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Neo-Kaleckian and neo-Marxian regime research: A promising scientific research programme or a scientific *cul-de-sac*?

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1. Introduction

Over the past three decades, a small but very productive Post-Keynesian and Marxian research community has engaged in the elaboration of a scientific research programme (SRP) that has come to be known as wage and profit-led regime research.[1] In dozens of journal articles in almost every heterodox economic journal, particularly the *Cambridge Journal of Economics*, the primary aim has been to reiterate the classical political economy conception of functional income distribution as a major determinant of economic development and employment, from both a Keynesian (effective demand) and Marxian (class struggle) perspective. Only recently, the Review of Keynesian Economics (RoKE) dedicated - convening almost the entire 'wage and profit-led regime' community - an incredible four (consecutive) issues to delineating and discussing this *Denkstil*. The International Labour Office (ILO), meanwhile, commissioned a major research initiative investigating the relationship between functional income distribution and growth (see Lavoie/Stockhammer 2013a).[2]

Since only very few critical voices (such as Peter Skott (2017) joined this illustrious debate, I would like to re-open this discussion about the scientific and political merits of the 'wage and profit-led regime' approach. My intention is to examine whether this SRP can fill an obvious gap in Post-Keynesian theory. In accordance with Keynes' considerable neglect of distributional questions in his *General Theory*, most Post-Keynesians have underemphasised a phenomenon that has become one of the most socially and politically concerning problems of our times: growing income inequality.

This article is structured as follows: in the next section, the main arguments of the wage and profit-led regime approach will be delineated and scrutinised with reference to the Bhaduri-Marglin model, which is regarded as 'a widely used workhorse model' (Stockhammer 2017: 25). I will subsequently question its theoretical bases, its empirical validity, and its policy applicability. Finally, I offer a number of concluding remarks on the merits of the distributional regime approach.

2. Distribution and growth: A critical examination of the Bhaduri/Marglin model

In classical political economics, conflicts over the distribution of income always underlie macroeconomic development in capitalist economies (see e.g. Sandmo 2015). From a Marxian perspective, profit reductions hamper capital accumulation and are therefore harmful to economic growth, income generation, and employment, since capitalists will be less able to follow their maxim: 'Accumulate, accumulate! That is Moses and the Prophets' (Marx 1887: 418). In Keynesian economics, on the other hand, wage income constitutes the largest share of consumption spending, which likewise accounts for the largest share of effective demand in any capitalist economy. Although Keynes showed little interest in distributional questions in his *General Theory* (see e.g. Keynes 1939), he

[1] To name just a few of the studies produced by this community: Dutt (1984); Blecker (1989); Bhaduri/Marglin (1990); Lavoie (1995); Onaran/Galanis (2012); Lavoie/Stockhammer (2013a).

[2] Interestingly, the ILO initiative has been acknowledged by mainstream economics (see e.g. Francese/Mulas-Granados 2015), while the distributional regime research has been entirely ignored (see e.g. Atkinson 2009; Bentolila/Saint-Paul 2003; Elsby 2013; Charpe/Bridji/McAdam 2019).

did highlight certain channels through which changes in income distribution may have an effect on growth and employment, the most obvious being the impact of income inequality on marginal propensity to consume as a determining factor of effective demand. Nevertheless, in *General Theory*, even this channel is only addressed in an aside, which appears to concern personal rather than functional income distribution: 'If fiscal policy is used as a deliberate instrument for the more equal distribution of incomes, its effect in increasing the propensity to consume is, of course, all the greater' (Keynes 1936: 95). Furthermore, the fact that Keynes approaches a change in (personal) income distribution in terms of state action (fiscal policy or taxation) rather than the struggle between different socioeconomic actors over an appropriate income share (class conflict over functional income) suggests that, in his eyes, functional income distribution is an endogenously determined resultant, not an exogenous determinant of growth, income, and employment.

Changes in functional income distribution may then be assessed very differently with respect to their impact on economic growth and employment.[3] They may be regarded as a major determining factor with contrasting signs, such as the positive or negative impact of a growing wage share and, *vice versa*, the negative or positive impact of a growing profit share, depending on whether the consumption channel (Keynes) or the investment channel (Marx) is regarded as dominant. Or they may be regarded as insignificant, in accordance with the Keynesian understanding of functional income distribution – as of growth, income, and employment – as an endogenously determined result of economic activity based on a given and controllable set of factors such as technologies and techniques, tastes, preferences, propensities, institutions, and policies but not as an outcome of the conflictual actions of collective socioeconomic actors.

Unlike most subsequent contributors, Bhaduri and Marglin (Bhaduri/Marglin 1990: 375-6; henceforth 'B/M paper') were entirely explicit in their seminal paper about Keynes' (and as they claim with reference to the 'wage theorem', Kalecki's) insistence on the endogeneity of functional income distribution (and thus the insignificance of functional income distribution with respect to growth and employment in the above sense). They nonetheless depart from this view for two reasons: 1) even mere 'thought experiments', they claim, may provide useful insights; 2) the argument concerning the endogeneity of functional income distribution is premised on a closed economy, and may not apply to an open economy. Later we will need to return to these two qualifications, since they are crucial for any evaluation of the wage and profit-led regime approach but have nonetheless been entirely ignored in most of the theoretical discussion and empirical specifications that followed the publication of the B/M paper.

For now, let us consider the B/M paper's assumption that pure 'thought experiments' – i.e. the assumption that the owners of the factors of production can deliberately determine

[3] We will be concerned only with long-run considerations here, since 'regimes' are structural arrangements that are better able to explain long-term phenomena (i.e. growth) than short-term phenomena (i.e. business cycles). We shall therefore ignore the debate on capital utilisation (see e.g. Nikoforos 2012), in line with the assumption that capital utilisation will always have to be at its 'normal' level in the long term.

the real remuneration rates of their factors[4] – may produce valuable insights. One such insight, which has been quoted a number of times, is that it may be theoretically possible to vindicate both signs of the impact of changing functional income distribution. Depending on the impact of a change in the wage rate or – what is synonymous for this model – the wage share (or, conversely, a change in the profit rate or profit share) on consumption and investment spending, an increase in the wage share (or real wage rate) will either positively affect effective demand and thus growth and employment (on the wage-led regime misleadingly associated with Keynes) or negatively affect it on the profit-led regime associated with Marx. This conclusion rests, of course, on the specific assumptions set out in the B/M paper (and the entire wage-led, profit-led regime literature). These are: 1) a 'classical' saving hypothesis in which savings are only derived from capital income (implying a higher marginal propensity toward consumption among labourers than capitalists); 2) a constant quantity of labour per unit of final output (implying a correspondence between average and marginal labour productivity); 3) an investment function determined by the profit rate (and in the short run by the difference between 'normal' or 'desired' and actual capital utilisation); 4) a profit margin (mark-up) determined by capitalists; (5) the independence of savings from investment and 6) a (certain) price-elasticity of exports in an open economy and a lack of exchange rate or real wage movement-based compensating measures on the part of trading partners (for a discussion of a binational case, see Stockhammer/Onaran 2013: 65f.). Whether an economy can be considered 'wage-led' or 'profit-led' obviously depends on the difference between the two socioeconomic classes' propensities to consume, the profit-rate elasticity of investment spending, and the price elasticity of exports. Larger, more closed economies are more likely to be wage-led, while smaller, more open economies are likely to be profit-led.

The classical saving hypothesis does not of course claim to be very realistic, but serves to ensure a positive difference between the consumption propensities of the different classes. This difference is anything but logically obvious, however, since a household's propensity to consume sensibly depends on its income *levels*, rather than its *source* of income. And even if it were empirically to hold,[5] the underlying idea that an increase in aggregate demand due to increased consumption spending is associated with an increase in the wage share (i.e. the wage-led regime) is easily contestable once we distinguish between the wage income of 'operative workers' and the earned income of 'administrative workers', both of which make up the overall wage share. If functional income distribution changes in favour of the wage share and personal income distribution becomes ever more unequal due to managers' salaries increasing exorbitantly while operative workers' wages stagnate (as has been the case in the past 2 to 3 decades), the argument for a wage-led regime begins to crumble[6].

[4] This, according to Keynes (1933a; 1933b), can only be true in a 'real-wage, co-operative or neutral economy' but not in the 'money-wage or entrepreneur economy… that we actually live in today' (Keynes 1933a: 78).

[5] For empirical evidence to the contrary, see Bowles/Boyer (1995) and Marglin (1984).

[6] Palley (2017) incorporates issues of personal income distribution by relaxing the classical savings assumption and introducing capitalist-managers earning wage as well as capital income. The paper shows „the importance of the distribution of wages for whether an economy is wage-

The fixed labour-coefficient assumption (i.e. a limitational Leontief production function) is needed for two reasons: firstly, it secures the correspondence between the direction of change in the factor remuneration shares and rates. If we were instead to assume an ordinary Cobb-Douglass environment (i.e. a substitutional production function with elasticities of substitution different from zero), this correspondence would become blurry.[7] Secondly, the assumption allows us to presuppose the exogenous character of functional distribution, which is a fundamental element of the whole approach. Now, the price-level p is determined by average (variable) costs (nominal unit labour cost) *bw* (where *1/b* = average labour productivity and w = nominal wage rate) and a mark-up (*m*) set by firms:

$$P = (1 + m)\, bw \qquad (1)$$

If we take the mark-up as given and the labour coefficient as technically determined, setting the nominal wage rate will also determine the real wage rate. Simply changing the mark-up (see assumption 4, above) will result in the wage rate and, correspondingly, the wage share (and of course, the profit rate and profit share) changing in the same direction and thus becoming an exogenous variable in the control sense. This is probably why most adherents of this approach do not consider the assumption of exogeneity as merely a 'thought experiment' but rather as a crucial characteristic of their neo-Kaleckian, neo-Marxian models. It nonetheless rests on the assumption that the mark-up is a source of conflict between the two socioeconomic classes and thus a power-related variable. Yet, it has never been convincingly shown how a shift in power relations can influence the mark-up.[8] All that the socioeconomic classes can struggle over in a capitalist economy is the nominal wage rate,[9] and not the real wage rate. Whether a change in the nominal wage rate will translate into a change in the real wage rates depends on the extent to which firms are able to set the price of their commodities. This in turn depends on the level of competition in the commodity market. As long as *this* does not change, it is difficult to see how firms should be able to increase their mark-up even though labour might have weakened[10]. The real wage rate required to determine functional income distribution is

or profit-led, and changes in the distribution of wages can change an economy's character" (Palley 2017: 59).

[7] A Leontief production function may be a good short-term representation of industrial production, but not of non-industrial production involving administrative workers in the long run.

[8] For Kalecki himself, the mark-up is determined by what he terms the 'degree of monopoly'. There are indications that in his earlier writings the degree of monopoly is entirely dependent on the commodity market structure, while in his later writings, it is also affected by class struggle on the labour market (see Rugitsky 2013). Yet what Rugitsky (2013: 452) has called a 'subtle argument' (citing Kalecki 1965: 18) can less affectionately be termed 'flawed', since it implies that rising nominal wages threaten the competitive position of a firm or industry. Nevertheless, what is true for a single firm under perfect competition (where price is given) cannot be true for all firms under imperfect competition (where prices are set by firms) and collectively bargained nominal wages.

[9] And, of course, the wage structure, which has a strong impact on personal income distribution.

[10] Eichner (1973) shows that the distributional conflict between the socioeconomic classes in the labour market will trigger a wage-price spiral but will not change the mark-up. Making class conflict an issue of income distribution is of course a long-standing feature of classical political economics. Nevertheless, attempts to demonstrate the (limited) wage-setting power of monopsonistic firms rest on the crucial assumption that real-wage setting is untenable in a 'money

therefore fixed once the nominal wage rate, technology, and the market structure of commodity markets are set, and it cannot be altered as a result of conflicting claims on the labour market that, *ceteris paribus*, result in nominal wage rate and corresponding price changes.

The investment function used in neo-Kaleckian, neo-Marxian models is, simply put, inadequate. It relates investment spending to the profit share and (in the short run during periods of disequilibrium, or partial equilibrium, if the capital utilisation rate is used as a short-term adjustment instrument) to the capacity utilisation rate (see e.g. Lavoie/Rodriguez/Seccareccia 2004). Neglecting the latter determinant for the reasons set out in footnote 3, above, to accord the profit share (and thus the profit rate) such a prominent role in determining investment spending clearly serves the purpose of closing the distributional system. This is done by also making savings dependent on the profit share and assuming that investment and savings are independent. By thus equating I and S (as an equilibrium condition), the (equilibrium) profit share and, implicitly, the (equilibrium) mark-up is determined and the distributional system closed. This reasoning is flawed on three counts: 1) simply relating investment demand to (*realised*) profits is certainly not a convincing rationale for action in a world in which capitalists do not merely accumulate but also have to choose between investing, consuming, and maintaining liquidity. What is needed here is a comparison between *expected* profits and an independent opportunity cost factor such as the interest rate in (Post-)Keynesian determination. To take *actual* profits as a proxy for *expected* profits, as is explicitly the case in Badhuri/Marglin (1990: 380), is to assume an entirely static world. This would be a very strange notion and would still not be enough to determine investment demand as long as the interest rate is not taken into account. And even if we were to include the interest rate as an additional factor in the investment function, as has occasionally been done (see e.g. Stockhammer/Onaran 2013: 64), this does not help as long as the interest rate is not the factor that keeps capital scarce (i.e. that restricts capital accumulation) because it 'rules the roost' of the 'own rates of interest' (Keynes 1936: 223). In neo-Kaleckian, neo-Marxian theories, the interest rate is merely the 'financial twin' of the profit rate, which primarily fulfils an allocational (and distributional) function between capitalists and rentiers. In other words, in neo-Kaleckian, neo-Marxian models it is the profit rate that determines the interest rate in the long run, rather than the other way around.[11] Including the interest rate in the investment function therefore does not really help. 2) Ever since Keynes' treatment of savings and investment in his *General Theory*, we have known that both variables are mere accounting identities: they cannot diverge from each other. Any investment spending therefore creates, *uno actu*, an equal amount of savings.[12] Using terms such as 'desired', 'planned', 'full employment', and so on, we

wage economy' (see Keynes 1933: 78).

[11] Among the classical economists, Marx is the most explicit about this: 'Since interest is merely a part of profit, paid according to our assumption by the industrial capitalist to the money-capitalist, the maximum limit of interest is marked by profit itself, and in that case the portion pocketed by the productive capitalist would be equal to zero' (Marx 1894: 421). This must be so for purely logical reasons, since otherwise, as the distributional system has only one degree of freedom, it would be overdetermined.

[12] For an illustrative treatment see e.g. Terzi (1986/87). Keynes (1936: 81) argues that 'The

can define these categories in such a way that they may diverge, so that 'planned' or 'desired' savings may be lower than 'planned' or 'desired' investment. Yet this does not explain why and how a change in functional income distribution is supposed to overcome this inequality. In the short run, of course, any errors in predicting the correct (i.e. *ex post* realised) amount of effective demand leading to a situation of *ex-ante* 'over-investment' (i.e. the underrating of households' propensity to save) will be 'resolved (i.e. brought into numerical equality *ex post*) by a change in functional income distribution to the detriment of profit earners. Nevertheless, once capacities are adjusted accordingly (in the long run), the initial income distribution will prevail as long as the technical conditions and market structures have not changed. In the long run, then, income distribution is simply not needed as an equilibrating mechanism (and in the short run, functional income distribution has a purely passive role, which does not fit the 'regime' metaphor). This is the third reason why the treatment of investment in the neo-Kaleckian, neo-Marxian models is inadequate: once we accept that the mark-up is not a question of class conflict, the distributional system proves to be closed and does not require any (theoretically dismissible) I-S equalisation mechanism.

Finally, when treating an economy as merely a part of a bigger whole – as when a single country is treated as part of the whole world economy – the real wage rate in that local economy may certainly become an endogenous variable that can be 'controlled' by nominal wage changes in the one country if we disregard similar nominal wage rate movements in the rest of the world or, more realistically, the kind of compensating exchange rate movements predicted by ordinary purchasing power parity (exchange rate) theory. In this case, the impact of nominal and real wage changes on the price competitiveness of the individual country in relation to its trading partners will certainly bolster the profit-led line of argument. Nevertheless, the substance of the argument concerns price elasticity, rather than functional income distribution. Let us assume, for example, that in the initial period the country is neither importing nor exporting to the rest of the world. If we now reduce the nominal wage rate in that country, prices and the entire price level will change proportionately, leaving the real wage rate (and functional income distribution) unchanged. If the nominal wages in the rest of the world or the exchange rates do not change in the same way, however, and we assume an ordinary (negative) price elasticity of exports in the given country, effective demand in that country will be increased.

Bhaduri/Marglin promise that the 'thought experiment' of exogenising functional income distribution will produce valuable insights. These can now be summarised as follows: 1)

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prevalence of the idea that saving and investment […] can differ from one another, is to be explained, I think, by an optical illusion due to regarding an individual depositor's relation to his bank as being a one-sided transaction, instead of seeing it as the two-sided transaction which it actually is. It is supposed that a depositor and his bank can somehow contrive between them to perform an operation by which savings can disappear into the banking system so that they are lost to investment, or, contrariwise, that the banking system can make it possible for investment to occur, to which no saving corresponds. But no one can save without acquiring an asset, whether it be cash or debt or capital-goods; and no one can acquire an asset which he did not previously possess, unless either an asset of equal value is newly produced or someone else parts with an asset of that value which he previously had. In the first alternative there is a corresponding new investment: in the second alternative someone else must be dis-saving an equal sum.'

determining the profit margin via class conflict is crucial to the entire project. If this assumption is rejected on analytical grounds, functional income distribution proves – in this type of model – to be endogenously determined via economic activity on the basis of technological factors and the degree of competition on commodity markets. 2) A Leontief production function is required to close the distributional system by assuming fixed capital and labour coefficients (or productivity). Nevertheless, assuming fixed coefficients in this way will only provide a solution to functional income distribution if the choice of technique[13] has been settled. This can only be achieved, however, if the real wage rate or the interest rate is set exogenously. As we have argued above, the real wage rate is an endogenous variable. As Keynes (1936: 222ff.) and Sraffa (1960: 33)[14] have proposed, the interest rate must then be the variable that closes the distributional system. 3) Investment spending as the core of the growth model is purpose-built rather than empirically or analytically derived. Its purpose is to show that growth (or accumulation through investment) is determined by functional income distribution and thus becomes a *petitio principii*.

3. The empirical dimensions of wage-led and profit-led regimes

A Two different hypothesis can be derived from the neo-Kaleckian, neo-Marxian growth models:

(1) There is a causal (long-run) relationship between functional income distribution and economic growth

(2) The impact of an exogenous change in functional income distribution can either be wage or profit-led.

The first hypothesis is fundamental for the whole idea of distributional regimes as economic policy measures based on exogenous encroachment into functional income distribution. The second hypothesis leaves room for an empirical settlement of the apparently open question of the signs of impact. Logically, the first hypothesis precedes the second. Nevertheless, to my knowledge, none of the empirical studies that have tested the wage and profit-led regime has ever been concerned with testing hypothesis (1); these studies have rather simply assumed the exogeneity of functional income distribution and its causal relationship to economic growth.[15]

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[13] Assuming a Leontief production function does not exclude the possibility of different 'Leontief techniques' using different fixed coefficients to produce the same output. Which of these different techniques – with higher or lower capital or labour coefficients – will be used depends on the relative rates of remuneration of the factors of production.

[14] While Keynes' position that the interest rate is a purely monetary phenomenon (which is based on his conception of liquidity preference) is quite clear, if not undisputed, there has been a long and unresolved discussion about Sraffa's position (see e.g. Pivetti 1985; Panico 1988; Nell 1988). Nevertheless, this is not our concern here.

[15] Even if a long-run co-integration between functional income distribution and economic growth could be established – as I suppose it could (see e.g. Charpe/Bridji/McAdam 2019) – this would not imply any causation. Take the example provided by Skott (2017: 342 ff.), in which effective competition regulations on commodity markets increase both the growth rate and the wage rate by reducing the mark-up. The resulting change in functional income distribution does not causally affect the growth rate. The same is true if we consider the case of the 'revenge of the rentier' (an

The second hypothesis has mostly been tested indirectly, either by using single equation estimations of the different components of effective demand or structural autoregression (VAR) models for many different countries or country groups and different functional specifications. What these studies have produced is not an estimation of the long-run positive or negative impact of the change in functional income distribution on the growth rate but rather short-run estimations of consumption, investment and the export elasticities of changes in wages, profits, nominal unit labour cost and other additional factors. As long as technological change has not been controlled for and no long-run co-integration test has been performed, the empirical studies cannot be regarded as fallibilistic, positivist tests, but are merely indirect empirical estimations of the sign and magnitude of impact of an assumed change in functional income distribution on effective demand, and thereby as an attempt to discriminate between the possibility of a wage-led or profit-led scenario.

It is at this point that the empirical literature on neo-Kaleckian, neo-Marxian growth models becomes particularly disappointing: not only is it inconclusive insofar as different studies come to contrary conclusions on the relevant signs – i.e. on whether a country is to be regarded as wage or profit-led. Italy appears to be the only country that has not produced such contradictory results (see Stockhammer/Onaran 2013). Moreover, the results seem not only to be inconclusive for countries such as Germany and France, which are hard to assess and predict with respect to their openness (more closed economies are more likely to be wage-led); even indisputably small, open economies such as the Netherlands, Austria, and Australia and indisputably large, closed economies such as the Euro area or the USA generate contradictory results.

Numerous explanations have been proposed for these contradictory results, including different empirical techniques, different specifications, different temporal dimensions (short and long-term outlooks), different perspectives with regard to domestic or total demand, and different perspectives with regard to the influence of personal income distributions (see Stockhammer/Onaran 2013; Lavoie 2017; Skott 2016; Stockhammer 2017), yet it is nonetheless a devastating objection if neither theoretical reasoning nor empirical evidence can ultimately identify the nature of a distributional regime in a single country.

4. Policy implications

Neo-Kaleckian, neo-Marxian growth models are regarded as a challenge to the mainstream, supply-side economic policy recommendations characteristic of the neoliberal era (see e.g. Lavoie/Stockhammer 2012b). These policies, which include labour market deregulation, welfare state retrenchment, and collective bargaining decentralisation, have (along with the processes of globalisation and financialisation) reduced the wage share over a long period and thus hampered economic growth. According to the above analysis, this is nonetheless only true if an economy is identified as wage-led, since mainstream supply-side measures (which from a Marxian point of

ongoing increase in the real interest rate) which may be associated but surely not causally linked with an obstacle to long-term growth and an increase in the profit share (see Seccareccia/Lavoie 2016: 209-10.).

view are obligatory in a capitalist world (see Boddy/Crotty 1975)) would otherwise be necessary to maintain profitability as a major source of the accumulation process. This appears to be the reason why most of the relevant literature either assumes – despite the inconclusiveness of the empirical evidence – that countries are wage-led (see e.g. Stockhammer/Onaran 2013) or at least claims that a wage-led regime would prevail if a certain wage policy (expansionary or restrictive) were to become a global strategy (see Lavoie/Stockhammer 2012b: 33).[16]

At least in most countries, however, wage policy is pursued by trade unions and employers' organisations, but does not constitute an area of governmental policy. *Functional income distribution is therefore not an instrument of economic policy*. The outcome of the wage bargaining process thus cannot be easily influenced by a government following any form of wage regime. What can then be done to ensure that a wage-led regime remains viable (assuming the country intending to follow such a regime is, in fact, wage-led)? Beyond simply providing political support to trade unions in the bargaining process, it has been argued that any measure that strengthens the position of trade unions in their struggle to achieve a fair income share will be helpful (see e.g. Lavoie/Stockhammer 2013b: 34; Stockhammer/Onaran 2013:). Such measures include introducing and increasing minimum wages, increasing the reservation wage via social policy, and strengthening collective bargaining. In conjunction with policies to regulate international financial markets (i.e. to re-balance the power relations between capital and labour which have been distorted due to the process of globalisation and financialisation), all of these proposed measures aim to pacify the 'class conflict', yet our analysis showed that functional income distribution is primarily determined by an exogenous variable which is certainly not the real wage nor the structure of the commodity markets. With regard to the use of monetary policy (to set or influence the exgoneous variable) and competition policy (to maintain or restore competition on commodity markets) the relevant literature remains rather silent.

Although it has been acknowledged that a wage-led strategy is 'certainly too small in magnitude to be sufficient as a stabilisation policy in the medium term' (Stockhammer/Onaran 2013: 75; see also Onaran 2016), policy recommendations based on the distributional regime approach are often still proposed as an 'equitable strategy for economic recovery' (Lavoie/Stockhammer 2013b) which 'aims at establishing a full-employment growth model in which sustained wage growth drives demand via consumption growth and via accelerator effects of investment growth as well as productivity growth via labor saving technological change' (Stockhammer/Onaran 2013: 74). Furthermore, following a 'wage-led' strategy is regarded as a means of replacing a 'beggar-thy-neighbour', export-oriented strategy with one that places domestic demand centre stage and that thus mitigates the danger and likelihood of trade conflicts. While we may acknowledge that economic policy strategies that aim to increase an economy's price competitiveness by reducing relative nominal unit labour cost may indeed foster domestic growth to the detriment of trading partners, this outcome is independent of whether such a policy impacts on functional income distribution. In other words: the 'beggar-thy-

[16] See Razmi (2018) for a critique of the claim that the world as a whole (i.e. a closed economy) must be wage-led.

neighbour' argument is unrelated to the distributional considerations of the wage-led-approach.

In sum, it does not seem unfair to say that neo-Kaleckian, neo-Marxian growth models do not focus on the dimensions of economic policy and polity.

5. Conclusion

The initial task of this paper was to evaluate the wage-led, profit-led regime approach as an SRP. Our question was essentially whether such an approach provides a promising means of integrating income inequality – which is perhaps the most socially problematic development of the last four decades – into heterodox modelling. Rising income inequality is not simply a social problem when attended by rising poverty rates and a political problem when the legitimacy of ever higher relative and absolute income at the higher end of the income scale is called into question (see e.g. Mongiovi 2015: 564); it is also an economic problem when the generation of income itself is hampered by income inequality through the effective demand channel. This is of course anything but a new insight and has always played a role in heterodox models – though arguably not to the extent that it should (see Lopez-Bernardo/Lopez-Martinez/Stockhammer 2016: 198ff.).

Nevertheless, where income distribution is concerned, the focus of attention in recent years has been on personal income distribution rather than functional income distribution.[17] This is quite right, since personal income inequality has exploded in recent decades across the world and independently of the measures used to assess it (gini-coefficient or income deciles). Now functional income distribution may of course influence personal income distribution – yet, the sign of impact is unclear.[18] Moreover, functional income distribution has remained rather stable in recent decades and few traces can be detected of a long 'neoliberal era'.[19] In the US, the wage share fell from around 66% in 1991 (a cyclical high) with long but rather unpronounced swings by 5.5 percentage points to 60.4% in 2017. In the UK, it rose with greater variance during the same period by 2.5 percentage points, from 63.8% to 66.3%. In the Euro Area it fell rather steadily by merely 3 percentage points, from 65.8% to 62.6%, while in France it remained

[17] There are two different and unrelated avenues of income inequality research: the first takes Okun's 'big trade-off' between equality and efficiency (Okun 1975) as a starting point, in order to show how low (wage) income inequality detrimentally affects employment by impeding the structural change from industrial production to the service economy (see e.g. OECD 1994; Appelbaum/Schettkat 1995; Appelbaum/Schettkat 1996). The second is concerned with measuring income inequality and its determinants (see e.g. Atkinson 2015). Nevertheless, both research approaches focus on personal rather than functional income distribution. Carvalho/Rezai (2016) attempt to add aspects of personal income distribution to neo-Kaleckian, neo-Marxian models rendering them more complex, more realistic but also more unpredictable in their regime character

[18] And has not yet been thoroughly investigated. For some initial attempts see Glyn (2009); Ranaldi (2018).

[19] Makrevska Disoska/Toshevska-Trpcesvka (2016: 327) speak of a 'dramatic decline…during the post-1980s neoliberal era' of the wage share. This alarming evaluation certainly does not fit the facts: Charpe/Bridji/McAdam (2019) speculate on thirty to forty years cycles of wage shares with the recent decline in some countries as rather 'normal' development from a historical perspective.

almost constant with only little variance.[20] Although 'Bowley's law', which claims that such long-run constancy of functional income distribution is the 'normal' outcome, has been strongly contested in recent research (see e.g. Bentolila/Saint-Paul 2003; Elsby 2013; Charpe/Bridji/McAdams 2019), a moderate (cyclical) fall in the wage share appears unproblematic[21] and can easily be explained by technological factors, concentration processes in commodity markets, and the long-run development of liquidity preferences among wealth owners in maturing economies[22]. There is certainly no need for a class conflict narrative here – a narrative that, it has been argued, cannot be theoretically substantiated.

Furthermore, the policy recommendations arising from the distributional regime approach are both unfocussed and risky. They are unfocussed insofar as political actors have few means of interfering directly in the wage bargaining process. All of the measures intended to strengthen labour may or may not increase the wage share. Since functional income distribution is endogenously determined, it ultimately depends – *ceteris paribus* – on the impact of wage settlements on interest rates. And this is where the recommendations may become risky: on the one hand, they neglect the possibility of an inflationary process triggered by excessive nominal wage claims,[23] which may easily push the central bank to raise (short-term) interest rates and may seduce wealth owners to increase their liquidity preference (thus impacting long-term interest rates) in order to guard against growing uncertainty. On the other hand, focussing on wage policy may leave other more important policy areas such as fiscal and monetary policy underexposed. Moreover, even if class conflict were capable of intentionally changing functional income distribution, as long as there is reasonable doubt about the identification of a particular economy as either wage or profit-led, any responsible government would be well-advised not to place too much emphasis on a strategy that may easily turn out to miss its mark.

If the above considerations are correct, neo-Kaleckian and neo-Marxian regime approaches cannot be considered a promising SRP but have to be regarded as *scientific*

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[20] These data are drawn from the European Commission's Ameco database and show the adjusted wage share of the total economy as a percentage of current GDP at current factor cost. If the period under investigation is shortened to consider only the 2000s and 2010s, the functional income distribution trend becomes even less clear. Lavoie/Stockhammer (2013b:13) discuss developments in functional and personal income distribution as though the two concepts were similar, co-move together and can therefore be used interchangeably. This is misleading at the least.

[21] Particularly if it takes place in conjunction with a compression of personal income distribution.

[22] See e.g. Autor et al. (2017) for the impact of market concentration on functional income distribution or Kohler/Guschanski/Stockhammer (2019) for the impact of financialisation.

[23] Wage claims become 'too high' when they exceed the margin given by the productivity increase and 'accepted' (by the central bank) inflation rate.

cul-de-sac[24] that have produced much self-reflection and idiocentrism[25] but few helpful insights for policy procurement, and through their self-inflicted focus on functional income distribution have even distracted from more important questions of personal income distribution and the incorporation of wage policy into a strategy of coordinated macroeconomic policies to boost growth and employment (see e.g. Heise 2006; Heise 2009) – however this ultimately impacts functional income distribution.

[24] A very similar conclusion has been drawn by Peter Skott (2017: 354): ‘I do not believe, however, that the current focus on wage versus profit led growth has been very helpful.’ Stockhammer/Ramskogler (2013: 52ff.) put forward a number of recommendations for Post Keynesian Economics (PKE) to move forward, i.e. prerequisites for PKE to be seen as a promising SRP. Among them are the recommendations of ‚be politically relevant‘ and ‚be more Post and less Keynesian‘ – the latter has been justified not in terms of analysis but in terms of subjects being investigated. With respect to the distributional regime approach (as a variant of PKE), the first recommendation appears not to be lived up to, while the second recommendation should probably be reversed: ‚be less Post and more Keynesian‘ in analytical terms as much as in subjects being investigated.

[25] This is not to be taken as a reproach but as a fact (see e.g. Lavoie 2017). Indeed, this is how science advances: by providing extensions, alterations, or alternatives to existing models and empirical tests. It nonetheless also comes with opportunity costs.

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