Institute for International Political Economy at the
Berlin School of Economics and Law (IPE)

Hochschule für
Wirtschaft und Recht Berlin
Berlin School of Economics and Law

Karl Marx – an early post-Keynesian?

Eckhard Hein

22nd FMM conference

Berlin, 25 – 27 October 2018

1. Introduction

- Abundant Marx-Keynes (Kalecki) comparisons: Alexander (1940), Argitis (2001), Crotty (1986), Dillard (1984, 1986), Fan-Hung (1939), Foley (1986), Hein (1996, 2004, 2006), Kenway (1980), Rotheim (1991), Sardoni (1987, 2011), …
- Post-Keynesians on Marx: Kalecki (1968), Robinson (1942), Steindl (1952, Chapter XIV),
- However, no Marx book or paper in the references of Lavoie‘s (2014) standard advanced PK textbook – but at least Marx appears in the name index.

- Keynes on Marx:

‚I believe that the future will learn more from the spirit of Gesell than from that of Marx‘ (*CW* VII, p. 355)

- Keynes on Marx‘s *Capital*

‚Its dreary, out-of-date, academic controversialising seems so extraordinarily unsuitable as material for the purpose. (…) But whatever the sociological value of the latter, I am sure that its contemporary economic value (…) is nil.‘ (*CW XXVIII*, p. 38)

2. Post-Keynesian economics as a variant of heterodox 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)

Essential characteristics of PK economics

Presuppositions 1.-5. of heterodox economics plus:

6. the focus on a **monetary theory of production** (Keynes 1933) in which **money is non-neutral** in the short and the long run, i.e. money is not a veil;

7. the dominance of the **principle of effective demand** (Kalecki, Keynes) **in the short and the long run**, investment creates its corresponding saving via income, growth and/or distribution effects;

8. the importance of the notion of **fundamental uncertainty**, which is different from probabilistic risk ('we simply do not know', Keynes 1937);

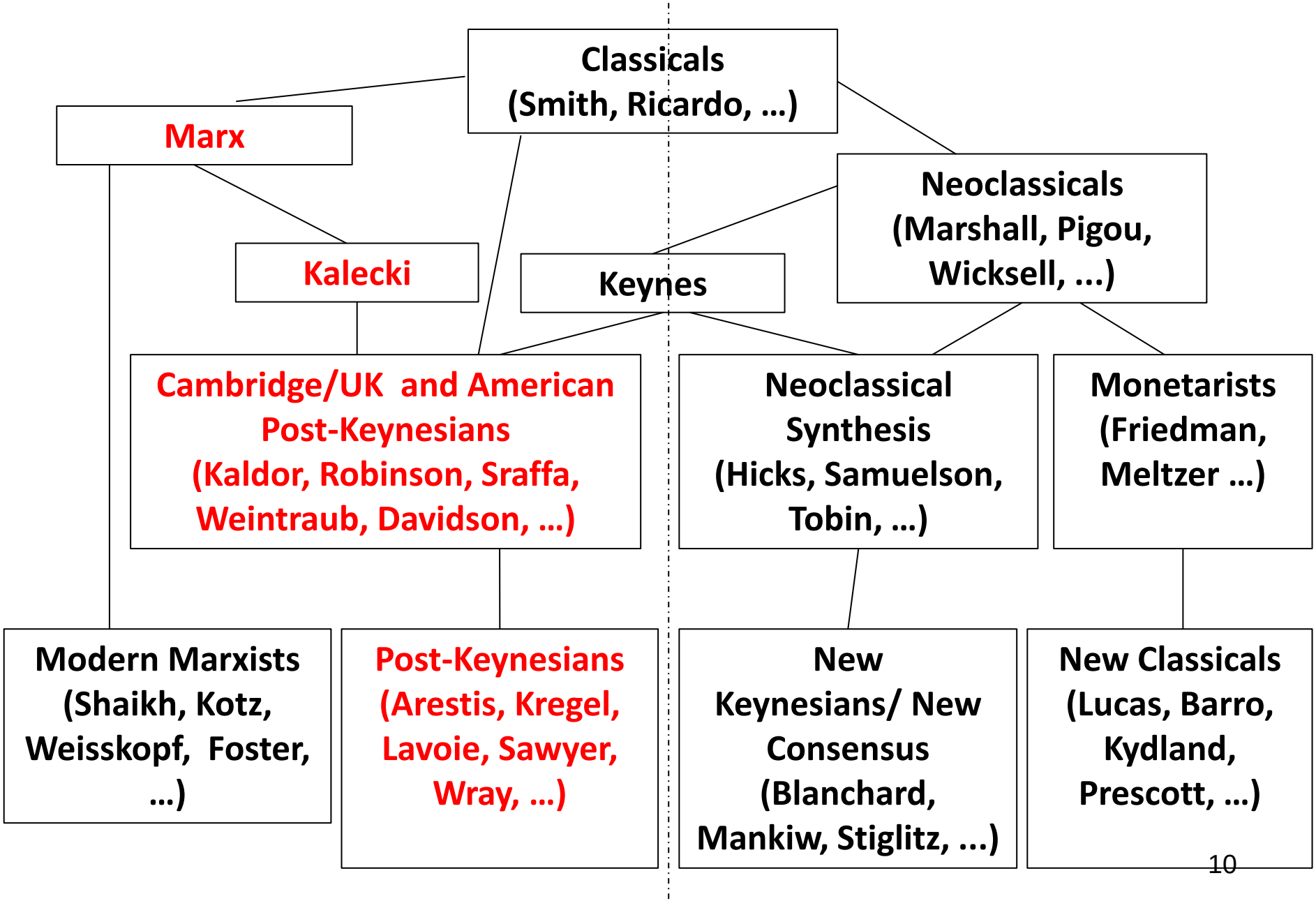
9. the insistence that economic processes take place in **historical and irreversible time** – and are thus largely path dependent, hence no pre-determined NAIRU or potential growth ('long run trend is but a slowly changing component of a chain of short-period situations', Kalecki 1971), and

10. the importance of distributional issues and **distribution conflict** for economic outcomes (output, employment, inflation, growth).

- ***'Ten commandments of pK economics'***

3. Marx and the post-Keynesians

Heterodox and Orthodox Schools in Macroeconomics



- Marx and Kalecki: simple and extended reproduction and the principle of effective demand in a monetary economy

but also:

- Marx and Sraffa: labour theory of value and prices of production
- Marx and Keynes: monetary theory of value and monetary theory of production
- Marx and Minsky: credit and crises

3.1 Marx and Sraffa: labour theory of value and prices of production

- **prices and pricing** are determined by **costs** and **requirements of reproduction**
- **labour theory of value** as a theory of relative prices is **not sustainable** in an economy with constant capital and heterogeneous technical coefficients of production
- **labour values are not required** for the determination of **prices of production** (Steedman 1977)

3.2 Marx and Keynes: monetary theory of value and monetary theory of production

- "**Monetary Analysis** introduces the element of money on the very ground floor of our analytical structure and abandons the idea that all essential features of economic life can be represented by a barter-economy model." (Schumpeter 1954, p. 278)
- „In my opinion the main reason why the problem of crises is unsolved (…) is to be found in the lack of what might be termed a ***monetary theory of production***. (…) The theory which I desiderate would deal (...) with an economy in which money plays a part of its own and affects motives and decisions and is, in short, one of the operative factors in the situation, so that the course of events cannot predicted either in the long period or in the short, without a knowledge about the behaviour of money between the first state and the last." (CW XIII, 408-9)

- Marx‘s theory of value (*Capital I, Chapter I)* as a **‚monetary theory of value‘** (Rubin 1973, Heinrich 1991, Reuten 1988, 1995, Matthews 1996, Williams 2000)
- **Theory of value implies theory of money**, no ‘labour embodied theory of value’, no ‘commodity theory of money’
- Amount of **‘socially necessary labour’ is determined in exchange against ‘universal equivalent**’, i.e. money, representing ‘abstract labour’
- **Money as a socially accepted representative of the universal equivalent** which has to be guaranteed by social institutions

➢ perfectly compatible with the **modern credit money system** which can be described as a **hierarchy of promises to pay**

- C-M-C: **money as means of circulation** constitutes **‘possibility theory of crisis’**, i.e. Marx’s rejection of Say’s law (*TSV,* 499-508), possibility of lack of aggregate demand (‘general glut’), exacerbated by **money as a means of payments** (*TSV,* 511), i.e. creditor-debtor relations
- money has to be **non-commodity money** to sustain the **critique of Say’s law** in Marx’s ‘possibility theory of crisis’ and to pose the problem of effective demand to capitalist economies
- with money as non-commodity, the **price level is determined by nominal wage rate & distribution struggle** (Foley 1983, Matthews 1996)
- **Quantity of money is endogenous** to economic activity (*Capital I*, 116-124)

3.3 Marx and Kalecki: simple and expanded reproduction and the principle of effective demand in a monetary economy

***Capital II*, Chapter XX-XXI: Schemes of reproduction**

- Given values/prices

Sector 1: $D_1 + W_1 + \Pi_1 = I_1^g + I_2^g$

Sector 2: $D_2 + W_2 + \Pi_2 = C_{w1} + C_{\Pi 1} + C_{w2} + C_{\Pi 2}$

D_i: constant capital costs, W_i: wages, Π_i: profits, I^g_i: gross investment, C_{wi}: consumption of workers, $C_{\Pi i}$: consumption of capitalists

Equilibrium in simple reproduction

$D_1 = I^g_1$, $D_2 = I^g_2$, $W_1 = C_{W1}$, $W_2 = C_{W2}$

Proportionality condition: $I_2^g = C_{w1} + C_{\Pi 1}$.

Kalecki (1968)

Realization of aggregate profits:

$$\Pi_1 + \Pi_2 = I_1^n + I_2^n + C_{\Pi 1} + C_{\Pi 2},$$

$$I^n = I^g - D$$

I^n = net investment in constant capital

- capitalists cannot determine their sales and their profits but can only decide about their expenditures on net investment and consumption goods,
- capitalist **expenditures** have to ensure that ***produced* profits will become *realized* profits**
- **investment determines saving** in Marx's schemes of reproduction
- contribution to **'possibility theory of crisis'**

- **no theory of investment demand in Marx's schemes of reproduction** and hence no determination of the level of output or the rate of growth of the economy (Kalecki 1968, Sebastiani 1991)
- such a theory is implicit in **production and investment finance** also present in the schemes of reproduction
- capitalists need **access to money** in order to get the process of (even simple) reproduction started (*Capital II*: 329-54, 415-26)

- „So far as the entire capitalist class is concerned, **the proposition that it must itself throw into circulation the money required for the realization of its surplus-value** (correspondingly also for the circulation of its capital, constant and variable) not only fails to appear paradoxical, but stands forth as a necessary condition of the entire mechanism. For there are only two classes: the working class disposing only of its labour-power, and the **capitalist class, which has a monopoly of the social means of production and money**." (*Capital II*: 424-5)

- **Financial sources of capitalists**: transfer of money from hoards, increasing velocity of money in circulation, raising the stock of money (*Capital II*, 349-50, 494-5)
- In a modern **credit economy with endogenous credit and money**: „The sustainable rate of growth of the system obviously depends on the level of such new borrowing: the higher the total borrowing, the faster the rate of expanded reproduction that can be achieved by the system.” (Foley 1986a: 89)

Marx on endogenous credit money:

- "The credit given by a banker may assume various forms, such as bills of exchange on other banks, cheques on them, credit accounts of the same kind, and finally, **if the bank is entitled to issue notes – bank-notes of the bank itself**. … This last form of credit appears particular important and striking to the layman, first because this form of credit money breaks out of the confines of mere commercial circulation into general circulation, and **serves there as money**; and because in most countries the principal banks issuing notes, being a particular mixture of national and private banks, actually have the **national credit to back them**, and **their notes are more or less legal tender**; because it is apparent here that the banker deals in credit itself, **a bank-note being merely a circulating token of credit**."(*Capital III*: 403-4)

The expanded circuit of capital (*Capital III*, 338-57)

$$M - M - C \ldots P \ldots C' - M'' - M'$$

$$M'' - M = \Pi, \; M' - M = Z, \; M'' - M' = \Pi^n$$

$$\Pi = \Pi^n + Z$$

$$r = r^n + i.$$

- **Theory of investment** is about the determination of **monetary advances** in order to make **profits in a monetary form**.
- **Availability of credit** and the relation between (expected) **rate of profit** (r) and **monetary rate of interest** (i) determine capitalist expenditures and accumulation and thus also realised profits

- In Marx‘s **two stage theory of distribution**, the **rate of interest is a monetary category** determined by relative powers of money capital and industrial capital (*Capital III*, 358-69).
- **Rate of profit** is determined by distributional conflict between **capital and labour**.
- With a given rate of profit, conflict between **industrial and financial capitalists** determines **rate of interest and thus rate of profit of enterprise**.

Kalecki‘s (1954, Chapter 1-2) theory of distribution

- **functional income distribution** is given by firms’ **mark-up pricing** on unit variable costs with the mark-up being determined by the degree of monopoly, i.e. the **intensity of price competition in the goods market** and the **relative powers of capital and labour** in the labour market.
- Kalecki (1954: 18): increasing **overhead costs**, which include interest paid by firms, may but need not cause an increase in the ‘degree of monopoly’ and hence in the profit share.

➢ **Rate of interest may but need not affect distribution between capital and labour**.

Implications for a Marxian theory of accumulation, growth and crises (Hein 2006, 2008, Chapter 5.4)

- Marxian theories based on ‚real analysis‘, i.e. profit squeeze (*Capital I*) and FRoP (*Capital III*), cannot be sustained
- Capital accumulation cannot be determined by capitalists‘ saving in Marx‘s ‚monetary analysis‘
- Saving adjusts to investment, i.e. change in utilisation of capital stock (high elasticity of production, *Capital I*, p. 424) a la Kalecki/Steindl, or in distribution a la Kaldor/Robinson.
- Monetary factors, i.e. monetary rate of interest and credit availability, matter for investment decisions & growth

➢ No ‚general laws of accumulation and crisis‘

3.4 Marx and Minsky: Credit and crises

- Minsky (1975, 1986) adds financial instability to a basically Kaleckian income generation process.
- Types of external investment finance: hedge finance, speculative finance and Ponzi finance
- Fragility depends on the share of credit in investment finance and the types of external investment finance
- Financial stability breeds instability because of rising credit-capital ratios (no paradox of debt!) and falling shares of hedge finance in an upswing (macroeconomics unclear)

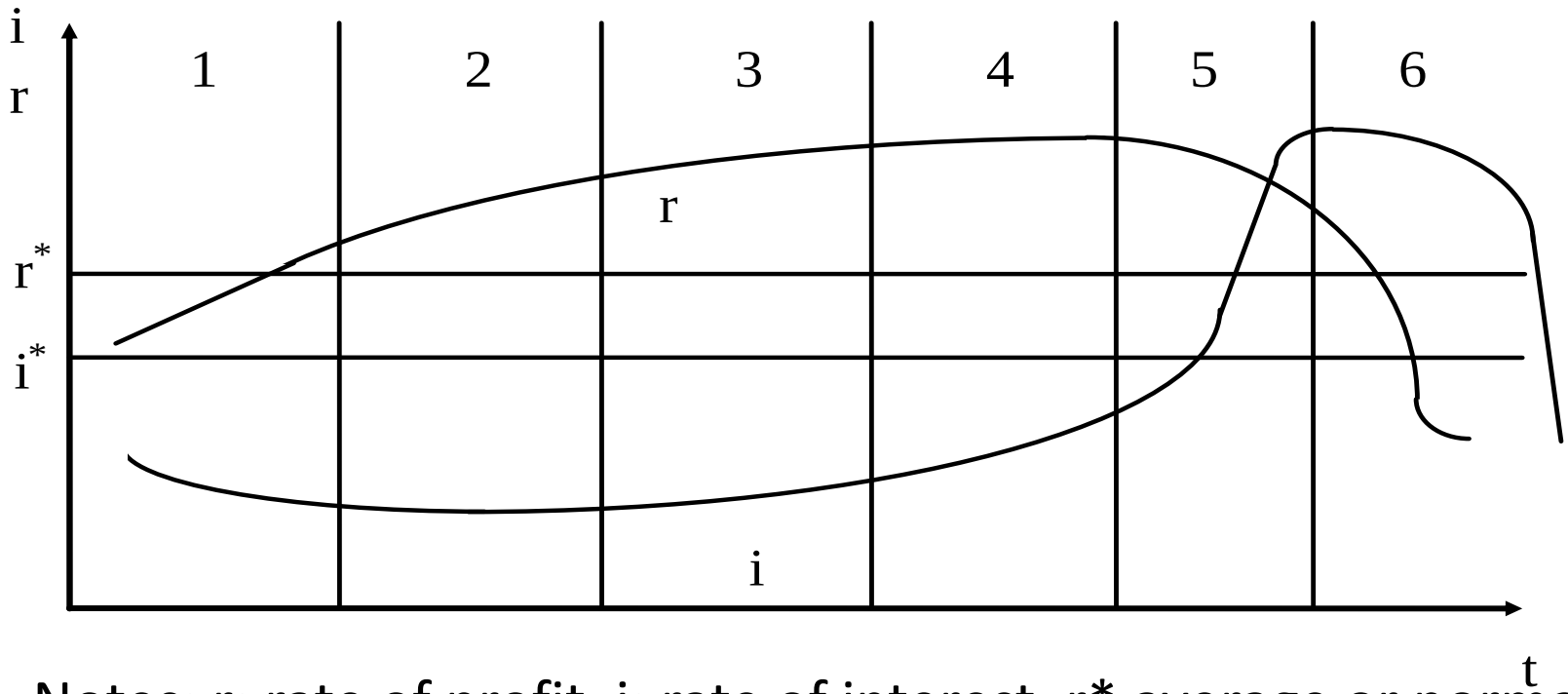
➢ Financial fragility rises and random shock triggers financial crisis with debt deflation and defaults, …

Marx in *Capital III*, Part V

- Credit system accelerates capital accumulation but raises vulnerabilities
- Inverse relationship between the dynamics of the rate of profit and the monetary interest rate in the course of the business cycle
- Profit rate dynamics is determined by capacity utilisation and income distribution in the short run, and by technical change in the long run
- Fall in the rate of profit triggers a crisis (profit squeeze, overproduction or overaccumulation)

- Interest rate dynamics are mainly determined by supply of (endogenously) generated credit, i.e. willingness to lend, relativ to credit demand (*Capital III*, Chapters 28, 30)
- In the business cycle, abundant credit supply from ‚state of inactivity‘ to ‚prosperity‘ phase with low interest rates
- Further rising credit expansion in ‚overproduction‘, rising speculative investment, rising debt-capital ratios, rising fragility
- Crisis is triggered by fall in rate of profit, causing a fall in investment , debt deflation, defaults, credit constraints, rising liquidity preference and rising interest rates

Rate of interest and rate of profit in the course of the business cycle according to Marx



Notes: r: rate of profit, i: rate of interest, r* average or normal rate of profit, i* average rate of interest

1: state of inactivity, 2: mounting revival, 3: prosperity,

4: overproduction, 5: crisis, 6: stagnation (*Capital III*, p. 360)

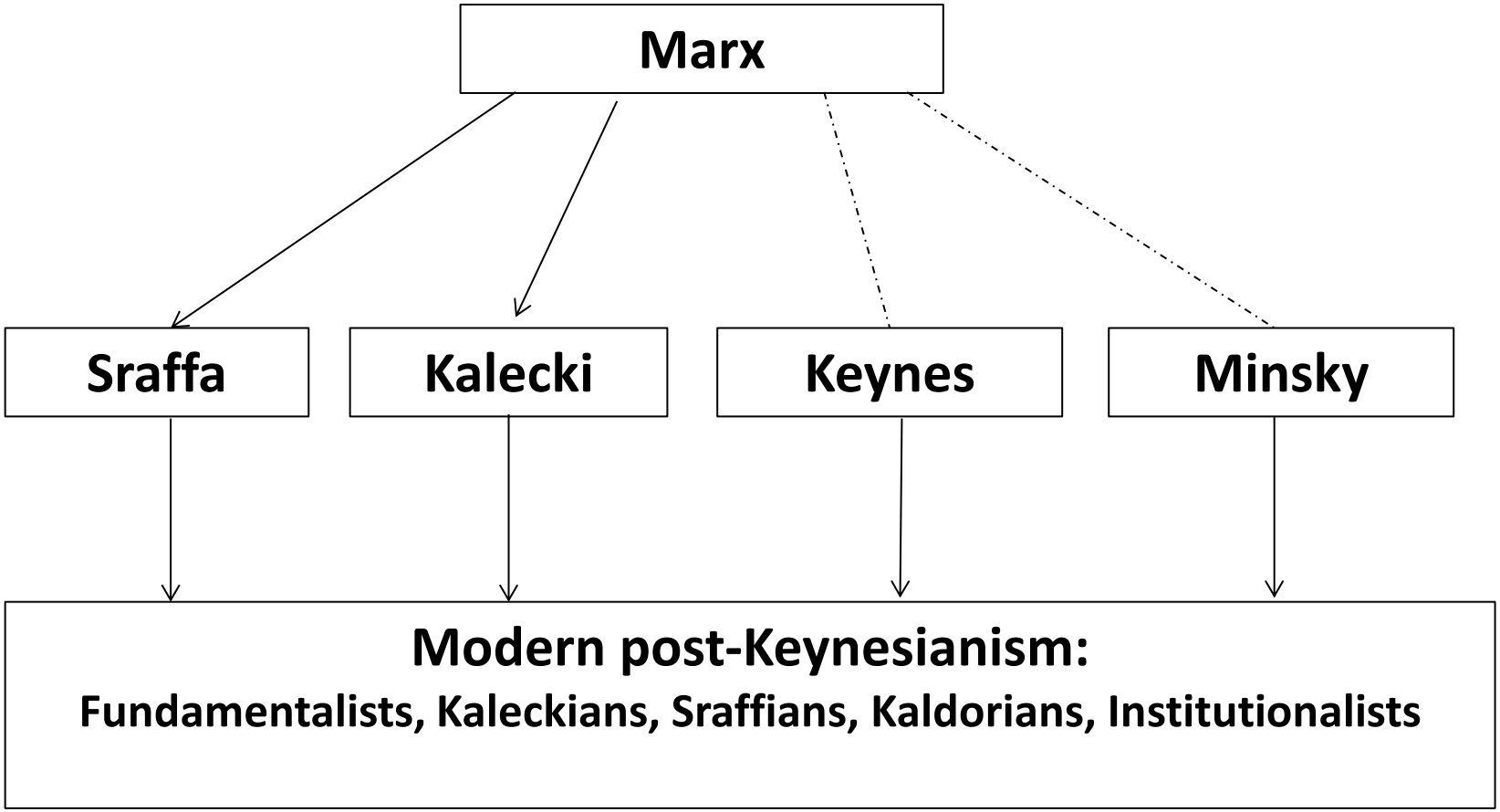
Source: Hein (1996, p. 269)

- Both, Marx and Minsky provide a story of rising financial fragility in the economic upswing and an acceleration of the downswing by debt deflation and defaults
- Marx provides a theory of crisis rooted in dynamics of the profit rate, whereas Minsky has to ‚rely‘ on random shocks
- Potential problems in both: rising debt-capital ratios in an upswing at the macro level (i.e. no paradox of debt)? Net debt or gross debt?
- Marx‘s theories of crisis convincing?

4. Conclusion

- Of course, Marx cannot have been an early post-Keynesian
- But his work has influenced modern post-Keynesianism through Sraffa and Kalecki (and also through Robinson and Steindl)
- And there are some commonalities and similarities even with Keynes and Minsky
- Studying Marx might therefore be beneficial for new generations of pK economists!

Marx and the post-Keynesians



direct influence

consistencies/similarities in some important parts

Thank you!