

PRELIMINARY VERSION - PLEASE DO NOT CITE

Empirics, Economic Growth and Interpretation in Applied Post Keynesian Research:

Criticism of Income Distribution-Growth Models

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This paper focuses on the shortcomings of empirical research/empiricism in Post Keynesian models of income distribution and growth. The aim of the paper, at the current stage, is to be critical before being constructive. The paper firstly briefly describes the problematic of Post Keynesian/ Kaleckian models of growth and income distribution. The second part focuses on the econometric work based on the theory, the data sets, the unit of analysis of the research (national level) and suggests some improvements. The third part focuses on the results obtained from the empirical research, the discourse of the interpretation of the results and the use of the information obtained from the econometric work. It is claimed that PK empirical research in this field of economics recreates and justifies the economic growth ideology on a heterodox ground via use of econometrics.

1.Introduction

The economic analysis using data sets and empirical tools (such as econometrics) in economics seems to be the most convincing way to prove the reliability and relevancy of economic theories for most of the economists, probably, due to ongoing hegemony of empiricism in social sciences. In academia, not only in economics, it is promoted to conduct econometric research to justify the validity of theorems-for some academicians it is the unique way to do so. The theories are in advance assumed to be valid and the econometric tests are used to determine the parameters of a given model. What is tested is, usually, the parameters of the model, but not the models themselves.

Several economists mention the importance of empirical studies in Post Keynesian (from here on PK) research in the last decade. Gerrard (2002) underlines the necessity of use of econometrics in PK methodology. Holt and Pressman (2007) report from Eichner (1976, 1983) that firstly theoretical, then empirical evidence that supports the former must be developed to construct an economic paradigm. Departing from this point, in *Empirical Post Keynesian Economics*, they argue for the necessity and importance of empirical studies in PK research. They mention that, despite the fact that the theoretical discussions among the Post Keynesians persist, the research in this area should be directed to empirical side. Going further, they claim that ‘Empirical analysis is important because it is **only** through empirical work and testing that one is able to evaluate the accuracy of economic theory, and it is **only** through empirical work that one may test the policy implications that derive from the theory’ (bold parts are not original).

However, not all the PK researchers have the same conviction about the indispensability of empirical research. Critical realists criticize use of econometrics in economics from several points and try to construct an alternative for economic methodology

(see Lawson(1997) for a detailed discussion). It should be noted that critical realism itself is subject to several criticisms, for instance, from the Marxist political economists such as Fine (2006).¹

The aim of this study, at the current stage, is not to contribute to the methodological discussions in heterodox economics but to focus on the problems regarding empirical research on PK models of income distribution and growth and the function of use of orthodox methodologies (econometrics in this case) in heterodox approach to economics (PK economics in this case).

2. Post Keynesian / Kaleckian Models of Growth and Income Distribution

In contrast with neoclassical economists, which view income distribution (between labor and capital income) as output of marginal productivities of labor and capital, Post Keynesians conceive this allocation as the outcome of power relations. This conception alters explanation of workings of economy and policy recipes aiming attainment of higher growth rates.

After the theoretical works of Blecker (1989), Bhaduri and Marglin (1990), and Marglin and Bhaduri (1990), who theoretically analyzed wage-led and profit-led growth regimes of closed and open economies, several empirical studies are done to characterize growth regimes of developed and, recently, developing countries. It is shown that under certain conditions higher wage shares can lead to increased capacity utilization and growth. In such a case, growth regimes of the economies are called wage-led. This contradicts with the approach that higher profit shares always lead to higher growth rates, however, under other set of conditions the growth regime is so, and called profit-led.

¹For his questions posed to Nielsen and Morgen (2006) regarding the difference between Marxist political economy and critical realism, see Fine (2006).

In order to designate the wage-led/profit led character of the economies, two different estimation strategies are employed. The first type of empirical studies examine the goods market in isolation. Behavioral functions for demand components (consumption, investment and net exports) are estimated separately with single equations. The second type of studies estimate a goods market equilibrium along with other markets or indicators. Those models can capture the interaction among the variables through use of VAR, however, identification of individual variables is difficult (Stockhammer et al., 2011).

3. Analysis at national level using ‘nation’s data sets

Almost all of the empirical studies of growth regimes deal with the income distribution-growth relation problem at a national level. This is quite related to the etymology of the word *statistics*, which derives from the word state. Efav (1991) underlines that it refers to “data such as numbers concerning births, deaths, marriages, taxes and commerce collected by agencies of the state”. This definition, which is still valid in the 21st century, gives us clues about the macroeconomic data that economists use. Firstly, the data is collected by the state apparatus and secondly, as a direct result of the first, it only concerns the national level. Both aspects of statistics pose problems for the economists.

Firstly, the collection of data by the state raises the questions of reliability and speculation. The reliability problem is, at first look, related to the statistics of unemployment, inflation, and GDP growth rate which occupy an important place in the ‘successes’ or ‘failures’ of governments. Especially, use of surveys and their conduction poses important problems in data gathering process. Tooze (2003) mention that “Statistics are not neutral reactions of social and economic reality. They are produced by particular social actors in an effort to make sense of the complex and unmanageable reality that surrounds them.”

Dependent, autonomous or independent, the state statistics belong to states and privatization or autonomy of the state statistics departments cannot go beyond a naive suggestion due to their connections to other state departments. This is a fundamental problem which can, optimistically, be handled through transparency of workings of institutions.

The second problem is analysis of countries independently from each other. Here, it might be argued that taking exports and imports into account compensates lack of international/global dimension of the problematic. However, there are other points to consider in analyzing the effects of income distribution on macroeconomic aggregates consumption, investment and net exports. Theoretical and empirical models assume that national consumption is a function of wages and profits and investment is a function of interest rates, profits and aggregate demand of a given country. However, in an integral economic union such as the EU, the effect of income distribution in a country on other countries should also be borne in mind. That is to say that income distribution in a country might have effects on the macroeconomic aggregates on another one. As for the consumption function, cross country effects of income distribution should be taken into account due to globalized nature of consumption. Tourism expenditures, constitutes an important element of the consumption aggregate in relative and absolute terms many countries. Although those expenditures seem negligible at first glance, for some countries it has significant importance. Recently, Eurostat (2009) commenced a study for calculation of tourism expenditures under the title 'Tourism Satellite Accounts'. The statistics collected show that for some countries such as United Kingdom, Sweden, Austria, and Germany, share of domestic tourism consumption in final consumption expenditures by private households is non-negligible. Since tourism expenditures are made by visitors who are non-residents of a given country, this part of the GDP should be modeled as a function of the weighted labor and profit incomes of the visitors from the main tourism partners.

As for the investment function, there are also some amendments due be made in terms of explanatory variables. For an open economy, international, instead of national, interest rates can be used depending on the financial openness of the countries.

The nature of resource of data sets, the way they are used and theoretical/empirical models pose problems in applied research in PK models of income distribution and growth. Based on this framework, PK researchers use econometrics to determine the wage-led or profit-led character of the economy using time series data. In the next section, the relation of the analysis to economic growth ideology and empiricism is analyzed.

4. Economic Growth Ideology and Function of Econometrics

The problematic of the PK growth-income distribution models, by definition, is to analyze the conditions under which GDP grows, using comparative statics. In this framework, the main problem of the researcher is to show whether wage or profit share should be increased, taking the econometric results based on time series data into account. The aim of the criticism of the PK approach here is to show that this “radical” school of economics is dominated by the orthodoxy though two dimensions. The first is the indispensability of economic growth and the second is that of empiricism.

The first dimension of dominance is criticized by several authors. In a recent critique Spash and Schandl (2009) state that “Although emphasizing distributional concerns, PKE, like mainstream economics, assumes growth is good and more is better. Rather than questioning growth and capital accumulation the concern is for how to achieve more of the same.” From the PK perspective, wage increases might, under certain conditions, be a means to enhance economic growth. In other words, the aim of the research is not to find the ways to

improve wages but to show that under some conditions wage increase is beneficial for economic growth.

Within this theoretical framework, applied PK research aims to show that wage increases can go hand in hand with economic growth and econometrics is perceived as the unique way to prove it. However, when the economies turn out to be profit-led, wage increases cannot be justified through those models. How should the PK researcher present the results if the economy under investigation turns out to be profit-led? How can the increase of profit share in a country be defended if the share of profits is already high? Up to which degree should/can the wage/profit increment be?

In order to answer those questions above, it should be noted that wage/profit share in the economy are assumed to be exogenous to the system and determined by the class struggle between workers and capitalists from the PK perspective. That is, the time series data of wage and profits are outcomes of this struggle and the series of consumption, investment and net exports are directly and indirectly (due to the international economic structure and variables) determined by this struggle. So, the results of the econometric research can, at best, be a summary of this struggle and its average effects on macroeconomic aggregates, but cannot be predictive or be used for policy recommendations. However, the results are sometimes presented as policy recommendations through sentences formed as “if wage/profit share increase by x %, economy grows by y%”, not taking the already high wage/profit shares into account.

What might be the reasons behind presenting the results as policy recommendations, instead of viewing them as the summary of the class struggle? What might be the motivation of the PK researcher? I hypothesize that use of econometrics by the Post Keynesian can be claimed to be under the occupation of orthodoxy due to the reasons below:

- 1) To prove that PK economics can be practiced by applying an orthodox methodology, i.e. econometrics.
- 2) To present more 'solid' evidence by using numbers (elasticities, marginal effects etc.) to be more persuasive to the non-academic reader.

5. In lieu of conclusion

In this work, empirical research in PK models of income distribution and growth are criticized from several dimensions. At the first stage the nature of data sets is underlined and shortcomings of analysis at national level are mentioned along with some suggestions. At the second stage, economic growth ideology and its recreation by using econometrics within the PK models of income distribution and growth is analyzed.

From the data collection step to use of econometric techniques, empiricist approach of discussing the validity of theorems have certain shortcomings. The discussion of existence of economic relations between economic agents and causal relations within the structure of the economy cannot be reduced to econometric test of the supposed econometric relationships between economic magnitudes due to several reasons which are discussed in this work. This picture shows that PK research is under the occupation of heterodoxy though it is presented as a radical methodology.

At the next step of this work, the hypotheses presented at the last section should be developed and the motivation of the PK researcher should be analyzed more deeply. This might be achieved by concentrating on academician-academics-politics relationship in the field of economics.

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