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Post-Keynesian macroeconomics since the mid-1990s – main developments

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Towards Pluralism in Macroeconomics?

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2. Post-Keynesian economics as part of heterodox economics and alternative to orthodox economics

Presuppositions of heterodox economics, including post-Keynesian economics

Table 1.3 Presuppositions of the heterodox and orthodox research programmes

Presupposition	Heterodox schools	Orthodox schools
Epistemology/Ontology	Realism	Instrumentalism
Rationality	Environment-consistent rationality, satisficing agent	Hyper model-consistent rationality, optimizing agent
Method	Holism, organicism	Individualism, atomicism
Economic core	Production, growth, abundance	Exchange, allocation, scarcity
Political core	Regulated markets	Unfettered markets

Source: Lavoie (2014, p. 12)

Strands of post-Keynesian economics ('big tent')

- **Fundamentalist** (Keynes, older J. Robinson, Minsky, Shackle, Weintraub): fundamental uncertainty, the features of a monetary production economy, financial instability, method.
- **Kaleckians** (Kalecki, Steindl, younger J. Robinson): cost-plus pricing, class conflict, effective demand, income distribution and growth
- **Kaldorians** (Kaldor, Harrod, Goodwin, Godley): growth, productivity regimes, open economy constraints to growth, economic and the financial system
- **Sraffians/neo-Ricardians** (Sraffa, Garegnani): prices of production in multi-sectoral systems, choice of techniques, capital theory, long-period positions of the economy
- **Institutionalists** (Veblen, J.K. Galbraith, Lerner, Eichner): pricing, the theory of the firm, monetary institutions, behavioural and labour economics.

Essential characteristics of post-Keynesian economics (‘big tent’)

Five presuppositions of heterodox economics plus:

- the focus on a **monetary theory of production**, in which **money is non-neutral** in the short and the long run,
- the dominance of the **principle of effective demand** in the short and long run,
- the importance of the notion of **fundamental uncertainty**,
- the insistence that economic processes take place in **historical and irreversible time** – and are thus largely path dependent, and
- the importance of distributional issues and **distribution conflict** for economic outcomes.

➤ *‘Ten commandments of post-Keynesian economics’*

Stages of development of PK economics

1930s/40s

- Post-Keynesian economics starts with Keynes's and Kalecki's (!) revolution in macroeconomics, involuntary unemployment, trade cycle

1950s/60s

- Distribution and growth: extending the principle of effective demand to the long period (post-Keynesian d+g models)
- Critique of neoclassical macrotheory: capital controversy

1970s (,romantic age', Fontana (2009))

- Search for a grand theoretical system
- Foundation of journals: CJE (1977), JPKE (1978),
- Theory of the firm, pricing theories, ...

1980s/mid-90s (,age of uncertainty', Fontana (2009))

- Methods and methodology: ,What Keynes really meant, really'
- Textbooks:(Arestis (1992), Lavoie (1992), Davidson (1994), Palley (1996)
- Endogenous money (Moore), financial instability hypothesis (Minsky)
- Kaleckian distribution and growth models (Rowthorn, Dutt, Bhaduri/Marglin)

Late-1990s/2000s

- Applied work, economic policies
- Integrated models of money, distribution conflict, effective demand, capital accumulation + growth (analytical + sfc simulation models)

3. What has been achieved in post-Keynesian macroeconomics over the last two decades?

3.1 Integration of distributional issues into short- and long-run macroeconomics

3.2 Integrated analysis of money, finance and macroeconomics

3.3 Alternative macroeconomic models and policy mixes to the NCM

3.1 Integration of distributional issues into short- and long-run macroeconomics

- Distribution and distribution conflict affect aggregate demand, employment, inflation in the short run.
- Kaldor/Pasinetti/Robinson distribution and growth model: income shares are determined by capitalist expenditures; wages more rigid than prices; normal rate of utilisation in the long run
- Kalecki/Steindl distribution and growth approach: income shares determined by mark-up pricing, endogenous rate of utilisation in the long run
- Neo-Kaleckian growth model (Dutt 1984, 1987, Rowthorn 1981): wage-led demand and growth for closed economy; profit-led only with strong net-export effect in open economy (Blecker 1989)
- Post-Kaleckian growth model (Bhaduri/Marglin 1990, Kurz 1990): different regimes (wage- or profit-led) for closed economy.

3.1.1 Endogenous rate of capacity utilisation beyond the short run?

- Harrodian/Marxian critique (Dumenil/Levy 1999, Shaikh 2009, Skott 2010, 2012): Deviation of utilisation from normal rate is not consistent with long-run equilibrium; paradox of costs disappears.
- Normal/optimal rate of in a world of uncertainty is a range (Dutt 1990, 2005a, 2010a)
- Firms have multiple goals and accept deviations from target or normal rate or utilisation (Dallery/van Treeck 2010)
- Firms' assessment of trend growth and normal rate is endogenous to actual experience (Lavoie 1995a, 1996a)
- Normal rate as stable inflation rate of utilisation is endogenous to monetary policies (Hein 2006a, 2008)
- Autonomous expenditure growth driving the system allows for Kaleckian results regarding growth path even with normal rate of utilisation (Allain 2015, Lavoie 2016a)

3.1.2 What about the feedback of demand/growth on distribution?

- Have Kaleckians ignored feedbacks of demand and growth on income distribution (Skott 2016)?
- Kaleckian models with feedbacks of demand, employment or growth on distribution: Assous/Dutt (2013), Bhaduri (2008), Blecker (2011), Cassetti (2003; 2006; 2012), Dutt (2006a; 2010b; 2012), Hein/Stockhammer (2010; 2011b), Lavoie (2010; 2014, Chapter 6), ..
- Feedback of demand and employment on distribution is not unique, applying Kalecki's theory of distribution (Dutt 2012)
- Feedback depends on changes in socio-institutional factors, in particular in the medium to long run
- Income shares are thus taken to be exogenous when it comes to the analysis of medium-/long-run wage vs. profit-led demand/growth

3.1.3 Why do different studies show different results regarding wage- and profit-led regimes?

- Kaleckian ‘one-directional structural approach’: estimation of the effects of changes in wage/profit shares on components of aggregated demand (Bowles/Boyer 1995, ..., Onaran/Obst 2016)
 - Domestic demand is usually wage led, small open economy may turn profit led in isolation
- Goodwinian ‘bi-directional (or system) aggregative approach’: direct estimation of effects of distribution on economic activity, and vice versa
 - Total demand is profit led
- Main difference: time horizon (Blecker 2015, Bridji/Charpe 2016), Kaleckians are interested in medium-/long-run effects of distribution on demand, Goodwinians are interested in short-run interaction
- Is the short run profit led?
 - Empirical doubts (Stockhammer/Stehrer 2011) and theoretical doubts, i.e. overheads (Lavoie 2014) or credit/debt (Stockhammer/Michell 2016)

3.1.4 Are functional income distribution and the wage-led vs. profit-led distinction still relevant with rising personal income inequality and household debt?

- Falling wage shares and rising inequality, but rising instead of falling private consumption in countries like US before crisis
- Debt in workers' consumption function (Dutt 2005b, 2006b, Hein 2012a, Nishi 2012a, ...)
- wealth and debt effects on consumption (Bhaduri/Laski/Riese 2006, Bhaduri 2011a, 2011b, ...);
- relative income hypothesis (Belabed/Theobald/van Treeck 2013, Carvalho/Rezai 2016, Kapeller/Schütz 2014, 2015, Kim/Setterfield/Mei 2014, ...)
- Empirical results regarding relative income hypothesis are inconclusive; financial and residential wealth, as well as debt effects on consumption for some countries quite robust.
- Wage share is still important, because household debt can only temporarily boost consumption without triggering financial instability, but personal distribution and wage dispersion matters – irrespective of wage- or profit-led demand (Palley 2016)

3.2 Integrated analysis of money, finance and macroeconomics

- Rate of interest as a monetary phenomenon, exogenous for income generation and growth (Pasinetti 1974, p.47)
- Interest, finance and investment: Kalecki's (1937) 'principle of increasing risk', Steindl's (1952) 'gearing ratio', Minsky's (1975, 1986) distinction between 'hedge', 'speculative' and 'Ponzi' finance
- Interest, debt and consumption (credit availability, wealth, relative income hypothesis, ...)
- Demand-driven small-scale analytical models
- Large-scale, stock-flow consistent (SFC) models in the tradition of Godley (Cambridge) and Tobin (Yale) (Godley/Lavoie 2007)

3.2.1 The integration of interest and credit into post-Keynesian distribution and growth models

- Since the late 1980s/early 1990s, several attempts at integrating monetary variables into different types of post-Keynesian distribution and growth models
- Three classes (rentiers, managers/firms, workers); interest and debt of firms affect income distribution, investment and consumption through the income shares of the three groups; demand, growth and (financial) stability
- Steindl's macroeconomic paradox of debt (Dutt 1995), debt-led (Minskyian) and debt-burdened (Steindlian) regimes (Taylor 2008)
- 'Normal', 'intermediate' and 'puzzling' cases for effects of interest rate/debt changes (Lavoie 1995)
- Only 'debt-led' and 'puzzling' regimes seem to be stable (Hein 2007)
- Further debate on stability: Sasaki/Fujita (2012), Hein (2013), Franke (2016)
- Including Minsky: Charles (2008a; 2008b; 2008c), Lima/Meirelles (2007), Meirelles/Lima (2006), Nishi (2012b), Ryoo (2013)

3.2.2 Financialisation in post-Keynesian distribution and growth models

- Since the early/mid-2000s, post-Keynesian have increasingly applied their integrated distribution and growth models to the ‘macroeconomics of finance-dominated capitalism (Hein 2012b)
- Channels: distribution, investment, consumption, current/capital account
- Potential regimes: ‘Finance-led growth’ (Boyer 2000), ‘profits without investment’ (Cordonnier 2006), ‘contractive’; only the former seems to be (financially) stable in the long run.
- Empirically, ‘profits without investment’ seems to have dominated:
- ‘Debt-led private demand boom’ vs. ‘export-led mercantilist’ regimes before the crisis (case studies: i.e. FESSUD)
- Alternative: Wage-led/mass income-led regime (Lavoie/Stockhammer 2013, Stockhammer/Onaran 2013) embedded in a Keynesian Deal (Hein/Mundt 2012, Hein/Truger 2011; 2012/13):
- Re-regulation of finance, re-distribution of income, re-orientation of macro-policy, and re-creation of international policy coordination

3.3 Alternative macroeconomic models and policy mixes to the NCM

- Post-Keynesian critique and amendments of NCM since early/mid 2000s (Arestis 2009, 2011, Arestis/Sawyer 2004a, Fontana/Palacio-Vera 2002, Kriesler/Lavoie 2007, Lavoie 2006b, ...):
 - Critique: Independence of the NAIRU from the development of actual unemployment, neutrality of money in the long run, focus on interest rate policy only, neglect of fiscal policy
- Alternative models assume away the existence of a short-run inflation barrier and hence the NAIRU (Atesoglu/Smithin 2006, Setterfield 2006, 2009a), or treat it as endogenous in the medium to long run (Hein 2006c, Hein/Stockhammer 2010, 2011b, Lavoie 2006b, Stockhammer 2008b)
- ... accept the interest rate inverse IS-curve (Atesoglu/Smithin 2006, Lavoie 2006b, Rochon/Setterfield 2007, Setterfield 2006), or replace it including distribution, debt etc. (Hein 2006c, Hein/Stockhammer 2010, 2011b, Setterfield 2009a, Stockhammer 2008b).
- Reverse neoclassical/NCM hierarchy of markets: Financial and goods markets determine employment! Labour market affects primarily inflation.

Table 2: Macroeconomic policy recommendations: New Consensus models (NCM) and post-Keynesian models (PKM) compared

	NCM	PKM
Monetary policy	Inflation targeting by means of interest rate policies, which affects unemployment in the short run, but only inflation in the long run	Target low interest rates affecting distribution, and stabilise monetary, financial and real sectors applying other instruments (LLR, credit controls, ABRR)
Fiscal policy	Support monetary policy in achieving price stability, balances the budget over the cycle	Real stabilisation in the short and in the long run, no autonomous deficit target, distribution of disposable income
Labour market and wage/incomes policy	Determines the NAIRU in the long run and the speed of adjustment in the short run, focus should be on flexible nominal and real wages	Affects price level/inflation and distribution, focus should be on rigid nominal wages, steady nominal unit labour cost growth and compressed wage structure
International economic policies	Free trade, free capital flows, flexible exchange rates	Regulated capital flows, managed exchange rates, infant industry protection, regional and industrial policies
Co-ordination	Clear assignment in the long run, co-ordination at best only in the short run	No clear assignment, economic policy co-ordination required in the short and the long run, both nationally and internationally

Macro-policy debates in post-Keynesian economics

- Monetary policy: ‚activist‘ vs. ‚parking it‘ approach to interest rate (Rochon/Setterfield 2007)? But agreement that current QE is ‚pushing on a string‘ and requires supporting fiscal policies
- Fiscal policy: functional finance? Limits to government debt? MMT (Wray 2012) and their critics (Palley 2015)
- Wage policy: Only nominal stabilisation? Or also re-distribution? Focus on wage structure instead of wage share?
- International economic policy: floating (Wray 2012) or managed/fixed exchange rates?

4. Final thoughts on open questions, areas for future research – and pluralism

Micro and macro

- Post-Keynesian microeconomics (King 2015, Chapter 5, Lavoie 2014, Chapters 2-3)
- Basic principles of post-Keynesian micro (King 2015):
 - decisions of firms are the driving force
 - oligopolistic or monopolistic competition
 - Fundamental uncertainty, satisficing behaviour

Neither ‘micro-foundation of macro’ nor ‘macro-foundation of macro’:

‘As Kalecki maintained, macroeconomics and microeconomics should be thought of as existing side by side, closely related to and influencing each other but also relatively autonomous and neither constituting the foundations of the other.’ (King 2015, p. 45)

- Integration of changes in micro of firm and households into post-Keynesian macro models of financialisation
- PKs have and should draw(n) on other schools of thought and social sciences

Areas for future research

- Integration of ecological and environmental issues into post-Keynesian macroeconomics (Fontana/Sawyer 2013, 2016, Rezai/Taylor/Mechler (2013))
- Inclusion of the gender issues into macroeconomics (Van Staveren 2010)
- Re-focus on the political economy dimension and the social embeddedness of economic processes and economic policies (Kalecki 1943, Steindl 1979, Smithin 1996, Cornwall/Cornwall 2001)

Pluralism and coherence

- Pluralism (topics, methods, ...) is required because of complexity, historic specificity, and for progress in social sciences (King 2015)
- Post-Keynesianism is a pluralist but coherent research programme ('10 commandments')
- PK provide macro for a pluralist political economy programme

THE END