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Learning from distant cousins? Post-Keynesian Economics, Comparative Political Economy and the growth models approach

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Abstract

Since the Global Financial Crisis there has been growing interest in post-Keynesian macroeconomic theory by political economists. In particular the recent growth models approach in Comparative Political Economy (CPE) draws heavily on Kaleckian macroeconomics of demand regimes. This paper, firstly, traces the disintegration of 19th century political economy and highlights that many streams within heterodox economics are a continuation of the political economy project, as are the subfields of CPE and International Political Economy in the social sciences. Secondly, the paper gives an overview of the growth models approach and its relation to post-Keynesian economics (PKE). It clarifies different strategies of identifying growth models empirically, namely GDP growth decomposition versus analysing growth drivers, and it highlights changes in growth models since the Global Financial Crisis. Finally it identifies opportunities and challenges that emerge from a continued engagement of PKE with political economy and with CPE in particular.

Keywords: Post-Keynesian Economics, Comparative Political Economy, growth models, varieties of capitalism

JEL codes: B2, B5, E12, O43, P51.

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1 Introduction

Since the Global Financial Crisis (GFC) there is a growing interest in post-Keynesian Economics (PKE) from the side of social scientists.¹ In the field of Comparative Political Economy (CPE), which had previously been dominated by the Varieties of Capitalism approach, Baccaro and Pontusson (2016) have proposed the growth models approach that builds on post-Keynesian (PK) macroeconomics. It marries the analysis of demand regimes with the institutional focus of CPE and is part of broader trend of engagement of political economy with heterodox economics and PKE in particular. In International Political Economy (IPE), Blyth and Matthijs (2017) have made a forceful statement that IPE needs to re-engage with critical Keynesian approaches. This raises interesting questions about the mutual relationship between PKE and CPE: what can CPE and PKE learn from each other? And more generally, is PKE part of the political economy tradition and what is the significance of its engagement with current political economy approaches in the social sciences? The aim of this paper is to take stock of the recent engagement of CPE and PKE and to identify areas for further dialogue.

This paper makes three points. First, we clarify the historical origins of PKE and CPE in the 19th century political economy tradition and the subsequent split of political economy into distinct fields of economics and the social sciences. PKE and heterodox economics more generally are part of the political economy tradition, but have become narrower in the type of questions they investigate due to pressures of discipline. CPE forms a sub-field of political science and sociology and considers economic, institutional and political phenomena. It thus resurrects ambitions of the original political economy approach, but comes from the modern social sciences. In this sense PKE and CPE are natural complements in that both are situated in the political economy approach, but depart from different disciplinary backgrounds. We argue that they are best thought of as distant cousins, but that their different departure points also generate difficulties for communication.

Second, we highlight the contributions of PKE to CPE in general and the growth models approach specifically. We give an overview of the development of the growth models approach and how it builds on PK analysis of demand regimes. We clarify the key concepts of demand regimes, growth drivers and growth models theoretically, and then discuss different ways to empirically identify them. We argue that while the growth models approach got traction via the export-led/debt-led growth models distinction, this typology should not be confused with the growth models approach itself. Analyses of growth models need to be based on a comprehensive set of potential growth drivers and their dynamic properties. Specifically, we argue that finance-led growth comes with cycles and that there are forms of state-led growth.

Finally, we explore potential benefits for PKE of engaging with CPE (or with political economy more generally). While PKE is part of the political economy tradition, it has become narrower over the past decades. While it frequently refers to power and institutions as explanatory factors, they are not subjects of analysis themselves. One area where this is particularly important is regarding state policies, which are often treated as exogenous in PKE. Thus engagement with CPE (or political economy more generally)

¹ While economics ought to be considered a social science, in this article we will use the term 'social sciences' to refer to political science, international relations and sociology, and will contrast these with economics (see section 2).

allows PKE to build towards historically and institutionally specific analysis. We illustrate potential benefits using the Sraffian supermultiplier approach, institutionalist PKs, and Minskyans as examples.

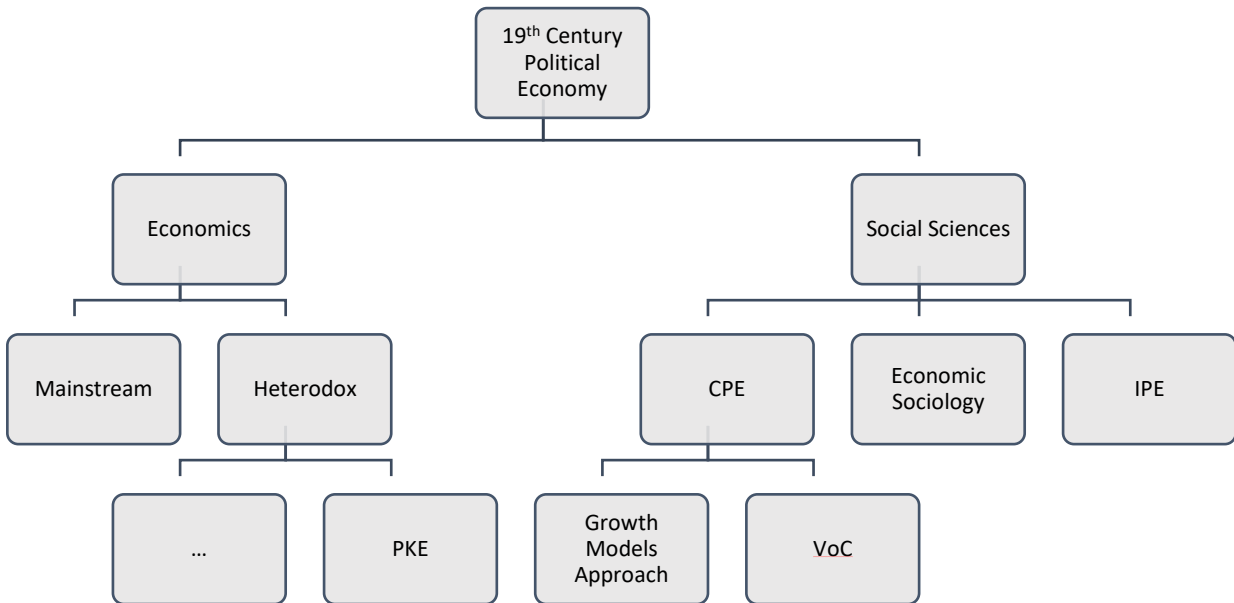
The paper is structured as follows. Section 2 traces the bifurcation of the political economy approach into separate fields of economics and social sciences, and situates PKE and CPE within these. Sections 3 and 4 give an overview of the debates within CPE and how the Kaleckian-inspired Growth Models approach emerged. Section 5 clarifies the notion of growth models and discusses their empirical identification. Section 6 analyses changing growth drivers since the GFC. Finally, Section 7 concludes by highlighting challenges as well as opportunities of a continued conversation between PKE and political economy.

2 From Political Economy to Post-Keynesian Economics and Comparative Political Economy

Today PKE and CPE seem like rather different fields. However, they share a common origin in 19th century Political Economy and, we argue, they are best understood as distant cousins. The 19th century saw a broad field of political economy that analysed economic and political phenomena, typically with a strong awareness of the historical and institutional circumstances. For most proponents the existence of classes and class conflict was a given. It encompassed a variety of different theoretical and political positions ranging from liberalism and the German Historical School to Karl Marx. Notably, that was before the formation of modern academic disciplines. This tradition of political economy came to an end with the rise of neoclassical economics and the separation of economics and social sciences. The use of the term ‘pure economics’ in the title of Leon Walras’ most famous work is indicative here.² Figure 1 gives a graphical representation of the bifurcation of 19th century political economy into different disciplines and subfields.

² Walras uses ‘pure economics’ in contrast to ‘applied economics’ and ‘social economics’, which were concerned with what is true, useful and just respectively (Jaffe 1956). The second and third are much closer to political economy.

Figure 1. The bifurcation of political economy research



The separation of disciplines would have a profound impact on the type of questions economists ask and the framing they use in their analysis. Most specifically it justified excluding the analysis of power relations and mainstream economics would only return much later to the analysis of institutions in the form of New Institutional Economics (Williamson 2000). The pathways to the dominance of modern (neoclassically informed) mainstream economics varied by country, with dissenting views surviving in many cases for a long time. In the 1930s economics was shaken by the Keynesian revolution. Keynesianism allowed for non-rational behaviour and thus gave prominence to social conventions and institutions that would stabilise the formation of expectations. It also highlighted fallacies of composition that undermined the neoclassical project of rational-actor microfoundations. Within the mainstream the Keynesian challenge was resolved uneasily with the neoclassical-Keynesian Synthesis, which used a long run/short run dichotomy to reconcile these strands. In the short run prices would be rigid, which gave rise to Keynesian results. However, that did not solve the theoretical tensions. What would later become PKE rejected the Synthesis; the more radical wing of the mainstream (e.g. Milton Friedman and Robert Lucas) attacked the Keynesian elements from the neoclassical side.

The second big transformation of economics came in the 1970s with the Monetarist and New Classical counterrevolution. The Synthesis Keynesians were attacked by Monetarists in economic policy and by the New Classicals theoretically. From then onwards we observe a substantial narrowing of what is considered an acceptable theoretical framework, in particular an insistence on neoclassical 'microfoundations'. Neoclassical economics also branched out into other social sciences with the 'economic approach' applied to questions outside the field of economics (Becker 1971), sometimes referred to as economic imperialism.

The Monetarist counterrevolution marginalised those outside the mainstream, most acutely the post-Keynesians.³ Their school formation dates from this period of a growing sense of exclusion from the economics journals and grant agencies; and PKs start forming their own journals, conferences etc. From this point economics is characterised by a very strong (and repressive) mainstream and a multitude of small heterodox niches, which include feminist economics, (old) institutionalism, ecological economics, Marxism, evolutionary economics, agent-based modelling etc, which negatively relate to the mainstream, but much less to each other (Dobusch and Kapeller 2012). Effectively these fragmented heterodox approaches continue the project of political economy; however, since the later 1990s the term 'heterodox economics' is often used.⁴

While the narrowing of economics suited the mainstream, it created tensions within PKE. PKE is often based on a class analytic approach, it emphasises the importance of institutions and gives prominence to power relations (e.g. in the determination of income distribution, but arguably also in finance). However, these power relations (and institutions) are usually taken as given and not subject to analysis. To some extent that is unavoidable: in a field where most published pieces face an 8000-word limit, a certain division of labour is necessary. However, it also reflects a narrow set of questions that PKE is asking, which typically focus on pure economic issues. To be clear, this 'narrowness' has also been a strength of PKE, which has arguably more theoretical coherence than other parts of heterodox economics; however this coherence is a weakness insofar as it limits the explanatory range of PKE. Where this sidelining of the political economy dimension is most obviously detrimental to PKE's own research agenda is in the treatment of the state. Overwhelmingly, state policies are taken as exogenous in PKE. Often that is for analytical clarity and to highlight that state policy has different options. However, it also means that there is very little analysis of actual policy regimes (as in, say, the New Keynesian discussions of monetary policy rules) and there is even less discussion of endogenous changes in policy regimes.

Interestingly, until around 1980, PKs often used the term 'political economy'. For example one of the first book length introductions to PKE was Kregel's *The Reconstruction of Political Economy*. We are not aware of a study of where and when in the institutionalisation of PKE there was a clear shift to PKE rather than 'PKPE'. It might well have been the establishment of *Journal of Post Keynesian Economics* that tilted the balance.⁵

The split of political economy also impacted the social sciences, which would form the disciplines of political science, international relations, and sociology. From the 1970s onward we see research areas form at the intersection of economics with various social sciences, i.e. they occupy the space that the demise of political economy has vacated. These include IPE at the intersection of international relations

³ PKs had a foothold in Cambridge and in the 1950s and 60s had a status of dissident economists, i.e. outside the mainstream, but the mainstream remained in communication (PKs were able to publish in leading journals), most famously in the Cambridge Capital Controversies.

⁴ However, the largest European network of heterodox economics, the European Association of Evolutionary Political Economy, founded in the early 1980s, uses the term 'political economy'.

⁵ Within the PKs the Cambridge and Sraffian wings, which also had links with the Marxist tradition, used the term political economy. The monetary PKs, which would become important after the demise of Cambridge as the PK centre, seemed to have been less inclined to use the term. It is less clear why the Kaleckians, who played an important role in the 1980s did not use the term. Note that of the other journals founded at a similar time as *Journal of Post Keynesian Economics*: the *Review of Political Economy* has 'political economy' in the name; the *Cambridge Journal of Economics* has 'economics' in the name, but it is owned by Cambridge Political Economy Society and explicitly encourages submissions from heterodox economics and the social sciences.

and international economics; CPE that builds on industrial relations, welfare state regimes and economics (Schwartz and Tranoy 2019); and economic sociology.⁶ Among these IPE is most firmly established, but usually located within international relations or political science departments. A number of universities offer degrees in IPE. By contrast, CPE is less institutionalised. While there is a clear stream of academic literature and some textbooks (Clift 2014), there are few corresponding degrees or academic units.⁷

Thus we find a situation where both in economics and in the social sciences there are descendents of political economy. However, there is a notable lack of, or at least unevenness, of communication. First, heterodox economics is a fragmented and marginalised field that has limited visibility to non-specialists. Furthermore; many of the heterodox economists (and indeed many of the PKs) are trained economists who, in line with the standards of the field, use advanced mathematical and statistical modelling, which constitutes a barrier for many political economists. Heterodox economists, despite a basic sympathy for the social sciences, often lack systematic knowledge in the canonical theories in the social sciences and are not familiar with their recent debates. Moreover, restrictive promotion criteria often discourage publishing outside economics journals.⁸ Thus decades of disciplinary division have led to substantial communication barriers between heterodox economics and the social sciences.

3 Comparative Political Economy and Varieties of Capitalism

Comparative Political Economy emerged as a field within the social sciences that compares economic performance, institutions and political dynamics across countries, and analyses the interaction between institutions and economic growth. It thus needs a theory of growth (i.e. economics) as a well as a theory of institutions and politics. Schwartz and Tranoy (2019) give an overview of the development of CPE and highlight that in terms of the economic underpinning, there has been steady shift from a focus on demand formation to supply-side institutions.

The narrowing of CPE's research agenda in favour of the supply side manifested itself with the Varieties of Capitalism (VoC) approach that came to dominate CPE in the 2000s. The VoC approach emerged from debates in comparative industrial sociology and argued that globalisation does not necessarily give rise to one (liberal) model of capitalism, but that different versions are feasible. Theoretically it builds on neo-

⁶ There are other, often less institutionalised, fields of political economy research that transcends the economics/social sciences divide. One of the most important one is the debate on financialisation (no academic units yet) that draws heavily on heterodox economics as well as on insights from social sciences. Other fields that could be listed include aspects of gender studies, development and economic geography.

⁷ As a simple measure of the relative size and frequency of use of the terms, we check the respective citations in the Google Scholar fields. That is based on self-declaration of researchers, thus to some extent measures the strength of identity of a field. As measure, admittedly ad hoc, we take the citations of the 10th researcher ranked under each field. This measure is a mix of the willingness of researchers to list a certain field as their research area and the citations of the respective researcher. For CPE that person has citation count of 8391, for IPE 14412, for economic sociology 29292. For comparison heterodox economics the value is 2926, for PKE 576; 'New Keynesian economics' only has two researchers listed, which probably reflects that New Keynesians would identify their field as 'macroeconomics' rather than 'New Keynesian.' Thus a lower degree of institutionalisation does not necessarily represent a weakness (accessed 12/11/2021).

⁸ The main qualification to that is that, in the UK, business schools to some extent do encourage heterodox economists to consider non-econ journals as there are hardly any well ranked heterodox economics journals.

institutionalist theory (Hall and Soskice 2001) and analyses how different institutional configurations can provide a comparative advantage to firms. One of VoC's achievements is that it synthesises literatures on industrial relations regimes, welfare state regimes, differences in financial systems and in national innovation systems into a comparative country typology. At the core is the distinction of Liberal Market Economies (LME) and Coordinated Market Economies (CME): USA, UK vs Germany, Japan. Later Mixed Market Economies (MME), mostly southern European countries, have been added. Despite ongoing debates and questions on whether these typologies are still valid, it is fair to say that the country classification has been one of the most enduring impacts of VoC, while its theoretical analysis now features less prominently.

VoC has been criticized for being functionalist, firm-centred and methodologically nationalist (e.g. Bohle and Greskovits 2009). From a PKE perspective, the absence of a serious analysis of demand formation is notable. Essentially VoC offers a version of supply-side socio-economics that identifies institutional sources of microeconomic efficiency. We also note an absence of issues of financial instability or of financial factors more generally. The analysis of the market-based bank-based distinction refers to corporate finance (i.e. the financing of investment, including R&D and skill upgrading); but there is no housing finance, no speculation etc. Rather than a general analysis of demand formation, VoC is concerned with international competitiveness (almost as if foreign demand is the only one worth considering).

The supply-side and competitiveness focus of VoC becomes apparent in their contributions on the Euro crisis (Johnston et al 2014, Hall 2014). These essentially interpret the Euro crisis as the outcome of cost divergences. CME have coordinated wage bargaining systems, which leads to wage constraint (in line with export sectors), whereas MME have less coordination among unions, thus non-tradable sectors push for higher wages, which results in a loss of competitiveness. At the core, the explanation is a trade-driven story (in line with the core theoretical framework). On the side it is noted that LME and MME also rely on credit to finance domestic demand, but financialisation or financial booms clearly take a subordinate role in the analysis. Restrictive fiscal policy is reported and considered unhelpful, but plays no independent role in the escalation of the Euro crisis.

Stockhammer (2022) provides a general discussion of CPE from a PK perspective. He identifies financialisation, financial cycles, the understanding of neoliberal growth models and the political economy of central banks as areas where PKE can provide specific insights for CPE. In the following, we will focus on the impact of PKE on the growth models approach in CPE.

4 Post Keynesian Economics and the Growth Models Turn in Comparative Political Economy

While CPEs were preoccupied with classifying countries into LMEs and CMEs, PKs (more specifically Kaleckians) developed their own typologies, based on the notion of demand regimes. The origin of this approach goes back to attempts to establish Marx-Keynes synthesis models (Bhaduri and Marglin 1990, Marglin and Bhaduri 1990). At the centre of these models was the role of income distribution. Marxists tend to think of the growth process as profit driven; in contrast, Kaleckians emphasise (as does Keynes 1973 [1936], chapter 19) that workers have higher marginal propensities to consume than capitalists (the

so-called consumption differential) and that consumption is thus wage-driven. The Bhaduri-Marglin model synthesises these two by allowing for wage-led as well as for profit-led aggregate demand regimes, depending on the relative size of the consumption differential between wages and profits, as well as the profit- (as opposed to demand-) sensitivity of investment. This gave rise to a substantial empirical literature that econometrically identifies the relevant regimes (see Blecker 2016 as a survey). According to these studies, the effect of net exports is often substantial (and profit-led), which may give rise to a fallacy of composition problem: for individual countries wage restraint may stimulate the economy via exports, but if all countries pursue such a policy at the same time world demand will contract as countries trade among each other (e.g. Stockhammer et al 2009, Onaran and Galanis 2014).

The Kaleckian debates were then generalised in an attempt to apply them to the neoliberal growth experience (see the contributions in Lavoie and Stockhammer 2013a and in particular the synthesis in Lavoie and Stockhammer 2013b). First, supply-side considerations were added. Productivity growth can be wage-led or profit-led too (Storm and Naastepad 2013). Second, financialisation was incorporated and household debt identified as a potential growth driver. Stockhammer and Wildauer (2016) present an econometric test of the PK demand regimes approach that focuses on the role of house prices, share prices and household and corporate debt (for a panel of OECD countries). They estimate the relevant consumption, investment and export equations to identify the marginal effects and then use the actual changes in the explanatory variables (i.e house prices, household debt etc) to assess the growth effects of financial factors for the pre-GFC decade. They find that a large part of the growth performance of the Anglophone and southern European countries can be explained by financial factors, whereas in the Germanic country group these growth drivers are absent (with the exception of the Netherlands). Third, personal (as opposed to functional) income distribution has been added to the model and linked to different sectoral outcomes (Behringer and van Treeck 2019).

Lavoie and Stockhammer (2013b) argue that in the neoliberal era, demand is still wage-led, but other growth drivers have taken centre stage: debt-driven and export-driven growth. Hein and Mundt (2013) develop a classification of countries and growth models based on GDP growth decompositions (see also section 5). To identify export-driven growth models they use the respective contributions of net exports to GDP growth and for debt-driven models they use the growth contribution of private consumption combined with information on the change in borrowing by the household sector.⁹ Thus, PKE arrived at a country-classification into different 'growth models' independently of and with different theoretical concerns from those of CPE.

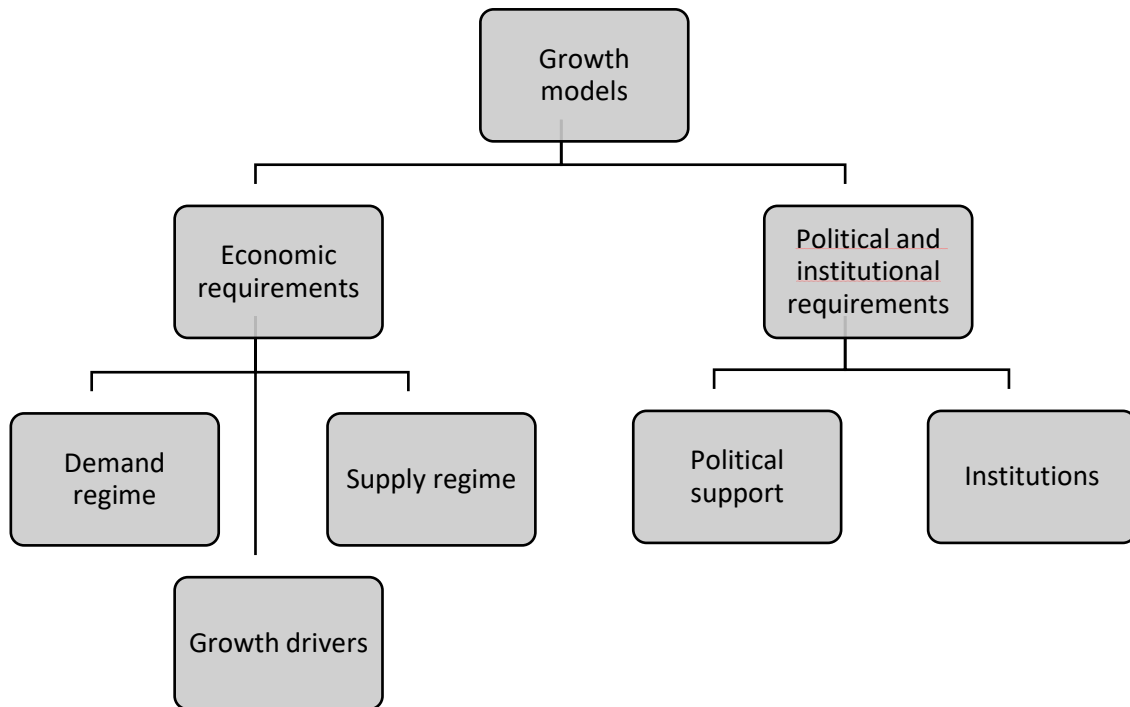
It was the contribution of Baccaro and Pontussen (2016) that explicitly made the case for introducing Kaleckian macroeconomic analysis of demand regimes into CPE, building on Lavoie and Stockhammer (2013). They aim to break away from VoC on multiple levels, while also offering an alternative country classification. First, they want to bring back in class struggle and political conflict. As documented in Baccaro and Howells (2011) the bargaining position of labour has deteriorated across all varieties of capitalism under neoliberalism; but the reactions of the countries have differed. Second, to understand these they refer to PK demand regimes. They analyse four country cases for the post-1980 period and distinguish between export-led (Germany and Sweden), what they call 'consumption-led' (UK), and a failed model (Italy). They consider postwar capitalism as wage-led and the post-1980s as different forms

⁹ The exact terminology in Hein and Mundt (2013) differs somewhat. They have 'strongly export-led mercantilist' and 'weakly export-led' regimes and use 'debt-led consumption boom'.

of profit-led regimes. That is potentially confusing as Lavoie and Stockhammer analyse neoliberal growth regimes as one with unsustainable growth drivers within (at least internationally) wage-led demand regimes. Third, they add a Gramscian element by analysing the resulting regime as one of hegemony rather than as an (neo-institutionalist) optimal competitive strategy based on specific institutional structures.

Figure 2 provides some conceptual clarification of the notion of growth models and its theoretical underpinnings from a PK perspective. Every (temporarily) successful growth model requires both economic and political/institutional foundations. On the economic side, growth models will have underlying demand and supply regimes. These specify the marginal effects of changes in certain variables (e.g. wage shares) on aggregate demand and labour productivity, respectively. The demand and supply regime thus describe a *structural* property that is relevant for (counterfactual) questions such as: how would growth react to a change in functional income distribution? Importantly, this is a very different question from what the actual driver of growth has been in a certain period. Indeed, a country could exhibit a wage-led demand and supply regime, and at the same time undergo a sustained fall in the wage share, dampening economic growth (see also Hein et al. 2020, p. 4).

Figure 2: Growth models and their economic, political and institutional requirements



Growth models thus also require *growth drivers* that are a broad set of variables that may impact growth, such as property prices, household debt, fiscal spending, and export complexity. In contrast to the notion of demand/supply regimes, growth drivers refer to the actual causes of growth in specific countries and periods rather than a structural property. Growth drivers require economically significant marginal effects

on growth, but also need to be empirically relevant, i.e. they need to change over time or across countries (see section 3.3).

On the political and institutional side, growth models require country-specific institutional settings and social coalitions that support economic growth based on a specific aggregate demand component (Baccaro and Pontusson, 2016, 2019). For example, an export-led growth model will be supported by a social coalition led by the dominant export sector(s) that integrates various sectoral interests and aligns their political interests with those of exporters. The social coalition will seek to align the institutional structure with the growth model and push for corresponding political reforms. For example, labour market institutions may be geared towards containing nominal wage growth and supporting vocational training in favour of high-skilled jobs.

Hope and Soskice (2016) offer a telling reply to Baccaro and Pontusson's growth model approach. They reject the need for PKE and explicitly propose to base VoC on the New Keynesian three-equation model, which "is well placed to shed light on the growth models of advanced economies during the post-Fordist period" (Hope and Soskice 2016, p. 219). This reasserts that the medium and long-term equilibrium is supply-side determined. Demand matters, but only in the short run. The inclusion of the financial sector is limited to the central bank-determined interest rate. There is no household debt, house prices, mortgage securitisation or financial cycle in their model. Nor is there much reflection on the role of income distribution for demand. This illustrates CPE can be based on PK as well as on New Keynesian, i.e. mainstream, economics.

The growth models approach has become widely used in CPE and inspired various follow up studies. The forthcoming edited volume by Baccaro, Blyth and Pontusson (2022) contains a state-of-the-art collection of the growth models approach.

5 Identifying Growth Models

Baccaro and Pontusson (2016)'s typology of export-led and consumption-led growth models was developed to describe western European economies in the decade before the 2008 GFC. Recent contributions have asked what the macroeconomic experience since the GFC implies for the growth models perspective. This requires a clarification of how to identify growth models empirically.

Baccaro and Pontusson (2016) used GDP growth decompositions to identify growth models. Growth decompositions measure how much of the growth rate of GDP is due to change of each of its components (consumption, investment, government consumption, exports and imports)¹⁰. The most dynamic component of aggregate demand would then determine whether a country is consumption- or export-led. Hein and Mundt (2013) and Hein et al. (2020) add a financial dimension to the growth-accounting method. They combine 'growth contributions' of consumption, investment, government consumption and net exports with the net financial balances of the private, public and external sector. The addition of

¹⁰ More formally, growth decompositions measure the share of a change in aggregate demand component i in total economic growth (\hat{Y}): $\hat{Y}_i = \frac{\Delta i_t}{Y_{t-1}}$, where $i = C, I, G, X, -M$ and $Y = C + I + G + X - M$.

financial balances provides insights into how expenditures of different sectors are financed.¹¹ A major advantage of this approach is its simplicity: the relevant data are readily available from the National Accounts and do not require estimation of a statistical model.

The components of a growth decomposition are often also called “growth contributions”. However, such terminology can be misleading: growth decompositions simply identify the most dynamic aggregate demand components, but they do not provide information on why that GDP component grows. In other words, growth decompositions as such do not provide information about the causal drivers of growth and thus are problematic for identifying growth models. For example, a strong contribution of consumption could stem from real wage growth or asset price inflation, i.e. it could be indicative of wage-led as well as of finance-led growth. It could also, if fiscal multipliers are as large as the recent literature suggests, be due to fiscal policy, i.e. a form of state-led growth.¹² GDP growth decompositions can thus only give necessary conditions for the identification of a growth model and need to be complemented by additional information.

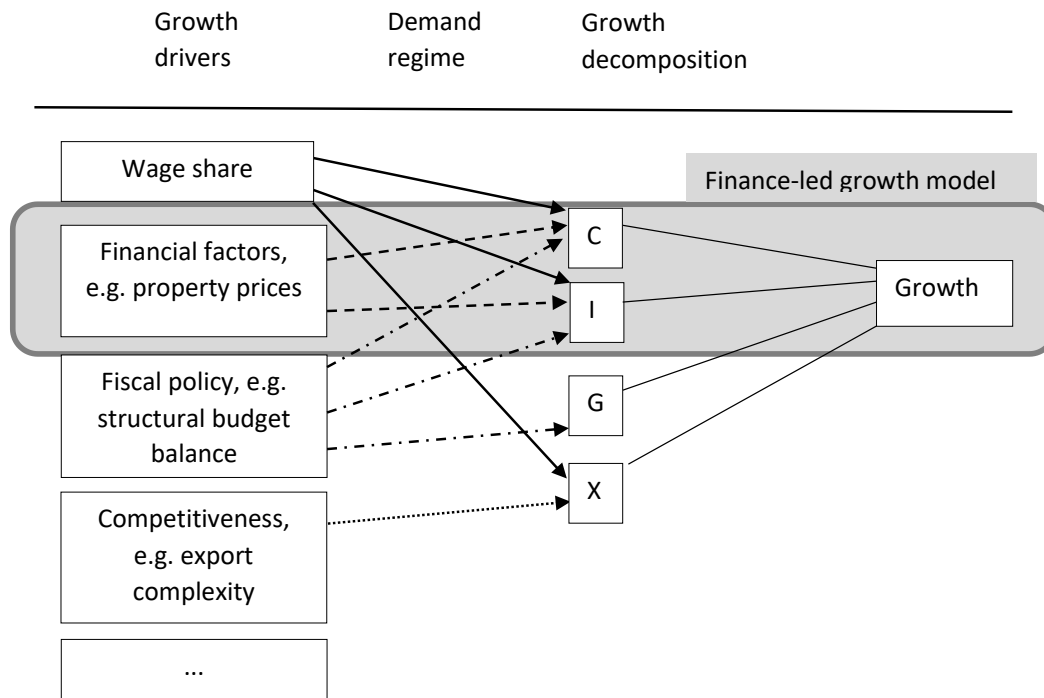
Kohler and Stockhammer (2021) instead propose the notion of growth drivers, which are economic factors that influence the growth of a demand-component without being themselves a part of aggregate income, e.g. the wage share, real estate prices or the fiscal policy stance (see also Stockhammer and Wildauer 2016, Stockhammer and Onaran 2022). In contrast to demand regimes, growth drivers thus refer to the actual causes of growth in specific countries and periods rather than a structural property.¹³ To underpin a growth model, growth drivers require relatively stable demand regimes in the sense that their marginal effects on growth should not change substantially over time. However, the drivers themselves can change in different directions and thereby explain historically specific growth episodes. Figure 3 illustrates the conceptual relationship between growth drivers, demand regimes, and growth decompositions for the case of a finance-led growth model. A growth model can be regarded as a specific configuration of growth drivers that are causally relevant (via the demand regime) and lead to the dominance of certain demand components (reflected in the growth decomposition). In finance-led growth model real estate prices are one of the main growth drivers, which impact consumption and investment expenditures.

¹¹ Hein et al. (2020) further combine their analysis of demand regimes with a classification of welfare models based on Hay and Wincott (2012).

¹² To illustrate: current fiscal multiplier estimates during recessions are of the order of magnitude of 2.5 (Auerbach, and Gorodnichenko 2012, Table 1). Assume that the government increases public investment (during a recession) by 1% point of GDP. That would (other things equal) induce an increase in private consumption by 1.5%-pts of GDP. A GDP growth decomposition would identify that economy as consumption-led, where in fact growth is state-led.

¹³ Formally, demand regimes are defined by the marginal effect β of change in explanatory variable on economic growth $\beta_j = \frac{\partial \hat{y}}{\partial j} \lesseqgtr 0$, where $j = \text{wage share, property prices, ...}$. Growth drivers are represented by actual changes in explanatory variables and their marginal effect on growth: $\hat{Y}_j = \beta_j \Delta j \lesseqgtr 0$.

Figure 3: Growth drivers, demand regimes, and growth decompositions



Notes: The shaded area denotes a finance-led growth model as one possible configuration. Other growth models are possible. C: consumption; I: investment; G: government consumption; X: exports.

6 Changes in Growth Models since the Global Financial Crisis¹⁴

The way in which growth models are identified empirically has implications for the interpretation of growth models since the GFC. Based on growth decompositions and financial balances, Hein et al. (2020) classify OECD countries into export-led mercantilist, weakly export-led, domestic demand-led, and debt-led private demand boom regimes, for both the pre- (2000-2008) and the post-crisis period (2009-2016). They find that the post-crisis period came with a larger number of countries pursuing export-led regimes as many countries that previously underwent debt-led private demand booms (e.g. Southern Europe and the Baltics) switched to positive growth contributions of net exports. For the Anglo-Saxon countries, they report a shift towards domestic demand-led regimes supported by government deficits.

Kohler and Stockhammer (2021) argue that a classification of growth models that exclusively draws on growth decompositions can yield a misleading picture of macroeconomic dynamics in the post-crisis period. They question the shift towards export-led models for most countries and argue that a closer investigation of growth drivers instead of decompositions yields a different picture. While previous work in CPE has indeed considered certain growth drivers, such as real wage growth or price competitiveness, a broader and more systematic consideration of growth drivers as well as an appreciation of their cyclical nature is needed to understand economic developments since the GFC.

¹⁴ This section states an argument more fully developed in Kohler and Stockhammer (2021).

First, consider financial factors as a driver of private demand. A sizeable literature in both PKE and CPE has argued that asset price inflation, especially in housing markets, is an important driver of consumption and construction (Crouch, 2009; Hay, 2009; Schwartz, 2008; Stockhammer and Wildauer, 2016). Baccaro and Pontusson (2016) speak of ‘consumption-led’ growth which they consider as fuelled by credit. However, they implicitly treat household debt as consumer debt and do not offer an explanation as to why household debt has risen. Kohler and Stockhammer (2021) argue that previous country classifications tend to overlook the cyclical nature of this growth model. Drawing on the notion of a ‘financial cycle’ (Borio, 2014) and a Minskyan perspective (Minsky, 2016; Palley, 2011; Ryoo, 2016), debt-led models are expected to exhibit cyclical dynamics where episodes of finance-led growth are followed by periods of debt-driven stagnation. Against this background, the post-crisis experiences of most countries that were debt-led in the pre-crisis period can be largely understood as a downturn in the financial cycle, in which private deleveraging enforced a contraction in private demand. The resulting collapse in consumption and import demand then led to an improvement in net exports, without a genuine switch to an export-led model as growth decompositions might suggest.

Second, fiscal policy constitutes public demand that has been neglected in analyses of the pre-crisis period (e.g. Baccaro and Pontusson 2016), but became important with the GFC. In a Keynesian perspective, fiscal policy is especially relevant in times of recession due to higher multiplier effects and can have long-run effects on economic growth through hysteresis (Blanchard and Leigh, 2014; Delong and Summers, 2012; Gechert et al., 2019; Gechert and Rannenberg, 2018). In addition, discretionary fiscal spending can be an important autonomous source of demand that drives long-run growth (Allain, 2015; Hein, 2018). Based on this, Kohler and Stockhammer (2021) argue that cross-country differences in economic growth since the GFC can partly be attributed to different fiscal policy reactions (Stockhammer et al 2019). The southern European countries underwent the double whammy of a downturn of the financial cycle combined with (externally imposed) austerity, whereas the English-speaking countries counteracted the contraction in private demand with a stronger public stimulus.

Third, one can distinguish two sources of competitiveness as drivers of foreign demand. Large parts of the CPE literature on the Eurozone crisis focus on nominal wage growth as a determinant of price competitiveness (Hall, 2014; Johnston et al., 2014). However, structuralist PKs as well as some of the earlier VoC literature emphasise the role of non-price competitiveness in the form of knowledge intensity, which is measured as the complexity of exported goods (Gräbner et al., 2020; Sorge and Streeck, 1988; Storm and Naastepad, 2015). In this view, countries specialised on high value-added goods are better equipped to sustain export demand in times of fierce competition from China and emerging markets. Kohler and Stockhammer (2021) present evidence that an improvement in price competitiveness, especially in the countries hit by the Eurozone crisis, did not come with improved growth or export performance. By contrast, the correlation between the export complexity and economic performance has increased in the post-crisis period.

The analysis demonstrates a substantial change in growth drivers between the pre- and the post-crisis period, suggesting that growth models may not be as stable as the extant literature assumes. In particular the prominent dichotomy between export-led and (debt-financed) consumption-led growth has lost some of its usefulness to describe the post-crisis experience. This supports an analysis of growth models based on a broad set of growth drivers, some of which may undergo cyclical changes. The argument leads to a re-conceptualisation of growth processes since the GFC. Weak or negative growth need not signal the end

of finance-led growth models but may merely reflect the downturn phase of the financial cycle. It also highlights the possibility of state-led growth models.

Methodologically, identifying growth drivers requires the estimation of one or more behavioural equations to determine the coefficients that govern the growth model. This is more challenging than the calculation of growth decompositions as econometric problems of model specification, endogeneity and serial correlation need to be dealt with. However, it provides insights into the causal drivers of growth models that growth decompositions do not deliver. We think that the PK literature on growth and demand regimes offers a rich set of potential growth drivers for the analysis of growth models, representing ample scope for further engagement between PKE and CPE.

Given the simplicity and convenience of growth decompositions, they are likely to be used in future research. Unlike the analysis of growth drivers, growth decompositions are themselves insufficient to identify growth models and need to be combined with additional information. Hein and Mundt (2013) and Hein et al. (2020) provide such a procedure for differentiating export-led and debt-led regimes (through sectoral financial balances). What additional measures are used depends on the nature of the hypothesised growth models. For the post-GFC period, information about the relative growth contributions of exports and imports and the fiscal balances are needed to ensure that growth drivers are not misinterpreted.

7 The Importance of Further Engagement between Political Economy and Post Keynesian Economics

The previous section has focussed on the impact of the Kaleckian stream of PKE on CPE, which has served as the entry point for the dialogue. By way of conclusion, we explore how engaging with political economy raises interesting challenges and opportunities for different streams within PKE. We argue that there is a strategic as well as theoretical interest of PKE to engage with CPE (and political economy more generally).

First, the strategic case. Arguably the GFC has demonstrated fundamental shortcomings of pre-crisis macroeconomics. In a serious academic discipline that would have led to some soul searching and the consideration of a wider set of economic theories. By and large, that has not happened; DSGE modelling has remained the reference point for mainstream macroeconomics. While there is a very selective reading of some PK authors (namely Minsky), overall the discipline of economics (in the USA) has witnessed a revival of the freshwater-saltwater divide of hard New Classical and New Keynesian approaches. That is very different in the political economy subfields, where a more serious engagement with heterodox economics and in particular PKE is taking place. This is not restricted to CPE: Blyth and Matthijs (2017) argue in favour of the (re-)introduction of Kaleckian macroeconomics into IPE. Keynesian and PK arguments have arguably been even more influential in various fields of political economy regarding issues of money creation, financialisation and international financial regimes (e.g. Gabor 2020, Ingham 2004, van der Zwan 2014).

Second, on the theoretical side, despite being located in different disciplines, we have argued that PKE and CPE are in fact cousins in that their joint origin can be traced back to the political economy approach.

However, PKE has narrowed its research questions to fit the agenda of the economics discipline. The strength of CPE lies in its systematic and rich study of institutional differences across countries, and CPE has done that for different areas such as industrial relations, welfare states, financial systems and innovation systems. The main achievement is thus to map out differences across countries and insist on the specificity of actually existing capitalisms.

Engagement with CPE raises questions of the mutual determination of the economic and the political spheres. How do economic developments shape political interests and how do these interests feed into policy making? This brings to the fore an area where its focus on narrowly economic issues leads to shortcomings for PKE's own research agenda. PKE tends to treat fiscal and monetary policies as exogenous. In part this is to highlight the potential for different policy choices. However, that is problematic on theoretical as well as on empirical grounds. Theoretically it leaves a key macroeconomic variable underdetermined. Curiously there are hardly any PK studies that follow up on Kalecki's famous (1943) paper that argues that capitalist may object to full employment policy as it undermines their power vis-a-vis labour. More generally PKE has had very little to say on why Keynesian policies would be adopted (but see Skocpol 1980, Ferguson 1984, Hall 1989). Empirically, countries will have different institutions and economic policy regimes, and this impacts PKE's ability to explain actual economic performance across countries. In PKE discussions of financialisation it is clear that financial relations are regarded as power relations that have distributional impacts, but PKE has so far not systematically developed a theory of financial power.

One field where CPE's analysis of institutions and politics can enrich PKE is in growth theory. As discussed in section 4, PK debates on demand regimes have moved beyond the original Bhaduri-Marglin model's exclusive focus on functional income distribution as a driver of growth. Empirical research has investigated the effects of asset prices and debt (Stockhammer and Wildauer, 2016, Blecker et al 2020, Stockhammer et al 2021) as well as fiscal policy (Qazizada and Stockhammer 2015, Obst et al., 2020) on aggregate demand. There is a certain convergence of current Kaleckian research and that emerging from the Sraffian supermultiplier (SSM) approach. At the theoretical level, SSM puts forward a theory of demand-led growth that highlights the role of autonomous demand components that do not create capacity (i.e. increase the capital stock).¹⁵ Thus far, SSMs have identified autonomous consumption (Freitas and Serrano, 2015; Lavoie, 2016), exports (Nah and Lavoie, 2017), and discretionary government expenditures (Allain, 2015) as demand components that qualify as autonomous, but without linking this concretely to the growth experience of countries. Empirical research on the SSM has mostly focussed on establishing a generic correlation between autonomous demand and GDP or the share of investment in GDP (Girardi and Pariboni, 2016, 2020) rather than studying specific growth episodes. However, Fazzari et al. (2020, p.602) and Dutt (2019, p. 299) note that SSMs 'can be used to understand the logic of the growth process' of specific countries. While the US housing bubble and fiscal austerity in Europe after the GFC are mentioned as determinants of autonomous demand, a detailed analysis of demand formation is missing.

It is in the study of (autonomous) demand-formation in specific countries and periods where the recent PK literature can benefit from the growth models approach. For example, export demand is widely regarded as a key driver of the German growth model, but what specific institutional and political settings

¹⁵ While SSM models are wage-led in the short-run in the sense that an increase in the wage share temporarily raises growth, income distribution has no long-run effects on the growth rate. The long-run growth rate of output depends only on the growth rate of autonomous, non-capacity generating aggregate demand.

underpin it? Baccaro and Benassi (2017) argue that a decentralisation of collective bargaining since the mid-1980s and welfare reforms in the 2000s put downward pressure on nominal wages. This improved price competitiveness at a time where exports became more price sensitive. At the same time, the regressive distributional effects of these policies have depressed consumption demand, making the German model highly dependent on exports.

Baccaro and Pontusson (2019) complement such an institutionalist analysis with a political theory of sectoral interests.¹⁶ They propose the concept of a 'social bloc', which is a hegemonic coalition dominated by economic sectors that exert strong influence over key policy decisions. Different sectors will be sensitive to different macroeconomic variables: the manufacturing export industry to nominal wages and the exchange rate, construction to the real interest rate, and finance to consumer prices. These sensitivities translate into different economic policy preferences. An important feature of the social bloc is its ability to project particular sectoral interests as national interests. In the case of Germany, the social bloc is dominated by the manufacturing export industry. After German reunification, the sector pushed for more flexible industrial relations to reduce wage cost. Thanks to the hegemonic character of the social bloc, neoliberal labour market reforms were eventually enacted by a centre-left government that portrayed the dismantling of collective bargaining and the creation of a workfare regime as policies in the national interest. Baccaro and Pontusson (2019) contrast the German case with Sweden, whose social bloc is broader and also includes public sector unions. As a result, the Swedish social bloc had a greater interest in policies supporting domestic consumption, rendering the Swedish growth model much more balanced than the German one.

In this way, the growth models approach could complement PK growth models by providing an explanation for why certain autonomous demand components that are treated as exogenous in theoretical models dominate empirically, e.g. exports in Germany and public and private consumption in Sweden. It also identifies social and economic tensions that come with growth models that are highly unbalanced in their demand composition, which may have implications for the stability of theoretical models and their parameters.

A weakness of the theory of social blocs proposed by Baccaro and Pontusson (2019) is its exclusive focus on sectoral interests. This seems to fit the case of export-oriented growth models, but is less suited to understand the political support of other growth models. In particular in finance-led growth models the political importance of home ownership cuts across economic sectors. A different strand in CPE flags the social and political impact of housing (Johnston and Kurzer 2020): homeownership can shape conservative political identities (Schwartz 2008, Watson 2010) and reduce political demand for welfare state provision (Wiedemann 2021). Homeownership has also been shown to be of strong predictive value for voting for Brexit (Adler and Ansell 2020). Housing and homeownership constitute an interesting intersection between the politics of everyday life as homeownership (or the absence thereof) impacts large parts of the population (and their sensitivity to interest policy or credit regulation), but housing finance is at the same time a prime interest of major financial institutions, from mortgage systems to regulation of securitization. There are massive interests of the financial sector at stake, which have an effective lobbying capacity (Culpepper 2011), but the political support goes beyond those employed in

¹⁶ In political economy there are numerous examples where sectoral interests play a major role, e.g. Frieden (2015) where different sectors have different interests with respect to exchange rate policy and regimes or Culpepper (2011), who analyses lobbying of the financial sector.

the financial sector. This political economy literature on housing is complementary to a small but growing PK literature on the macroeconomic importance of housing (e.g Kim et al., 2019; Ryoo, 2016, Stockhammer and Wolf 2019), which emphasises its centrality for the emergence of endogenous financial cycles in contemporary capitalism.

It is worthwhile recalling that there were earlier attempts to create a more systematic PK analysis where institutions feature prominently. Arestis (1996), and Hodgson (1989) in the 1990s drew heavily on (old) institutionalism (see Whalen 2020 for an overview). Before that the French Regulation Theory and the Social Structures of Accumulation approach both made efforts to fuse a historically specific institutional analysis with PKE (Hein et al 2014, Setterfield 2011); both however focussed on institutional change over time rather than explaining differences across countries. Similarly many Minskyan analyses have a strong institutional dent (Whalen 2001, Papdimitriou and Wray 2006, Palley 2011), emphasising that changes in the institutional structure (e.g. the rise of securitization and shadow banking) influence financial stability. Again these contributions highlight institutional change over time, but do not offer a systematic comparative analysis.

In sum, this article has argued that the recent interest of political economy in PKE is to be welcomed and offers an opportunity for PKE to realise its own research agenda, which is rooted in the political economy approach rather than in the narrow discipline of economics. The past years have already seen a growing engagement between Kaleckian analyses of demand regimes and CPE, which has informed the growth models approach. We have argued that the growth models approach needs to go beyond the export-led/debt-led dichotomy that has proven useful in the pre-GFC period and consider a richer set of growth drivers. This opens the door for a reinterpretation of existing growth models (allowing for finance-led growth as well as finance-led stagnation) and for considering a broader range of potential growth models (such as state-led growth). Further engagement with political economy approach has the potential to be useful for other streams, such as Sraffian supermultiplier models and institutionalist PKs, but it will require PKE to actively engage with a literature outside their usual comfort zone and to address questions of institutions and power more directly than in the past.

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