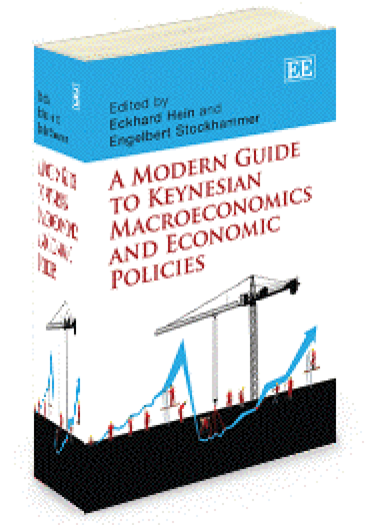
History and Fundamentals of Post-Keynesian Macroeconomics

CEPN
Centre d'Economie de l'Université Paris Nord

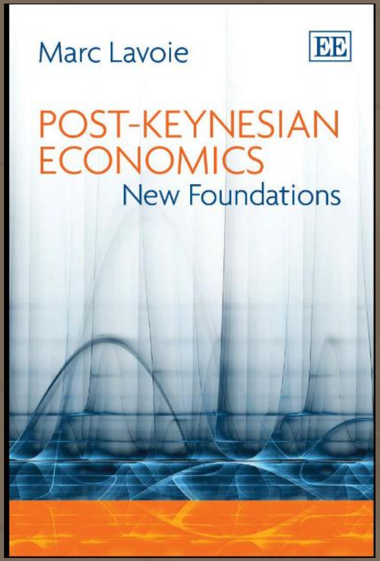
Marc Lavoie

University of Paris 13

University of Ottawa



A Modern Guide To Keynesian Macroeconomics And Economic Policies



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Outline

- 1. We set post-Keynesian economics within a set of multiple heterodox schools of thought, in opposition to mainstream schools and quickly identify the main features (presuppositions) of heterodoxy, contrasting them to those of orthodoxy.
- 2. We cover a brief history of post-Keynesian economics, in particular its founding moments.
- 3. We identify the additional features that characterize post-Keynesian economics relative to closely-related heterodox schools.
- 4. We delineate the various streams of post-Keynesian economics: Fundamentalist, Kaleckian, Kaldorian, Sraffian, Institutionalist.
- 5. PKE in the limelight: monetary economics

PART I

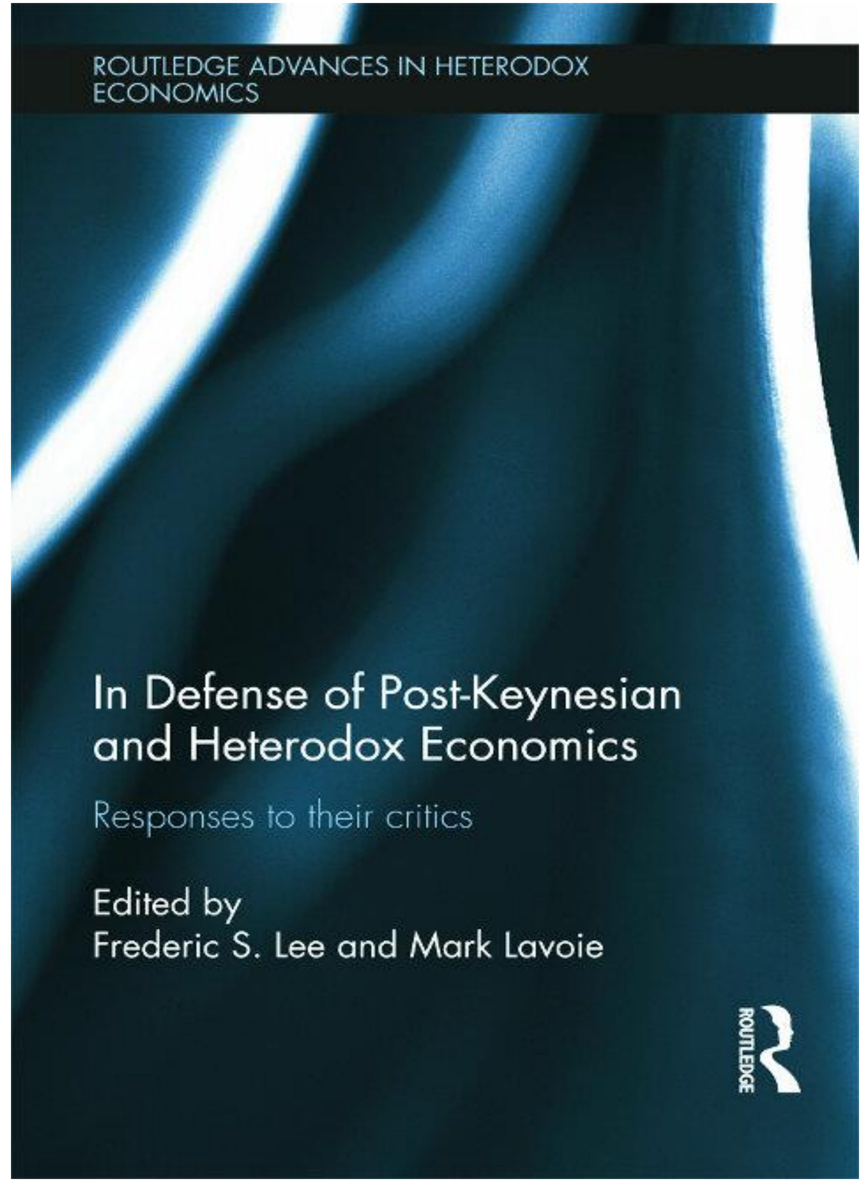
Heterodox schools and Keynesian schools

Heterodox vs Orthodox economics

- HETERODOX PARADIGM
- NON-ORTHODOX PARADIGM
- POST-CLASSICAL PARADIGM
- REVIVAL OF POLITICAL ECONOMY
- REAL-WORLD ECONOMICS

- ORTHODOX PARADIGM
- DOMINANT PARADIGM
- THE MAINSTREAM
- NEOCLASSICAL ECONOMICS
- MARGINALISM

- Lee, Lavoie ROPE 2012
- J.E. King
- Stockhammer and Ramskögler
- Dobusch and Kapeller
- D. Dequech
- B. Hopkins
- M. Vernengo
- Earl and Peng
- G. Mongiovi
- Rochon and Docherty
- D. Foley
- L. Hoang-Ngoc



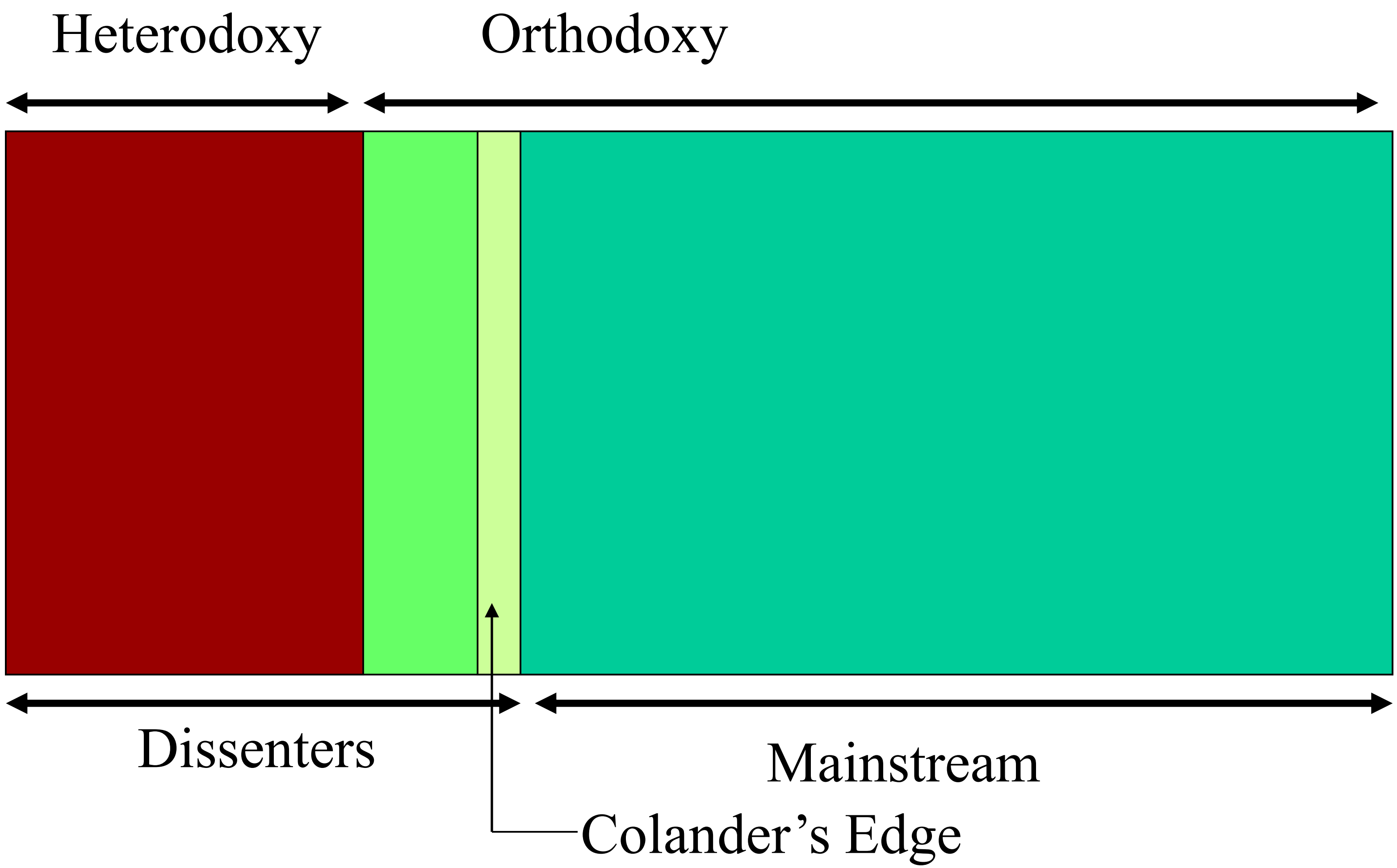
Hodgson (August 2019 book): *Is There a Future for Heterodox Economics?*

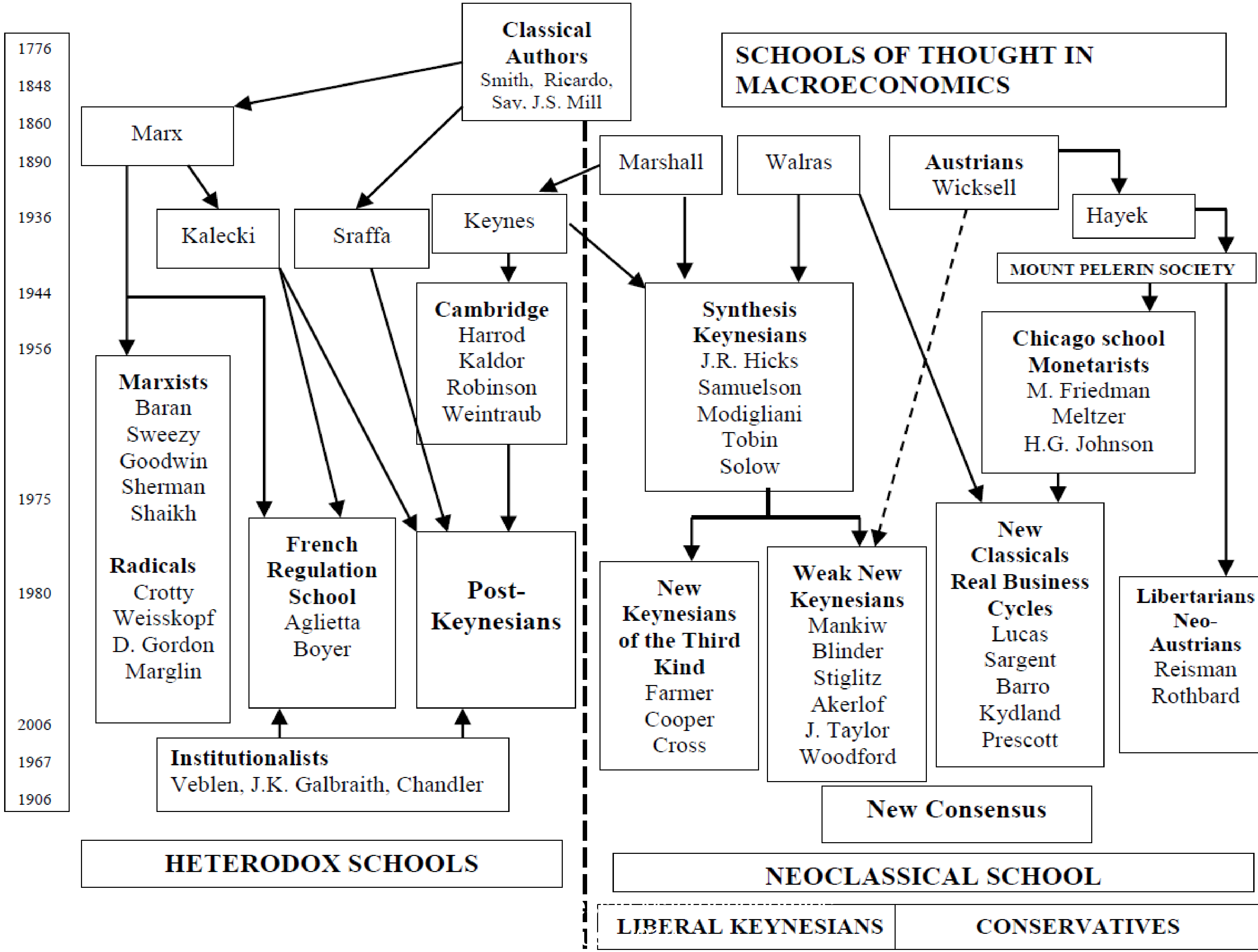
- "Over the last 50 years, and particularly since the financial crash in 2008, the community of heterodox economists has expanded, and its publications have proliferated. But its power in departments of economics has waned. Addressing this paradox, Geoffrey M. Hodgson argues that **heterodox economists** ….**cannot agree on what heterodoxy means.**
- Employing insights from the sociology and philosophy of science, the author explores the marginalisation of heterodox economics in the academic community and its exclusion from positions of power. **This perceptive book also shows how the weaknesses of a particular version of heterodoxy stemming from the Cambridge economics of the 1970s have been replicated globally in much of contemporary heterodox economics.** The author considers how the field can adapt in order to improve and sustain its presence in academia."

Hodgson: An apparent fixation against Cambridge PK economics

- *“Some Post Keynesian economists preoccupy themselves with interpreting what Keynes really meant, and there is insufficient self-criticism and innovation in this school of thought. The 1970s project of the Cambridge school and others of building a heterodox alternative around figures such as Marx, Kalecki, Keynes and Sraffa was ill-planned at the outset, as it papered over too many cracks. It has since proved unviable and no longer holds sway in any major university”.* (Hodgson 2008, in an interview of Labrousse and Vercueil)

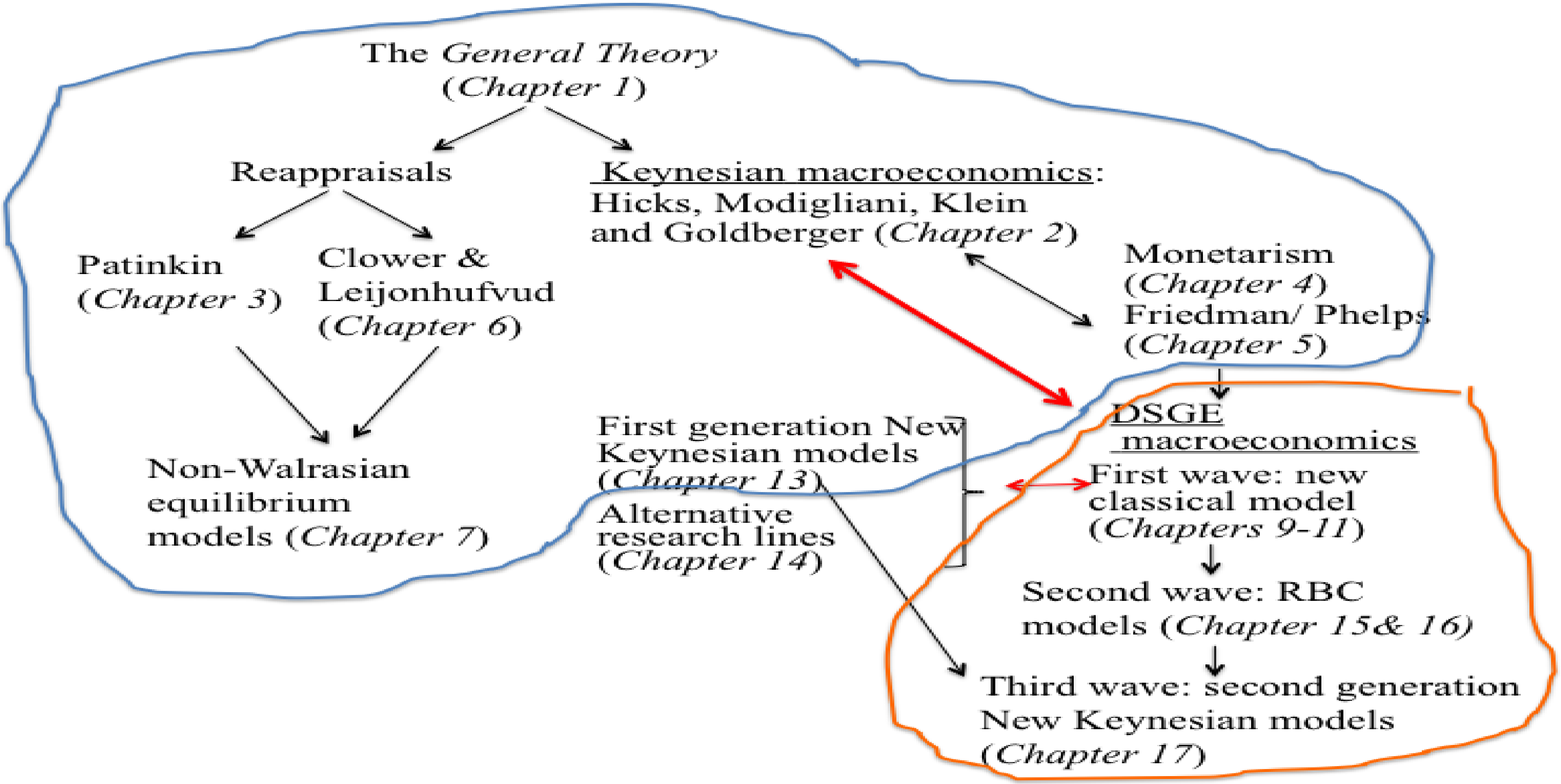
Dissenters and "the edge"





SCHOOLS OF THOUGHT IN MACROECONOMICS
1776
1848
1860
1890
1936
1944
1956
1975
1980
2006
1967
1906
Classical Authors
Smith, Ricardo, Say, J.S. Mill
Marx
Marshall
Walras
Austrians
Wicksell
Hayek
Kalecki
Sraffa
Keynes
MOUNT PELERIN SOCIETY
Cambridge
Harrod
Kaldor
Robinson
Weintraub
Synthesis Keynesians
J.R. Hicks
Samuelson
Modigliani
Tobin
Solow
Chicago school
Monetarists
M. Friedman
Meltzer
H.G. Johnson
Marxists
Baran
Sweezy
Goodwin
Sherman
Shaikh
Radicals
Crotty
Weisskopf
D. Gordon
Marglin
French Regulation School
Aglietta
Boyer
Post-Keynesians
New Keynesians of the Third Kind
Farmer
Cooper
Cross
Weak New Keynesians
Mankiw
Blinder
Stiglitz
Akerlof
J. Taylor
Woodford
New Classicals
Real Business Cycles
Lucas
Sargent
Barro
Kydland
Prescott
Libertarians
Neo-Austrians
Reisman
Rothbard
Institutionalists
Veblen, J.K. Galbraith, Chandler
New Consensus
HETERODOX SCHOOLS
NEOCLASSICAL SCHOOL
LIBERAL KEYNESIANS
CONSERVATIVES

Mainstream macroeconomics according to Michel De Vroey (2016)



Heterodox schools in economics

- Post-Keynesians
- Sraffians (Neo-Ricardians)
- Old Institutionalists
- Marxists, Radicals
- Structuralists (Development, Latin-American school, Furtado, L. Taylor)
- French Regulation School, Social Structure of Accumulation (SSA)
- Neo-Schumpeterians
- Circuitists (Monetary theory of production)
- Free Berlin University school
- Social economics and Humanistic economics
- Economists of « conventions »
- Green economics (Ecological Economics)
- Old behavioural economics
- Feminist economics ?
- …. And no doubt many others (Ghandi economics, Henry George, Gesell, Neo-Austrians (?), etc.)

What do all these heterodox schools have in common?

- Differences between schools of thought and their relative ranking have a lot to do with the sociology of the profession.
- Some of the discrepancies are due to specialization in certain fields (cf. T. Lawson).
- Still, in my opinion there are broad features that characterize heterodox and orthodox schools.
- These are called the <u>*presuppositions*</u> of research programmes by philosophers of science: they are things that cannot be questioned

Hodgson 2017

- Heterodox economics as often defined (by Lee 2008) does not include all possible candidates.
- Heterodox economics is often associated with **ideological** left-leaning opinions.
- **There is no agreement on the proper definition.**
- Heterodox economists do not seem to have endorsed **Tony Lawson's definition**, based on ontology and the need to avoid formalization in nearly all circumstances.

Five Presuppositions of the heterodox programme vs those of the mainstream

	Paradigm	
Presupposition	**Heterodox schools**	**Orthodox schools**
Epistemology	Realism	Instrumentalism
Method	Holism, organicism	Individualism, atomicism
Rationality	Reasonable rationality	Hyper rationality Optimizing agent
Economic core	Production, growth, income effects	Exchange, scarcity, substitution effect
Political core	Regulated, tamed, markets	Unfettered market optimism

What about neo-Austrians and analytical marxism?

- They do not fit most of the criteria defining the heterodox paradigm.
- This is also Davidson’s (1989, p. 469) assessment, who says that ‘the Austrians have neither logically differentiated themselves from the neoclassical approach, nor raised major problems in it’.
- The same could be said about analytical Marxism (Mary Wrenn 2007, p. 102).

Three further candidate presuppositions: 1. Ideology

- Variant of fifth: Ideology (Guerrien 2009, Marglin 1984, Samuelson 2007).
- ‘Economists produce the sorts of knowledge that its patrons desire’ (Mirowksi, 2011, p. 508).
- Paul Krugman (2013): ‘the austerity agenda looks a lot like a simple expression of upper-class preferences, wrapped in a facade of academic rigor. What the top 1 percent wants becomes what economic science says we must do’.

2. Open/Closed systems

- Another defining dichotomy between orthodox and heterodox economics has been put forth by Lawson (1997) and Dow (2000). Heterodoxy would entail a belief in open systems, while orthodox economics would deal with closed systems.
- Dubious distinction, in my opinion, and that of John Smithin (2004, pp. 67-70) and Mearman (2006).

3. A further candidate: the abuse of mathematical methods (Lawson CJE 2013)

- ‘The insistence that mathematical methods should be everywhere used is not only mainstream doctrine; it is the cause of the discipline’s continuing ills’ (Lawson, 2009b, p. 109).
- Sheila Dow (2000, p. 164): ‘the guiding principle of orthodox economics is mathematical formalism’….‘heterodox paradigms share a rejection of mathematical formalism’.
-

2.2 Mathematics and PKE?

- Several post-Keynesians endorse ‘the cautious use of formal methods in economics’ (Fontana, 2009, p. 39) or argue that ‘formalism is fine, but it must know its place’ (Chick, 1998, p. 1868).
- It is a source of tension between the various strands of PKE, and sometimes between PKE and other heterodox schools of thought.

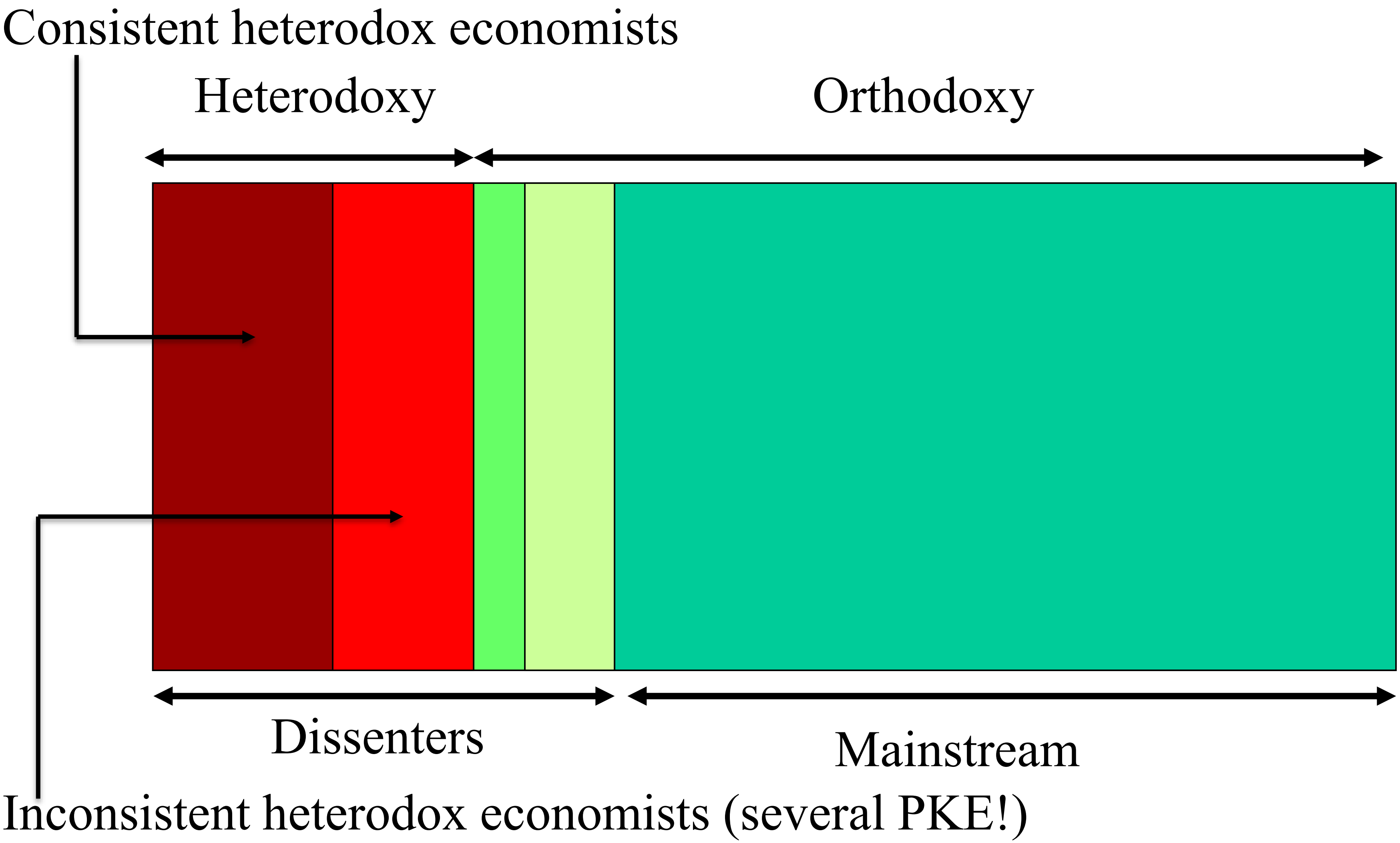
Consistent and inconsistent heterodox economists

- Slade-Caffarel (2019, *CJE*) revisits the arguments of Lawson : *'The only context in which it is appropriate to use such mathematical modelling … is in the analysis of closed systems of isolated atoms*.'.
- I used to understand this as applying to neoclassical theory (GET, DSGE models), but not so much to macroeconomic theory such as Minsky models or neo-Kaleckian growth models.
- Others (Keen, ABM authors) thought that non-linear, complex, models, eschewed the Lawson critique.
- But SC (2019) tells us that Lawson (2013; 2017-18) berates self-described heterodox economists who '*prioritise the goal of being realistic*', and yet fail to recognise the limited scope of modelling methods.
- SC calls them '***confused, inconsistent, heterodox economists***'.

Lawson's ambivalence resolved by himself in 2019

- *'In the past I have been quite positive about the heterodox project; recently less so. I think it's changing in the sense that **people are now claiming the heterodox label for themselves whilst allocating much of their time to mathematical modelling**.*
- ***So heterodox contributions have become increasingly weak and of little relevance to the real world.***
- *Just as important as dropping the term "neoclassical" is perhaps that modelling-dominated projects give up the term "heterodox". They increasingly are not.'* (Lawson 2019)
- When asked specifically about stock-flow consistent (SFC) modelling, Lawson (2019) replies that even though their authors are concerned with the way the world is, **their work is '*worthless all the same because the method is irrelevant*'.** !!!

The New View: Slade-Caffarel 2019



PART II

History of post-Keynesian economics

Phases in the creation of PKE

1. 1950s: The Beginnings:
2. 1960s-early 1970s: The Capital controversies, the response to monetarism
3. Mid 1970s-1980s: The Romantic Age

   Syntheses, institutionalization
4. 1990s: The Age of Uncertainty

   Methodology
5. 2000s: The Age of Policy

1.1 Where are the origins?

- **In the 1930s, the 1950s, or the early 1970s?**
  – Keynes's banana parable, 1929
  – Keynes's General Theory 1936
  – Kalecki: 1933 (cycle), 1937 (principle of increasing risk),1939 (positive role of real wages), 1942 (A theory of profits)
  – Kaldor 1934: multiple equilibria, instability, path-dependence

1.2 JR: The Accumulation of capital (1956) and Kaldor's article on income distribution (1956)

- The Accumulation of capital: Great book, that covers the dynamic long-run implications of Keynes, inspired by Harrod, Kalecki, Myrdal, the revival of classical questions, Sraffa's introduction to Ricardo's Principles, Wicksell (Kahn): growth, choice of technique, money
- A *neo-Keynesian* or *Cambridge* theory of income distribution, based on macroeconomics, instead of marginal productivity
- First awareness that the theory being discussed at Cambridge is different from that in the US (Mata, 2004).

2.1 The Capital controversies, 1960s and early 1970s

- Started with Robinson (1953-4) and Sraffa (1960).
- Capital reversing and reswitching show that the rate of return on capital cannot be a measure of its « scarcity ».
- The controversies put in jeopardy the standard production function based on substitution.
- Further work has shown that the apparent success of neoclassical production functions (Cobb-Douglas, CES, etc.) arises because they replicate national account identities (Shaikh 1974).
- More recently, it has been shown that econometric regressions on production functions estimate profit and wage shares in national income instead of elasticities of factors of production (Felipe and McCombie 2013).

2.2 The response to Monetarism

- Money is endogenous (Kaldor, Kahn, Robinson, Cramp).
- Central banks control short-term interest rates, not the supply of money.
- Causality between money and inflation is reversed.
- Causality between bank reserves and bank deposits is reversed.
- Central bank open market operations are essentially defensive, trying to stabilize interest rates.

2.3 The Americans join in…

- Sidney Weintraub (1958) starts criticizing the neoclassical synthesis.
- Basil Moore and Paul Davidson go to Cambridge on their sabbatical in the late 1960s, and Davidson finishes his *Money and the Real World* (1972),
- In December 1971, at the AEA meeting, a dinner gathers about 15 economists (Chick, Eichner, Davidson, Kregel, Minsky, Nell, Asimakopulos, Don Harris, Kenneth Boulding) with Joan Robinson.
- Robinson and Eichner agree on 'post-Keynesian economics'.

2.4 The Eichner and Kregel article in the JEL Dec. 1975

- Eichner and Kregel claim that a new *Paradigm* has been born, called *Post-Keynesian economics.*
- They summarize the new school with the following characteristics:
  - A concern with growth and cycles;
  - A concern with history and time;
  - A neo-Keynesian/institutional theory of income distribution;
  - Incomplete information, fundamental uncertainty;
  - Imperfect markets with oligopolies, and constant marginal costs;
  - A monetized production economy;
  - Saving adjusts to discretionary expenditures (investment);
  - Purpose: to explain the real world as observed empirically.

3.1 The Romantic Age: A grand synthetic theory

- Davidson 1972, 1982
- Jan Kregel 1973
- Hyman Minsky 1975
- Eichner 1979 Guide to PKE
- Peter Reynolds 1987
- Alfred Eichner 1987
- Amittava Dutt 1990, Lance Taylor 1991
- Marc Lavoie 1992
- Philip Arestis 1992
- Cardim de Carvalho 1992
- McCombie and Thirlwall 1994
- Thomas Palley 1996

3.2 The institutionalisation of PKE

- The creation of The *Cambridge Journal of Economics*, 1977, created by young scholars at Cambridge, founded on the tradition of Marx, Keynes, Kalecki, Robinson and Kaldor.
- The *Journal of Post Keynesian Economics*, 1978, edited by Weintraub and Davidson, based on Keynes, Robinson, Kaldor, Kahn, Kalecki, Lerner, Harrod, Galbraith, Minsky, new Hicks.
- Other journals (Thames Papers, ROPE, MECA), Summer schools (Trieste, Knoxvillle, UMKC, Berlin, Levy), PKT network, PKSG, newsletters, blogs, conferences.
- *Then later IRAE, INTERVENTION:EJEEP, ROKE, FMM conferences, PK associations*

4. The Age of Uncertainty, 1990s

- The focus moves from theory to methodology:
  - Methodological disputes over the proper critique of neoclassical theory
  - History of economic thought
  - The Collected Writings of Keynes
  - The *Treatise on probability* and the notion of Uncertainty

5. The Age of Policy, 2000s

- Since the late 1990s, the emphasis has moved from methodology to policy.
- A large proportion of papers at PK conferences are devoted to policy issues (MMT).
- A large proportion of the papers use empirical analysis and econometrics.
- There is a return to formalization:
  - the Kaleckian growth models
  - Goodwinian models
  - Stock-flow consistent models, and later agent-based models.
  - Macroeconomic ecological models

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PART III

The presuppositions of post-Keynesian economics

PKE adopt the five general heterodox presuppositions

- Realism, holism, reasonable rationality, production, the need to tame markets.
- Holism: See next slides on macroeconomic paradoxes
- Taming markets is required because post-Keynesians often underline *disequilibria and instability.*
- There are endogenous destabilising forces at work and price mechanisms cannot in general counteract upon these (example: labour market).
- The best examples currently are unemployment (Keynes) and financial instability (Minsky).

Distrust in unfettered markets

- « On the one side are those who believe that the existing economic system is, in the long run, a self-adjusting system, though with creaks and groans and jerks and interrupted by time lags, outside interference and mistakes … . On the other side of the gulf are those that reject the idea that the existing economic system is, in any significant sense, self-adjusting »
- Keynes, CW, xiii, p. 487 (1934)

Some general macroeconomic paradoxes that every policy maker should be aware of

Paradox of thrift (Keynes 1936, Robinson 1956)	Higher saving rates lead to reduced output or reduced growth
Paradox of public deficits (Kalecki 1971)	Government deficits raise private profits
Paradox of costs (Kalecki 1969, Rowthorn 1981)	Higher real wages lead to higher profit rates (activity, wage-led growth)
Paradox of profit-led demand (Blecker 1989)	Lower wages may lead to slower growth despite all countries being profit-led
The flexibility paradox I (Krugman 2012; Caskey and Fazzari 1987)	The more flexible wages and prices are, the more dramatic the perverse Fisher debt effect will be
The flexibility paradox II (Seppecher 2012, Dosi et al. 2016)	The more easily employers can hire and fire employees, the less employment there is

Some crisis-related macroeconomic paradoxes that every policy maker should be aware of

Paradox of tranquillity (Minsky 1975)	Stability is destabilizing
Paradox of debt (I. Fisher 1933, Steindl 1952)	Efforts to de-leverage might lead to higher leverage ratios
Paradox of liquidity I (Minsky 1986, Nesvetailova 2007)	Financial innovations seem to increase liquidity when in fact they are reducing it
Paradox of liquidity II (Dow 1987)	Efforts to become more liquid transform liquid assets into illiquid ones – the Minsky moment
Paradox of risk (Wojnilower 1980)	The possibility of individual risk cover (MBS, CDS) leads to more risk overall
Paradox of degrading standards (McCauley 2009)	Default rates are low because of the degradation of underwriting standards

Specific post-Keynesian presuppositions (Hein, Lavoie)

- Principle of effective demand (investment causes saving)
- Monetary theory of production
- Historical and irreversible time (path dependence)
- Fundamental uncertainty
- Distribution issues and conflicts

What about econometrics and PKE ?

- ‘While Post Keynesians should be skeptical about prediction, this does not mean that they should abandon all empirical work’ (Holt, 2007, p. 101).
- Bill Mitchell (2007) says that policy makers require hard numbers for policy making, and these can be provided either by back-of-the envelope calculations or by econometrics.
- Econometrics is a powerful weapon in the battle of ideas. Economics is all about rhetoric (Deirdre McCloskey 1983).
- Katarina Juselius (2011) argues that general-to-specific cointegrated vector autoregression (CVAR) reflects post-Keynesian concerns about the non-stationarity of data and the importance of short-run dynamics

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PART IV

The various strands of post-Keynesian economics

The Hamouda and Harcourt (1988) 3-way typology

- They identify three strands:
- **The Fundamentalist** (American or Marshallian) Post Keynesians: Weintraub, Davidson, Minsky, Shackle
- **The Kaleckians**: Kalecki, Steindl, Asimakopulos, Eichner
- **The Sraffians**: Sraffa, Eatwell, Garegnani
- They admit that they don't know where to put Robinson, Kaldor, Goodwin, Godley, Pasinetti

The Lavoie (2010, 2014) 5-way current typology

- **Fundamentalist Keynesians:**
  - Money, liquidity preference, uncertainty, methodology
  - Davidson, Kregel, Chick, Dow, Rotheim, Tily, Hayes, Fontana
- **Kaleckians:**
  - Pricing, growth, cycles, employment, profits,
  - Sawyer, Bhaduri, Dutt, Blecker, Fazzari, Hein, Onaran, Stockhammer,
- **Sraffians:**
  - Relative prices, capacity, normal profit rate,
  - Salvadori, Kurz, Schefold, Serrano, Cesaratto, Stirati
- **Institutionalists:**
  - Institutions (firms, banks)
  - Fred Lee, Peter Earl, Arestis, Minsky, Wray, Fullwiler, (MMT), Galbraith
- **Kaldorians:**
  - Growth, money, international, productivity
  - Godley, Thirlwall, McCombie, Palley, Skott, Setterfield, Storm, Naastepad
  - **Ecclectic authors go across all or at least two of the categories, for instance Nell, younger PKs ….**

PART V

Post-Keynesian economics in the limelight: monetary theory

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Two cases

- A number of central bankers now make reference to PK works in monetary theory: banks are not only intermediaries, and causation from loans to deposits is reversed
  - Bank of England (McLeay et al. 2014; Jakab and Kumhof 2016, 2019)
  - Bundesbank
  - Central banks of Poland, Hungary,
  - Borio (BIS)
- Modern Monetary Theory (MMT)

US Senators condemning MMT (May 2019)

IN THE SENATE OF THE UNITED STATES

Mr. PERDUE (for himself, Mr. BRAUN, Ms. ERNST, Mr. MORAN, and Mr. TILLIS) submitted the following resolution; which was referred to the Committee on ________________

RESOLUTION

Recognizing the duty of the Senate to condemn Modern Monetary Theory and recognizing that the implementation of Modern Monetary Theory would lead to higher deficits and higher inflation.

Whereas noted economists from across the political spectrum have warned that the implementation of Modern Monetary Theory (referred to in this preamble as "MMT") would pose a clear danger to the economy of the United States;

MMT and PKE

- MMT is without a doubt part of the post-Keynesian tradition.
- The implicit MMT macroeconomic theory relies on post-Keynesian macroeconomic theory;
- MMT relies on a credit-creation view of banking – the endogenous money, where central banks essentially pursue defensive operations;
- MMT authors, like post-Keynesians, reject 100 percent reserve-related schemes;
- Both MMT and post-Keynesian economists believe that fiscal policy, not monetary policy, should be the main tool to stabilize the economy, and hence that quantitative easing is unlikely to jump-start the economy.

The main negative lines of MMT (also found in PKE)

- MMT advocates reject statements such as:
  - The government will run out of money
  - The government should run its finances like a household
  - Government deficits bring about hikes in interest rates
  - Government deficits take savings away from the private sector and lead to crowding out

•

Some unreasonable claims?

- *"The MMT economists are delivering the alternative paradigm in macroeconomics. No other challenge to the mainstream has succeeded and the heterodox tradition just became lost in peripheral issues. MMT is front and central macroeconomics and the mainstream cannot deal with it".* (Mitchell, Billyblog, 23 July 2019)
- ***"MMT economists were the first in the modern era to point out that loans create deposits not the other way around.*** *You will never find that proposition in the standard macroeconomics textbooks*." (Mitchell, Billyblog, 16 July 2019)
- *"The RBA …finally acknowledges what Modern Monetary Theory (MMT) economists have been pointing out for more than two decades – that the accumulation of household debt ultimately becomes a brake on spending growth".* (Michell, billyblog, 15 July 2019)

MMT statements that attract attention

- « **Sovereign** » governments cannot default
- A government **deficit lowers short-term interest rates**, it does not increase it
- **The limit to government spending is not a financial one**; the limit arises from the lack of real resources
- A **job guarantee program (government as the employer of last resort)** will achieve full employment without generating inflation

MMT statements based on the *general version* that draw attention

- « The Treasury does not ‘need’ to borrow in order to deficit-spend ». [Wray 1998, p. 117]
- « Taxes do not finance spending » [Forstater and Mosler 2005, p. 538]
- « Government spends simply by crediting a private sector bank account at the central bank. Operationally, this process is independent of any prior revenue, including taxing or borrowing ». [Mitchell and Muysken 2008, p. 209]

- **These statements follow from the consolidation hypothesis that mixes the Treasury with the central bank**

Two versions of MMT

- There are two versions of MMT:
  - the sophisticated version, also called the **specific case**, for academic discussion;
  - the simplified version, also called the **general case**, for popular consumption.
- In the past, critiques came mainly from insiders, usually friendly ones, essentially fellow post-Keynesians, who argued that **the general case should be abandonned**.
- Today, critiques come mainly from blog authors, pundits, mainstream economists, Marxist economists, some central bankers, politicians, and are **often based on the general case** or on a caricature of MMT.

Final remarks

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The most extremist versions always seem to attract all the attention

- I provide four cases within the realm of post-Keynesian theory:
  - The views of Paul Davidson among the five strands of PK theory;
  - The views of Pierangelo Garegnani among the three strands of Sraffian economics;
  - The views of Tony Lawson on methodology and the role of mathematical formalization;
  - The general version of MMT in contrast to its more academic version.

Conclusion: the future of PK economics

- Should PKE engage more with other social sciences?
- Should PKE engage more with other heterodox schools?
- Should PKE engage more with orthodox economists, in particular orthodox dissenters? How?