Post Keynesian Economics in a Nutshell

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1. Introduction

"Post Keynesian economics may be defined as a dissident school in macroeconomics based on a particular interpretation of John Maynard Keynes’s General Theory (and, for some Post Keynesians, the contemporary work of the Polish economist Michal Kalecki). There is also a substantial body of work in Post Keynesian microeconomics, and some distinctive and controversial policy propositions.” (King 2015 p. 1)

Much of Post Keynesian economics consists of criticism of neoclassical economics, including the “neoclassical synthesis”, monetarism, New Classical economics, New Keynesian macroeconomics, and the New Neoclassical Synthesis (the three-equation model in current undergraduate teaching; micro-foundations in advanced macro; and DSGE models used by central banks). However, this short paper summarizes Post Keynesian alternatives to neoclassical economics. The format of the summary is a series of propositions with short explanations (when needed) and (sometimes) comments. This paper also includes (in the last section) a very brief survey of other heterodox schools of thought.

Undergraduate students in economics who want more details can consult J.E. King’s Advanced Introduction to Post Keynesian Economics (2015). Graduate students looking for a comprehensive survey can dig into Marc Lavoie’s Post-Keynesian Economics – New Foundations (2014). This short paper is essentially a brief summary of King (2015). Unless otherwise stated, all references are to this short book (139 pages).

Post Keynesian theory originated in the 1950s and 1960s, more or less independently in Britain and the United States (King p. 28). The most important of the early British Post Keynesians were Joan Robinson and Nicholas Kaldor, whose main concern were the development of theories of growth and distribution that were consistent with Keynes’s General Theory – and in conflict with neoclassical capital theory and the Solow growth

1 Detailed comments by Jorge Buzaglo, Lennart Erixon and Stefan de Vylder are gratefully acknowledged and extensively used.

2 Chapter 3 in King (2015) is a short introduction to this criticism.
model. Three Italians played an important role in the development of this Cambridge tradition, namely Piero Sraffa, Luigi Pasinetti and Pierangelo Garegnani. In the United States, Sidney Weintraub was the first prominent Post Keynesian, emphasizing wage-push inflation and objecting to the neoclassical synthesis. Paul Davidson was first Weintraub’s student and then his colleague and long-term collaborator. Davidson’s *Money and the Real World* (1972) was a major event in the emergence of Post Keynesianism as a distinct school (King 2015 p. 30). For more history on Post Keynesian economics see, for example, King (2002).

2. Core propositions

There are six basic and interrelated propositions, which, according to King (2015 ch. 2), constitute the core of Post Keynesian economics.

**Proposition 1.** Employment and unemployment are determined in the product market, not the labour market.

Comment. This proposition may appear trivial, since employment is determined by production (and labour productivity), while unemployment is determined as a residual, as people without employment looking for jobs. But in mainstream economics this is true only in the “short run”: in the”long run” (or the “intermediate run”) employment and unemployment are determined in the labour market.

**Proposition 2.** Involuntary unemployment exists. Most of it is caused by deficient effective demand and the rest by frictional or structural unemployment.

However, unemployment can sometimes be the consequence of a permanent shortage of capital, rather than the result of a chronic deficiency of effective demand, as in nineteenth-century Europe (King p. 69-70).

Comment. Deficient effective demand means that production is restricted by sales (spending) at prices set by firms. Hence employment is also restricted by spending at prices set by firms. This is the “principle of effective demand”. Note that it is not easy (perhaps impossible) to distinguish between deficient-demand unemployment and frictional or structural unemployment. Of course, involuntary unemployment also exists in (some) orthodox economics, but there it is always due to something anomalous, like “imperfections” or “price stickiness” or “efficiency wages”.

**Proposition 3.** The relationship between aggregate investment and aggregate saving is fundamental to macroeconomic theory, and causation runs from investment to saving.

Thus, it is the level of investment spending that is the independent variable determining aggregate employment, output and income, with consumption spending (and hence saving as the difference between income and expenditure) as the dependent variable, rising and falling
with increases and decreases in income. This is not to say that current income is the only determinant of consumer spending. But it is investment that drives a capitalist economy.

**Proposition 4.** A monetary economy is quite different from a barter economy.

Since profit is defined as the difference between two sums of money (revenues and costs), this should be too obvious to require much discussion, but the general equilibrium models used by mainstream macroeconomists have great difficulty in making sense of it (King p. 6).

The demand for money is the result of the desire for a safe store of value in a world of fundamental uncertainty, where the prices of all other assets are unpredictable (King p. 19). Money is not “neutral”, and macroeconomic theory cannot be partitioned into “real” and “monetary” segments, with an iron curtain separating them; finance is important for production; debt matters since there is a crucial asymmetry between debtors, who can be forced to reduce their expenditure, and creditors, who cannot be forced to increase theirs.

Comment. The key to this insight is the interaction between price formation and money creation. In a modern economy (with fiat money) prices and wages are not necessarily restricted by the stock of money, since money growth can be adjusted to the prices of current goods and services (which is not possible in an economy with gold standard). More precisely, spending and hence also production and employment can be increased by borrowing financed by money growth. And, since prices adjust to wages, the stock of money adjusts to the level of money wages, not the other way around.

**Proposition 5.** In the Post Keynesian theory of inflation, increases in the stock of money are treated as the effect of inflation, not the cause (as in the quantity theory of money). Inflation originates in the “real” economy, in the product market and especially in the markets for labour and raw materials (King p. 79). Cost-push forces are identified (especially upward pressure on wages and primary product prices) as causes of inflation, often well before full employment is attained. Hence there is a need for prices and incomes policies.

Comment. While demand inflation is not mentioned here, it is mentioned in Proposition 30.

**Proposition 6.** Capitalist economies are driven by the “animal spirits” of investors.

Like many human activities in a world of fundamental uncertainty, decisions to invest depend on “spontaneous optimism” or rules of thumb rather than calculations of (expected) costs and revenues. Investment depends on “animal spirits” much more than on the rate of interest (King p. 19).

Comment. “Animal spirits” are also emphasized by Akerlof and Shiller in a well-known book, but King (p. 123) is very critical of their version.
3. Three schools

According to King (2015), there are three different schools of Post Keynesian economics, emphasizing or elaborating different aspects of the core above, and headed by Paul Davidson, Michal Kalecki, and Hyman Minsky. Their contributions to Post Keynesian economics can be summarized briefly in the following propositions.

**Proposition 7.** We live in a non-ergodic world, in which the future cannot be reliably inferred from the past (Davidson).

Comment. The financial crisis 2007-2008 offered many examples of “fundamental uncertainty” illustrated by unlikely events (“black swans”) incompatible with normal probability distributions.

**Proposition 8.** The principle of effective demand has nothing to do with “imperfections” in the labour market or the product market (Davidson).

For example, downward wage and price flexibility would not be sufficient to establish and maintain full employment (King p. 24).

Comment. Even if it is difficult to see how market-clearing in every market can be compatible with the principle of effective demand, the idea that this principle does not depend on “price stickiness” or other “imperfections” is well worth pursuing.

**Proposition 9.** The determinants of total profits include investment, consumption spending by capitalists, the government deficit, and the trade surplus (Kalecki).

Thus, it is entirely possible that capitalists can spend their way out of trouble, in aggregate, though not, of course, individually (King p. 16). Capitalists will normally resist government deficit spending, even though it would increase total profits. In part this reflects a mistaken belief in the need for “sound finance”, in part a well-founded fear of full employment as a threat to “discipline in the factories” (King p. 13).

Comment. The proof by King (p. 12) is so sketchy that it may be hard to believe. On the other hand, the proposition has not been disproved, only ignored, in mainstream economics (and a rigorous proof exists).

**Proposition 10.** There is no such thing as the long run, only a series of short runs (King pp. 20, 74).

Comment. This is an important departure from mainstream macroeconomics, which is organized around different theories for different periods, including the short run (year-to-year changes), the medium run (over a decade or so), and the long run (many decades).
Proposition 11. The business cycle is often the result of endogenous monetary instability, resulting from the behaviour of financial agents in the private sector (Minsky).

Minsky saw capitalism as essentially dynamic but also as inherently unstable (King p. 14).

Comment. In the financial crisis of 2007-2008 it was suddenly realized – even by Wall Street and some mainstream economists – that the writings of Hyman Minsky could explain what was happening. Now, as noted by Randall Wray (2016 p. vii): “Minsky’s writing style is notoriously opaque. Even those who want to understand him, including trained economists, find his work difficult”, so interested students may find the introduction by Wray useful.

Proposition 12. Commercial banks create money “out of thin air” by lending.

More precisely, a commercial bank can create money by crediting the account of the borrower with the loan against an increase of its assets by the borrower’s obligation to repay the loan. In fact, most money is created by commercial banks making new loans to households and firms. Thus, the stock of money is endogenous, being determined by the demand for loans, as elaborated by Minsky and his followers (King p. 22).

Comment. Without this basic fact it is difficult to understand the importance of the financial sector and, in particular, its support of asset price bubbles. For more important facts about money and the financial sector see, for example, Wray (2012) and Lavoie (2014, chapter 4).

Proposition 13. Macroeconomics cannot be reduced to microeconomics (King p. 42-45).

Keynes preferred to do his economics “top down, not bottom up” (King p. 23). All Post Keynesian schools agree that it is impossible to base macroeconomic theory on RARE “microfoundations”, that is, representative agents with rational expectations (King p. 15). The insistence on providing rigorous neoclassical microfoundations for macroeconomic theory amounts to a denial of the fallacy of composition, which Keynes regarded as the methodological pre-condition for having a separate macroeconomics in the first place (p. 27).

A well-known example of the fallacy of composition is the paradox of thrift, but there are many others, for example the paradox of tranquillity (“stability is destabilizing”, as noted by Minsky and Lavoie) and six other paradoxes discussed by Lavoie (2014 p. 17-22). But micro-reduction also conflict with “downward causation” (the fact that individuals are deeply influenced by the society in which they live) and “emergent properties” (properties of a society which depend on the interactions and not the properties of its individuals).

“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 … Post Keynesians do need their own microeconomic theory, which must be different from that of the mainstream and consistent with Post Keynesian macroeconomics” (King p. 45).
4. Microeconomics

When discussing product markets, labour markets, and consumer behaviour, Post Keynesians focus on facts about institutions, conventions and actual behaviour instead of models.

**Proposition 14.** Realism is much more important than mathematical tractability (King p. 48).

Comment. An accurate description of a part of the real word is the first step in exploring this part. A quantitative model is not always tractable without misleading assumptions.

**Proposition 15.** Most product markets are oligopolistic (King p. 48), so oligopoly (“competition among the few”) is the relevant benchmark model in economics.

Moreover, fundamental uncertainty means that precise maximization strategies are difficult to implement in practice (King p. 48). Future costs and revenues may not be easy to predict, so expectations are crucial (cf. “animal spirits”). Post Keynesians relate to behavioural economists like Herbert Simon, who also emphasizes “satisficing”, conventions, and rules of thumb (King p. 49).

**Proposition 16.** An industry’s output is almost always constrained by demand at prices set by its firms, not by rising costs (King p. 49).

Comment. This proposition is obviously fundamental to Keynesian economics. Note also that the management literature implicitly assumes that a firm’s production is restricted by sales at the price it sets, suggesting that this is indeed a stylized fact for most firms most of the time.

**Proposition 17.** Marginal (direct) costs are constant over a wide range of output and firms set prices as mark-ups on direct costs (King p. 50).

A firm set prices to cover costs and obtain some profits. To cover not only variable (direct) costs but also fixed (indirect) costs, a firm must set prices above marginal cost, which means that firms always set prices as mark-ups on marginal costs. The mark-up is usually chosen to cover total costs and “normal” profits for expected sales (cost-plus pricing), but definitions of “normal” profits may differ, so there are in practice many variants (King p. 51).

Comment. It is indeed true, as argued by Lavoie (2014 p. 127-128), that “competition occurs mainly through non-pricing means”, like advertising, product differentiation, or innovation, taking the market price as given. But how is the market price determined? Of course, not all firms can take the market price as given, as in “perfect competition”. But all firms but one can, implying price leadership. But how will the price leader set the price? This issue is not addressed by Lavoie until on p. 164-165, under the rubric of Complications: “At this stage of the discussion, we need to distinguish between the price leader, who sets prices, and the price-taker, who follows the lead of the price-leader. The price-leader may be the biggest firm of the industry (the dominant firm), the most innovative one, or firms may take turns. The price-leader may also be a ‘barometric’ firm, that is, a firm that is representative of the costs of the industry and is convenient for others to follow”.
**Proposition 18.** The fallacy of composition is more dangerous in the analysis of labour markets than in any other aspect of microeconomic theory (King p. 52).

For example, even if higher wages in an industry will reduce its production and employment, higher wages in an economy will not necessarily reduce aggregate employment, because of the effect on consumption. In fact, labour markets “do not really exist” (Lavoie 2014 p. 275), since the relation between employers and employees differs fundamentally from the relation between buyers and sellers in markets for commodities or securities, and from the relation between buyers and sellers in consumer markets or business-to-business markets.

Note, in particular, that variations in the price of labour (the real wage) cannot be relied upon to clear the market (King p. 53).

**Comment.** For an individual the causes of unemployment can fruitfully be divided into, first, causes of becoming unemployed and, second, causes of remaining unemployed. But to conclude from this insight that the stock of unemployment is determined by the inflow of unemployed and the average duration of unemployment is perhaps the most important example of the “fallacy of composition” in the analysis of labour markets.

**Proposition 19.** The level of employment is an essentially macroeconomic issue, so that microeconomic policy reforms will have a limited impact on unemployment (King p. 56).

**Comment.** King is (perhaps) referring to measures affecting the search behaviour of unemployed, which can affect the distribution of unemployment among workers but only marginally employment and hence only marginally unemployment. (High unemployment is not caused by long spells of unemployment but vice versa: long durations are caused by high unemployment.)

**Proposition 20.** Consumer preferences are endogenous, but individuals “enjoy some discretion”, and they are not completely manipulated by marketing (King p. 56).

More precisely, even if consumers are free to choose among firms and products – they “enjoy some discretion” – their tastes and preferences depend on the consumption decisions of others. Moreover, consumers have lexicographic preferences, meaning that there is a hierarchy of needs, with elementary needs being satisfied first, and with income effects being stronger than substitution effects. Consumers’ choices are based on habits and rules of thumb and hence “satisficing” instead of “optimising”.

5. Economic growth

A theory of economic growth (growth of aggregate output as measured by real GDP) is ultimately a theory of economic development – including historical, institutional, social and political forces – at least in the long run (King p. 68, 69).
**Proposition 21.** Economic growth depends on the growth rate of the labour force and the growth rate of labour productivity (King p. 64-66).

Thus, there is no capital-labour substitution induced by changes in relative factor prices in Post Keynesian economics, and no aggregate production functions (King p. 66).

**Proposition 22.** The growth rate of labour productivity depends on technical progress, investment, structural change, changes in organization (division of labour), and the balance of payments.

Technical progress (innovation) depends on entrepreneurship (as discussed e.g. by Schumpeter), while new technology normally needs to be embodied in new capital equipment through investment (endogenous technical change, King p. 66). There is a strong causal relation between the rate of growth of manufacturing output and the rate of growth of GDP: manufacturing is the engine of growth, in a way that agriculture and services cannot be (King p. 68). And growth is constrained by the need for expenditure on imports not to grow faster than the foreign currency received from exports (King p. 69).

**Proposition 23.** Economic growth is path dependent (King p. 67).

Thus, slower growth of actual output leads to a lower “potential” growth rate, that is, it lowers the set of possible growth rates in the near future (hysteresis), as seems to have been the case in the Great Recession that began in 2008 (King p. 67).

**Proposition 24.** Growth of output depends on the growth of demand.

Note, in particular, that the rate of growth of demand for a country’s exports often is a major determinant of its overall growth rate (King p. 68).

**Proposition 25.** Post Keynesian growth models are models of unstable, cyclical growth, from early theories of the business cycle to later theories of financial crises (King p. 74).

**Proposition 26.** For Post Keynesian growth theorists, formal modelling is not sufficient, as the insistence on the role of institutions, politics and history makes very clear (King p. 74).
6. Economic policy

Keynes wrote the *General Theory* in the firm belief that the capitalist system was in need of fundamental reform (King p. 78). Post Keynesians have always insisted on the need for systematic regulation of markets – above all, vigilant regulation of financial markets.

**Proposition 27.** Post Keynesians advocate four policy objectives: full employment; a low but positive inflation rate; a fair distribution of income and wealth; and financial stability (King p. 77). And they discuss policy instruments under five headings: monetary policy; fiscal policy; incomes policy; international economic policy; and environmental policy.

The Post Keynesian concern with questions of the distribution of income and wealth reflects a concern for social justice, and in part it is simply an inescapable consequence of the abandonment of the marginal productivity theory of relative income shares. This entails a rejection of the ethical justification for profits that was developed by J.B. Clark, according to which the owners of capital deserve to receive a reward for their contribution no less than the suppliers of labour power (King p. 78).

**Proposition 28.** Monetary policy should focus on not only output price inflation but also asset price inflation and stability of the financial system (King p. 80).

Monetary policy must be based on the fact that money is endogenous (created by lending by commercial banks) and the fact that inflation depends on price formation and in particular on wage setting and the pricing of raw materials (King p. 79). The move to central bank “independence” in the 1990s was a form of disguised privatization which needs to be replaced by government control (p. 80). Control of interest rates is more effective than control of the money stock, as now also advocated by mainstream economics (without acknowledgement). More monetary policy instruments are needed to prevent asset-price bubbles (p. 81). Many Post Keynesians advocate a stable and low interest rate, emphasizing the need for more policy instruments. And Post Keynesians are inclined to question how much monetary policy actually can achieve in a world of endogenous money.

For Minsky, neither consumption nor investment is particularly interest-elastic, and the effects of changes in interest rates are often swamped by other factors (King p. 94-95). There are three ways in which financial events have important effects on the real economy. First, changes in asset prices lead to changes in both consumption and investment spending (since consumption depends on wealth as well as income and since the incentive to buy new capital
goods falls when asset prices fall). Second, aggregate expenditure depends on “cyclically irrational expectations” concerning asset prices. Third, output and employment depend on credit rationing: whereas in the upswing almost everyone asking for a loan is granted one, when a bubble burst even creditworthy borrowers will be denied finance, and will be forced to reduce their expenditure accordingly.

**Proposition 29.** Fiscal policy should focus on the achievement of full employment and the avoidance of demand inflation (King p. 83). This is the principle of “functional finance”, first stated by Abba Lerner.

This principle requires that the government should run a deficit if private sector expenditure is expected to be inadequate to maintain full employment, and it should run a surplus if private sector spending is expected to generate inflation. A balanced budget (“sound finance”) is called for only in the exceptional case in which private sector spending is expected to be just right (King p. 83). And the rate of interest will not be forced up by expansionary fiscal policy – unless an independent central bank enforces it. The national debt is not a burden on posterity, only unemployment. And government bonds satisfy a large demand for risk-free and liquid assets from the private sector (King p. 85).

However, problems may arise if the national debt is owned by foreigners (King p. 84). And fiscal fine-tuning may sometimes be difficult because of time-lags involved in formulating and implementing policy changes, as emphasized e.g. by Minsky.

**Proposition 30.** Incomes policy should counteract wage inflation (or deflation).

While contractionary fiscal policy is an appropriate weapon against demand inflation, it is likely to be both ineffective and damaging when applied to cost inflation (King p. 85). Inflation due to wages increasing more than labour productivity should be controlled by agreements between “social partners”; or by legally binding arbitration; or through the use of tax incentives (King p. 86). Incomes policy of all types broke down during the stagflationary crisis of the 1970s, in part under the pressure of rapidly rising prices of oil and other commodities. Today a rather different case can be made for a wages policy, this time to avoid the dangers of deflation (King p. 87). Instead of restraining real wages, a wages policy now needs to make sure that they rise in line with labour productivity. Wage-led deflation, like that forced through in Germany in the early years of the 21st century, is a “beggar-thy-neighbour” policy similar to the competitive devaluations of the 1930s (King p. 88).
**Proposition 31.** International economic policy should focus on reforming the international monetary system. There is broad agreement on basic principles but some disagreement on exactly how the international system should be reformed (King p. 88).

Post Keynesians agree on a substantial degree of regulation of global financial markets, but also on the prevention of neo-mercantilist strategies like deflationary wage policies. And responsibility for correcting global imbalances should be shared by surplus and deficit countries, rather than imposed on deficit countries alone (King p. 88). But Post Keynesians disagree on the exchange rate system: fixed or floating (King p. 89, Lavoie p. 495). In fact, according to Lavoie (p. 456): “there is no consensus post-Keynesian view on open-economy macroeconomics”. The increase in the instability of food and raw material prices (due to increased speculation) has revived interest in the establishment of international funds which can stabilize commodity prices (King p. 90).

**Proposition 32.** Environmental policy should focus on direct government intervention instead of pollution taxes and other attempts to change behaviour by affecting prices (King p. 90).

This focus stems from the very limited role that Post Keynesians place on substitution effects, in both production and consumption (King p. 90). And “direct intervention” includes, for example, minimum environmental standards, renewable energy targets, and public investment policy to promote innovation. To prevent global warming it is necessary to cut aggregate consumption, but how can this be achieved without initiating a serious recession? By substantial increases in environmentally friendly public investment (King p. 91).

7. Other heterodox economics

King (2014) also surveys (in chapter 9) other heterodox approaches to economics, especially Marxian political economy (including contributions by Paul Baran and Paul Sweezy on monopoly capitalism); Sraffian political economy (including critique of neoclassical capital theory); institutional economics (including Thorstein Veblen and John Kenneth Galbraith on corporate capitalism); evolutionary economics (focusing on change in technology and institutions); and finally feminist economics and ecological economics (both dealing with aspects of economic life that Post Keynesians have tended to neglect).

Note, in particular, that it is sometimes said that institutionalism (including not only Herbert Simon but also, for example, Gunnar Myrdal) provides the microeconomics of Post Keynesian economics (King p. 118, Lavoie p. 30).
King also discusses behavioural economics (but without relating Daniel Kahneman or Richard Thaler to Post Keynesian economics) and Austrian economics, because they differ so much from traditional neoclassical economics. On the other hand, King emphasizes that these schools also differ in fundamental ways from Post Keynesian economics, particularly the macroeconomic parts.³

References


³ For a more detailed characterization of heterodox and post-Keynesian economics, but also of orthodox economics (including "orthodox dissenters" like Paul Krugman, Joseph Stiglitz, Richard Thaler, and Dan Rodrick), see Chapter 1 in Lavoie (2014).