Of course, as for Germany, a fundamental change in the economic and social strategies of the EU remains a task for the future. However, the elaboration of a detailed critique supported by specialists from across the EU, remains a significant achievement and is itself a precondition for a future change of course. At present European civil society is too weak and fragmentary to exercise effective political control over EU institutions, which continue to be primarily influenced by the interests of the big corporations. But the international activities of Jörg Huffschmid can be seen as an exemplary contribution to the emergence of that civil society.

His friends and colleagues, in Germany, Europe and around the world, will continue to debate with Jörg.

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Different sources of capitalism's instability: Finance in Minsky and money in *The General Theory* Elisabetta De Antoni*

Introduction

Hyman P. Minsky (1975; 1982a and 1986) presented his »financial instability hypothesis« (FIH) as a cyclical interpretation of *The General Theory* (TGT) which highlighted Keynes's most innovative insights. This paper compares Minsky's FIH with the 22nd Chapter of TGT, which Keynes expressly devoted to the business cycle. From this perspective, the next two sections will bring to light the different subjects of the analyses and the disparate conceptions of the business cycle. Lastly, the last section will focus on the different roles assigned to money and finance and on their concrete relevance.

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The common cyclical perspective: Analogies and differences

Both in Minsky and in Keynes's Chapter 22, the business cycle arises endogenously from the structural characteristics of the system.¹ In both cases, what causes fluctuations in income is the cyclical fluctuation of investment.² The latter in its turn reflects changing profit expectations and degrees of confidence. The resulting waves of optimism and pessimism³ also involve the monetary and financial markets. Their destabilizing role is explicitly recognized both by Keynes's Chapter 22 and by Minsky's FIH.⁴ As far as income is concerned, this grows in the phases in which investment exceeds saving and falls in the subsequent phases of excess saving. The orthodox re-equilibrating price mechanism is replaced by quantity adjustments that feed themselves. The resulting cumulative processes are based on the traditional income multiplier in Keynes and on the interdependence between investment and profits in Minsky.⁵

Both our authors are at the mercy of what in many ways is an analogous trade cycle; however, Minsky seems to «combat» the upswing and Keynes the downswing. Minsky (1974: 272 and 1975: 165) *explicitly* refers to an economy whose «fundamental instability is upward». Other things being equal, the expected profitability of investment tends to be high with respect to the money market interest rate. The result is an excess of investment over saving that stimulates the economy driving it to its peak. Thus, what mainly worries Minsky is the tendency of his economy towards an over-indebted investment boom.

»The spectacular panics, debt deflations, and deep depressions that historically followed a speculative boom as well as the recovery from depressions are of lesser importance in the analysis of instability than the developments over a period characterized by sustained growth that lead to the emergence of fragile and unstable financial structures« (Minsky 1986: 173).

1 To quote Minsky (1986: 172): «our economy is not unstable because it is shocked by oil, wars or monetary surprises, but because of its nature». Along the same lines Keynes (1936: 321) claims: «investment is [...] made in conditions which are unstable and cannot endure, because it is prompted by expectations which are destined to disappointment».

2 Minsky (1978: 30) expressly defines his theory as «an investment theory of the business cycle». Keynes (1936: 313), in his turn, traces the cycle back to the cyclical fluctuation of the marginal efficiency of capital.

3 See Keynes (1936: 154 and 321 – 322) and Minsky (1975; 1982a; 1982b and 1986).

4 In Keynes (1936: 316) we read: «Moreover, the dismay and uncertainty as to the future that accompanies a collapse in the marginal efficiency of capital naturally precipitates a sharp increase in liquidity-preference and hence a rise in the rate of interest. Thus the fact that a collapse in the marginal efficiency of capital tends to be associated with a rise in the interest rate may seriously aggravate the decline in investment» Minsky (1974: 267), in his turn, claims: «the capitalist market mechanism is flawed, in the sense that it does not lead to a stable price-full employment equilibrium, and [...] the basis of the flaw resides in the financial system».

5 In Minsky's view, investment affects income while income in its turn affects profits and then investment.

Conversely, an economy à la Keynes tends to be characterized by low marginal efficiency of capital relative to the money market interest rate.⁶ The result is an excess of saving over investments that drives the economy down to the trough. Thus, what mainly worries Keynes is the tendency of his economy towards investment stagnation and high, long-lasting unemployment. Not by chance, Chapter 22 of TGT insistently stresses the precariousness of full employment due to the depressive effect of accumulation on the marginal efficiency of capital, the tendential inadequacy of investment with respect to full employment and the consequent need to support the economy always and anyhow. Turning to the real world, Keynes writes: »Moreover, the evidence indicates that the full, or even approximately full, employment is of rare and short-lived occurrence« (1936: 249 – 250).

In short, the subjects of the two analyses appear to be quite different. Minsky's might be an optimistic economy in the aftermath of a burst of innovation, where the upswing implies a greater improvement and the downswing a milder deterioration in profit expectations. In this economy, profit expectations will be systematically more optimistic. The system will thus experience comparatively stronger upswings and smaller downswings. *Ceteris paribus*, the greater growth of the upswing-dominated economy will confirm and sustain its higher degree of optimism.

If our interpretation is correct, however, Minsky was not the faithful interpreter of TGT that he supposed himself – and is generally supposed – to be. He applied Keynes's economics to a system whose fundamental instability is upward. This change in the subjects of the analyses may in its turn reflect the different historical experiences of the two authors: whereas Keynes experienced the tragedy of the Great Depression, Minsky was formed by the post-war political and economic recovery.

The different conceptions of the business cycle

The aforementioned differences in the subjects of the analyses give rise to different conceptions of the business cycle. Let us start with the upswing. In the FIH, the excess of planned investment over saving (particularly over firm's saving) is so great that it inevitably requires business indebtedness.⁷ Finance is at the centre of Minsky's architecture. Keynes's Chapter 22, by contrast, does *not even mention* firms' borrowings.⁸ Given the smaller excess of planned

6 In his comment on the under-consumption school, for instance, Keynes associates the insufficient investment level with »a long-term rate of interest which seldom or never falls below a conventional level« (1936: 324 – 5). On this issue, see also Chapters 15 and 17 of TGT.

7 As known, Minsky's analysis explicitly refers to advanced capitalist economies with large and costly long-term investment that is debt financed.

8 In TGT, Keynes focuses on the crucial role of the interest rate as the financial cost of investment. Firms' borrowings and the related problems, by contrast, remain in the background. Chapter 12 instead takes explicit account of the Stock Exchange. In Keynes's view, its main role consists in enabling entrepreneurs to sell their investment goods to others. Consequently, in investment decisions, short-run forecasts concerning the prices of shares (the mass psychology of the market) replace evaluations of long-term prospective yields. As Keynes puts it, speculation tends to replace entrepreneurship: »beating the gun« becomes more important than »defeating the dark forces of time and igno-

investment, producers may have sufficient funds to finance it. Alternatively, their borrowing requirements may be of minor importance.

The different roles attributed to finance by Minsky and Keynes engender disparate concerns about growth. In the euphoria of Minsky's boom, indebtedness grows proportionally more than internal funds. Debt commitments eventually rise above profits. Hence, the debt service inevitably requires borrowing.⁹ As Minsky puts it, finance becomes speculative and the financial system becomes fragile. It is precisely financial fragility that threatens Minsky's boom. In Keynes's upswing, the problem is not over-indebtedness but the excess of the expected over the actual yield on investment fed by the optimism of the boom.

This brings us to the peak: the crisis that stops the boom is financial in Minsky and real in Keynes. According to the FIH, expansion ends by leading to an endogenous rise in the interest rate¹⁰ which in its turn triggers the financial crisis. Minsky's speculative firms have insufficient profits and borrowing capacity to discharge the higher debt commitments: their only option is to liquidate non-monetary assets. Keynes expressly rejects the financial diagnosis of the crisis:

»But I suggest that a more typical, and often the predominant, explanation of the crisis is, not primarily a rise in the rate of interest, but a sudden collapse in the marginal efficiency of capital« (Keynes 1936: 315).

In Keynes's view, it is the inevitable disappointment of over-optimistic profit expectations and the consequent collapse in the marginal efficiency of capital that triggers the crisis.

»But over and above this it is an essential characteristic of the boom that investments which will in fact yield, say, 2 per cent in conditions of full employment are made in the expectation of a yield of, say, 6 per cent, and are valued accordingly. When the disillusion comes, this expectation is replaced by a contrary ›error of pessimism‹, with the result that investments, which would in fact yield 2 per cent in conditions of full employment, are expected to yield less than nothing; and the resulting collapse of new investment then leads to a state of unemployment in which the investments, which would have yielded 2 per cent in conditions of full employment, in fact yield less than nothing« (1936: 321 – 322).

Let us now turn to the downswing. With the explosion of the crisis, the primary activity of Minsky's speculative firms becomes that of selling both financial and real assets in order to reduce debt and debt service.¹¹ The resulting fall in asset prices eventually makes firms insolvent, triggering a wave of bankruptcies. Investment and income collapse. The resulting

rance«. In Keynes's view, when this happens, »[w]hen the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done« (1936: 159).

9 This concerns principal in the case of speculative units, and interest as well in the case of ultra-speculative or Ponzi units. The dependency on credit makes these units financially fragile. See Minsky (1964 and 1986).

10 See Minsky (1986: 195).

11 This is Minsky's (1982b) definition of the financial crisis.

downswing, however, has ultimately a somehow cathartic function: it restores robustness to the financial system, paving the way for the ensuing recovery.¹² In Keynes's economy, as we have seen, the crisis turns the boom's over-optimistic profit expectations into a contrary »error of pessimisms«. Investment and income again collapse. This time, however, there is no cathartic or beneficial effect. By sweeping away even sound and promising economic activities, the slackening of economic activity belongs »to the species of remedy which cures the disease by killing the patient« (Keynes 1936: 323).

A last important difference between Minsky and Keynes concerns the weakest turning point, the one at which the interruption of the cycle is most likely. According to Minsky, »stability – or tranquillity – is destabilizing« and »the fundamental instability is upward«.¹³ After the storm comes the calm. Tranquillity, however, fosters greater confidence in the future, giving rise to a wealth re-allocation from money to non-monetary assets. The result is an externally financed increase in investment that stimulates the economy.¹⁴ Hence, the lower turning point is not open to question. Rather, Minsky's »obsession« is the upper turning point. Why does his vibrant economy turn downwards, instead of moving onto a steady growth path?¹⁵ As we have seen, Minsky finds the answer in the financial sphere of the economy.

Keynes, in Chapter 22, takes the opposite tack. Here, it is the upper turning point that is unquestionable: the over-optimism of the boom is inevitably bound to clash with reality. Keynes's perplexities focus on the lower turning point.¹⁶ He admits that the decline in the capital stock tends to stimulate investment and thus the economy, but he worries that this stimulus may be too weak to spark recovery. Not by chance, the main message of the first twenty-one chapters of TGT is that the persistence of the slump is perfectly possible.

»In particular, it is an outstanding characteristic of the economic system in which we live that, whilst it is subject to severe fluctuations in respect of output and employment, it is not violently unstable. Indeed it seems capable of remaining in a chronic condition of sub-normal activity for a considerable period without any market tendency either towards recovery or towards complete collapse« (1936: 249 – 250).

As we saw, Minsky applied Keynes's economics to a system whose fundamental instability is upward. In so doing, he (1986: 292) had the indisputable merit of questioning the myth of growth, which in his view does not necessarily converge to a uniform and steady rate, but may lead to financial fragility and financial crises. To quote Minsky (1974: 267): »The fundamental instability is the way in which a period of steady growth evolves into a speculative boom«. By introducing his upward instability, however, Minsky banished some im-

12 »However, it is worth noting that during the liquidation phase of a deep depression the financial »stage« is set for a long-wave expansion as debts are reduced, equity assets decline in value, and the stock of ultimate liquidity increases« (Minsky 1964: 325).

13 For the two quotations see, respectively, Minsky (1975: 127 and 1978: 37) and Minsky (1974: 272 and 1975: 165). Analogous concepts can be found in Minsky (1986 and 1980).

14 See Minsky (1986: 183).

15 This is the central issue in Minsky (1957 and 1965).

16 On this, see Keynes (1936: 158, 314 and 317).

portant issues raised in TGT: the endemic nature of unemployment, the persistent damage of depression, and above all the precariousness of recovery.

Conclusion: The different roles of money and finance

As said, business indebtedness is not even mentioned in Chapter 22 of TGT. Minsky, by contrast, places finance at the centre of his architecture, identifying it as the factor able to jeopardize growth. Money too performs a quite different role. As we shall see below, it represents a source of upward instability in Minsky and of downward instability in Keynes.

As said before, Minsky's economy is unstable and its fundamental instability is upward. Tranquillity increases confidence in the future, giving rise to a wealth re-allocation from money to non-monetary assets which stimulates economic activity.¹⁷ Thus, *thanks to money*, any 'tranquil' situation (any situation that otherwise would recur unchanged)¹⁸ is bound to evolve in an expansionary direction.¹⁹ The upward instability of Minsky's economy tends to push the system even beyond full employment.²⁰ In Keynes's economy, by contrast, such an occurrence is totally unrealistic: »Except during the war, I doubt if we have had any recent experience of a boom so strong that it led to full employment« (1936: 322). Indeed, the economy à la Keynes tends to oscillate »round an intermediate position appreciably below full employment« (1936: 254). Money is at the basis of this downward instability:

»Unemployment develops [...] because people want the moon; – men cannot be employed when the object of desire (i.e. money) is something that cannot be produced and the demand for which cannot be readily choked off« (1936: 235).²¹

Before concluding, let us briefly turn to the real world. The recent subprime crisis has been generally interpreted as a »Minsky moment« followed by a »Minsky meltdown«. One of the pillars of the FIH is the thesis that growth endogenously leads to financial fragility. In the 2000s, however, over-indebtedness seems to have been the source (rather than the consequence) of growth.²² If this is true, the recent experience does not seem to fit with Minsky's

17 What Minsky neglects, however, is that tranquillity alone may not be sufficient to trigger recovery. If expected profits were zero, the increase in confidence associated with a phase of tranquillity would not increase the demand price for investment goods (the present value of expected profits). Alternatively, the stimulus might not be strong enough to drive the demand price above the supply price.

18 In Minsky's view, tranquillity may concern an under-employment equilibrium, a full-employment equilibrium or a situation of steady growth. On these cases see, respectively, Minsky (1978: 36 – 7 and 1975: 61, 127, 165), Minsky (1974: 268; 1980: 26 and 1986: 177, 183) and Minsky (1974: 267).

19 In Minsky's (1986: 219) words: »Any transitory tranquillity is transformed into an expansion«.

20 Minsky (1986: 177), for instance, explicitly refers to »a more than full-employment speculative boom«.

21 On the »social dangers of the hoarding of money«, see also Keynes (1936: 161).

22 According to Krugman (2009), the 2000s were characterized by the Federal Reserve's expansionary policy and by a powerful wave of financial deregulation and innovation. The result was the widespread increase in credit availability and the generalized relaxation of credit standards that led to the housing boom and to the subprime crisis.

FIH. It would rather seem to be a Keynesian phenomenon. After all – in spite of support from technological innovation in the 1990s and from the Federal Reserve in the 2000s – the American economy has failed to avoid a new depression. The subprime crisis aside, unemployment seems to have represented the main pathology of post-war capitalist development in its entirety. Not by chance, whilst monetary and financial instability have inevitably implied also unemployment, the latter has often taken place also autonomously (besides proving to be more persistent).

All of this points to the conclusion that Hyman P. Minsky should have taken Keynes's stagnationist perspective²³ more seriously. Nevertheless, we should grant him the indisputable merit of having pointed out the crucial role of finance, showing that finance itself can trigger and prolong growth, but not prevent collapse (indeed, it may even accentuate it).

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23 With regard to the »paradox of poverty in the midst of plenty«, for instance, Keynes (1936: 31) claims: »Not only is the marginal propensity to consume weaker in a wealthy community, but, owing to its accumulation of capital being already larger, the opportunities for further investment are less attractive unless the rate of interest falls at a sufficient rapid rate« which – as shown in Chapter 17 – does not happen.