in Brazil 2006-2014 and China 2015-2019), when within the domestic demand, government expenditure is the main contributor to growth. In the same way, an export-led growth may be led by contributions of growing exports or by increasing the domestic content of production. We can express the cases of Brazil and China that we analyzed under this taxonomy, in Table 6.

Table 6. *Classification of Brazil and China in the period between 2000-2019*

	Brazil	China
Export-led Growth Regime	2000-2005 and 2015-2019	
Domestic-oriented Export-led Growth Regime		
Export-oriented Domestic Demand-led Growth Regime		2000-2008
Domestic Demand-led Growth Regime	2006-2014	2009-2019

Source: own elaboration

For China the breaking point of 2008 was kept from Ackay et al. (2022), as the literature specialized in the country highlights the Global Financial Crisis as a structural break in development patterns in the country (Medeiros, 2012), as we have seen. On the other hand, in section 5.4.1 we have seen that the periodization for Brazil works better when considering the policy shifts in domestic policymaking as the structural breaks between periods. Even when there is heterogeneity within certain periods, like the differentiation made between the 2006-2010 and the 2011-2014 periods for Brazil. Nevertheless, for the cases we focused on, the growth contributions and the composition of demand seemed to follow the patterns expected from the political economy literature focusing on political/economic policy shifts.

Apart from looking at what leads demand growth and how it is oriented, we have also looked at financial variables, in light of the external constraint discussed in this dissertation, and distribution variables. Since this work was focused mainly on the distinction between export or domestic demand growth regimes, we have focused on external financial variables (although public debt was also presented to look at the seemingly state-led case of Brazil). Not only current accounts, but financial account balances and the international investment position (especially the stock of foreign reserves) are crucial to assess whether a country may have to shift its growth pattern due to external financial constraints. Here, however, there is an important analysis that should be developed further. It comes from the distinction between financial liquidity and sustainability. Brazil in the period of 2011-2014 illustrates this problem. In the period, the country presented a seemingly unsustainable growth process with high sustained current account deficits. On the other hand, great financial inflows were maintaining balanced or positive balance of payment results and the country had already accumulated large stocks of reserve assets. This means there was good external liquidity, there was space for the expansion of domestic demand in the short to medium run (Serrano and Summa, 2015). But whether that was possible for longer periods seems more complicated, under the considerations made here on the role of capital inflows as increasing liabilities. Further research could implement this methodology with a more structured analyses of the financial variables for the classification of regimes.

Another limitation of this taxonomy is that it still fails to assess what Medeiros (2015) points out as the productive structure underpinning an 'export-led growth' experience. Following the post-Keynesian Structuralist tradition and the discussion of chapter 3, the structure of production has a direct impact on the external constraint. Which means it would also affect the feasibility of a certain demand regime in the long run. As we have seen in section 3.6.2, a sustained increase in the domestic orientation requires that the imported goods and services have an income elasticity (and/or a commercial policy) that allows domestic demand to grow faster than exports. While the growth of exports themselves, loosening the external constraint, depends on producing more technological-intensive goods competitive in international markets. This would point out that high sustained growth for long periods of time (above the growth of the rest of the world) depend on structural change towards more technological intense goods produced domestically.

The taxonomy presented here builds more on the Sraffian Supermultiplier decomposition methodology than in the one from National Income and Financial Accounting, although it tries to incorporate financial variables as done by the latter. That is, a decomposition with the distinction between induced and autonomous variables was considered, breaking down investment and consumption between autonomous and induced parts, and considering imports as an induced expenditure. If on one hand this breakdown follows Keynes basic multiplier insight, on the other hand the consideration of corporate investment as fully induced is closer to the Sraffian Supermultiplier tradition. Even on a synthesis around the Supermultiplier model as a basis demand-led growth model, neo-Kaleckian versions of the Supermultiplier still consider corporate investment may have an autonomous component (animal spirits) in the short to medium run, which is the time of analysis of decomposition methods. The difficulty in separating an autonomous and an induced part of corporate investment in the short run may be a difficulty in conciliating both traditions.

On the taxonomy itself, the main difference is that what is considered to lead growth is the demand contributions to growth and not the result of current account balances. As one can see in Table 1, in the National Income and Financial Accounting clustering a country with current account surpluses is necessarily classified as export-led. This prioritizes, implicitly, the net demand relation of a country with the rest of the world (note that a country with current account surplus is net receiving demand from the rest of the world and sending savings). A country may very well, however, be net receiving demand from elsewhere while having greater growth contributions (or generally growth drivers) domestically than from this demand received from elsewhere. With one potentially supporting the other, as exports ease the external financial constraint. For this reason, this taxonomy prioritizes growth contributions.

The attention given to the relative size of domestic and external demand is influenced by Development Economics more generally and the idea of development patterns from a demand-side perspective in particular. That is, to look at whether a country's development is focused on its own domestic market or *dependent* on the growth of other markets. The underlying idea, from a Structuralist perspective, is that a peripheral country may only break its dependence to center countries if it is able to develop a domestic market with its own endogenous dynamism. The classification of China as export-led mercantilist in finance-dominated capitalism literature, seems

not only to undermine the role its domestic market played in its own growth, but also in its political economic role globally.[73] The international political economy analysis of the post-Fordist period in the literature can greatly benefit from this different macroeconomic view on the external sector presented so far.

6. Conclusions

This master's dissertation has contributed to the macroeconomics and political economy of distribution and growth by linking the finance-dominated capitalism literature to the international political economy analysis of the post-Keynesian Structuralist tradition. It has argued that a synthesis between both views of political economy is possible, grounded on the recent convergence towards the supermultiplier as a basis theoretical model of demand-led growth (Lavoie, 2016; Hein, 2018; Dutt, 2019) and on Kalecki's (1943, 1971) political economy of distribution and growth in capitalism. On the other hand, it was argued that such a synthesis hangs on the incorporation of the treatment of the external sector, the role of a country's integration in international division of labor and geopolitics presented by the post-Keynesian Structuralist tradition. The better treatment of the external sector contributes not only to the analysis of growth regimes in peripheral countries, but to the understanding of the global accumulation regime.

While exports are a source of demand for all capitalist countries, they are less likely to drive growth the larger the domestic market is in total demand. On the other hand, exports are a source of foreign currency which allows domestic expenditures to grow. This is relevant for all countries that trade majorly in foreign currencies, but more restricting to those that import higher income elastic goods than those that it exports. Imports are a source of supply that represent demand leakages both through the multiplier and the accelerator effects, being endogenous to growth patterns. Exchange rate and domestic distribution effects on the external sector cannot be generalized as their result depend on the country's national productive structure and international integration. Financial balances can show a net balance of demand expenditures but not how they were financed. Once all of that is considered, the relationship between the external sector and the

[73] It is interesting to note that although later contributions in the literature considered China as export led mercantilist (Hein and Hundt, 2012; Ackay et al., 2022), the first contributions were not so sure if China should be considered 'export-driven growth models' (Stockhammer, 2010).

development of domestic markets can be interpreted and the export-led stagnation and false-positive export-led growth cases emerge.

Overall, these effects of the external sector in demand-led growth give greater focus to a country's structure of production and its integration in the global economy, away from the narrower focus on price-competition highlighted in the canonical neo-Kaleckian open-economy model (Blecker, 1989) underpinning the finance-dominated capitalism literature and its methodologies of growth regime identification (Stockhammer, 2010; Hein and Mundt, 2012; Hein, 2023). Both views are not necessarily contradictory, but the greater attention given to the external constraint and non-price competitiveness have important implications for political economy analysis.

Under this view of the external sector, the political economy and macroeconomic views of finance-dominated capitalism can be revisited. Both the Fordist and the neoliberal/finance-dominated regimes of accumulation cannot be disentangled from geopolitics and shifts in the global monetary system. While neoliberalism led to harsh external crises and stagnation in the periphery in the 1980s and 1990s, a new conjecture arose in the 2000s. New balance of payments measures by developing countries, low interest rates, large capital flows to the periphery, and increasing commodity prices loosened the external constraint. The combination of increasing trade deficits in the debt-led US economy and massive domestic investments in China, led to the rise of the rest, benefitting the whole periphery. After the 2008 crisis, and especially after the setback in global liquidity since 2015 this economic dynamism seems to have been maintained only in Asia.

The dissertation then moves on to the analysis of country specific experiences. An alternative definition of an export-led growth regime is presented. It depends on the external sector being the main contributor to growth and on an increasing or stable share of exports in autonomous demand. The focus on net exports and the current account balance in the National Income and Financial Accounting regime classification undermines the role of domestic demand components and the possibility of capital flows funding current account deficits. An exercise of demand-led growth decomposition and stylized financial statistics for Brazil and China was presented to illustrate this point and analyze growth pattern in the countries in the 2000-2019 period. Government demand and credit-based expenditures had a big leading role to play in these countries usually classified as 'export-led'. A new taxonomy is then proposed differentiating export- and domestic demand- led growth regimes.

There is much common ground between the demand and growth regimes/models in finance-dominated capitalism and the post-Keynesian Structuralist literatures. Closer research agendas could bring new insights to both traditions. It is also clear that although both traditions have already developed deep analysis of the neoliberal regime of accumulation up to the 2008 crisis, there still seems to lack more profound analysis on what has happened in the 2010s, and even in the post-covid world of the early 2020s. The world and its political economy balance seems to be changing quickly. Economists and political scientists must keep up if they want to understand and to change it.

7. References

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