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The Beat of the Economic Heart

Joseph Schumpeter and Arthur Spiethoff on Business Cycles*

Heinz D. Kurz

What does the alternation of upswing and downswing signify for economic life? It forms the most powerful means which could have been thought of to extract from man the maximum of economic effort of which he is capable. During upswings the carrot of profits, during downswings the stick of want. What more effective system could be invented?
(Spiethoff, 1953: 169 [1925: 84])¹

Cycles are not, like tonsils, separable things that might be treated by themselves, but are, like the beat of the heart, of the essence of the organism that displays them.
(Schumpeter, 1939: v-vi).

1. Introduction

The paper deals with the relationship between Arthur Spiethoff and Joseph Alois Schumpeter. In the first half of the last century Spiethoff was considered a major German economist, but afterwards he fell largely into oblivion.² He played an important role in several crucial moments of Schumpeter's life and career and was an important mentor of his younger colleague. As economists, both were first and foremost concerned with the dynamism of the capitalist economy and especially the endogenous cyclicality of economic development and growth. While Schumpeter published a lot and came close to being an *enfant terrible* in the economics profession, Spiethoff published fairly little and avoided the limelight. Two vastly different characters with vastly different talents and aspirations, whose life lines crossed

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¹ In his *Business Cycles* (1939: 137 n.), Schumpeter refers to "Spiethoff's telling phrase [of] 'the candy of gain and the whip of losses'". The German original speaks of "das Zuckerbrot des Gewinnes" and "die Peitsche der Not".

² While he is still being mentioned in some textbooks devoted to the history of economic thought, the information given appears often to be second hand and is frequently not reliable. In Blaug (1997) Spiethoff's name is no longer to be found in the index.

several times, shaped in important ways the path German economics and, in the case of Schumpeter, economics in general took.

The composition of the paper is the following. Since Spiethoff is nowadays largely unknown to an international audience, Section 2 provides a short summary account of his life and career.³ Section 3 then turns to the role Spiethoff played at important junctures of Schumpeter's life. It is hardly an exaggeration to claim that had it not been for Spiethoff Schumpeter would in all probability have forever been lost to scientific work. It was Spiethoff who brought the Austrian back to academia and research after a sequence of serious mishaps in politics and banking. Section 4 sets out what Schumpeter wrote about Spiethoff and the latter's work. Section 5 turns to Spiethoff's contribution to an analysis of business cycles and points out important similarities and some differences between it and Schumpeter's. Section 6 counterposes the view of Spiethoff and Schumpeter – that cycles are endogenous and cannot possibly be eliminated without at the same time eliminating the dynamism of the capitalist economy – with views of some of their contemporaries and particularly modern mainstream macroeconomics that this is not so. Section 7 concludes.

2. Arthur Spiethoff

Arthur Spiethoff was born on 13 May 1873 in Düsseldorf, almost ten years before Schumpeter.⁴ From 1893 to 1899 he studied “Wirtschaftliche Staatswissenschaften” (Economics and Cameralism) mostly in Berlin with Adolph Wagner and Gustav von Schmoller, but also in Geneva, and in 1899 he became an assistant to Schmoller, the towering figure of the younger German Historical School in Berlin.⁵ Spiethoff was also Schmoller's secretary in the latter's capacity as editor of *Schmollers Jahrbuch*, a leading German review of economics. In early 1905 Spiethoff received a Dr.phil. degree with a work entitled *Beiträge zur Analyse und Theorie der allgemeinen Wirtschaftskrisen* (Contributions to an Analysis and Theory of General Economic Crises).⁶ The title indicates that Spiethoff was not a narrow

³ Schumpeter's life has, on the contrary, been meticulously researched. See, in particular, Swedberg (1991) and McCraw (2007); for a short account, see Kurz (2005).

⁴ On Spiethoff's life and work, see Clausing (1958), Kamp (1969), Barends (1987) and Schefold (2010).

⁵ One of the reasons that appears to have prompted Spiethoff to study economics was that he wished to understand why the firm of his father went bankrupt in Westphalia in the depression of the 1870s. On the Historical School, see Rieter (1994).

⁶ Only a part of the dissertation was published; see Kamp (1969: 26).

historicist, but tried to combine the historical perspective and method and contemporary economic theory.⁷ By-products of the work on his dissertation were, among others, essays published in *Schmollers Jahrbuch* on “Vorbemerkungen zu einer Theorie der Überproduktion” (Preliminary remarks on a theory of overproduction) in 1902 and “Die Krisentheorien von M. v. Tugan-Baranowski und L. Pohle” (The crisis theories of Tugan-Baranovsky and Pohle) in 1903 (Spiethoff 1902, 1903). In December 1907 he finished his habilitation. One year later he was appointed to Alfred Weber’s former chair in Political Economy at the German Karls-University in Prague. (Weber had moved on to Heidelberg.) Spiethoff taught in Prague for ten years. In 1918 he accepted an offer from the University of Bonn, where he was to stay until the end of his academic career.⁸ He survived Schumpeter by seven years and died in Tübingen on 4 April 1957.

While Spiethoff held Schmoller in high esteem, he did not follow him in each and every respect. He was certainly first and foremost an inductivist. However, confronted with swiftly changing conditions in the discipline, he tried to strike a compromise between historicism and modern developments in economics outside Germany. He also felt that abstract theory had an important role to play: it helped one to understand certain phenomena and economic principles in their pure, unadulterated form, and via elaborating analytical concepts and frameworks it directed one’s empirical work and the search for essential facts. Yet he never dispensed with his historicist credo and succeeded in convincing others of its merits, including Schumpeter. Without Spiethoff’s influence, Schumpeter’s fifty pages long magisterial essay on “Schmoller and the problems of today” (Schumpeter 1926b) would probably have looked rather different. In fact, in the course of time Schumpeter’s work became more and more historicist and less and less indebted to Léon Walras’s theory, which he once had dubbed the “Magna Carta” of economics. Spiethoff’s meticulousness and modesty, his endeavour to first collect and then come to grips with myriads of facts and the inadequacy of his training in economic theory may contribute to explaining why he was so reluctant to

⁷ Salin (1951: 159 and 157) evaluates Spiethoff’s work on crises and business cycles as a “full and living amalgamation of rational and historical theory” and calls Spiethoff a “student and heir” of Schmoller’s, who on the one hand “preserved the historical tradition in a dignified way” and on the other cherished the “independence of theoretical thinking”. Spiethoff is said to have been keen to bridge the gap between the “observational” (*anschaulich*) and the “rational” point of view (ibid.: 188-9). On Spiethoff’s conceptualisation of the relationship between observational or “economic Gestalt theory” and pure (*reine*) Theorie, see Spiethoff (1932, 1938 and 1949), Kamp (1969: 33-42) and footnote 12 below. (Unless otherwise stated, translations from German texts are mine.)

⁸ On Spiethoff’s relationship with the Nazis, see Section 4 below.

publish.⁹ He was fascinated by people such as Schumpeter, who had managed, or so it seemed, to get to the frontiers of knowledge and who were even able to push them back. He engaged in careful collections of data, historical studies and descriptions of the business cycle, but in terms of the theoretical tools he used in explaining the phenomenon at hand, his analysis did not get much beyond the works of the authors he consulted, especially Clément Juglar and Mikhail I. Tugan-Baranovsky. There are essentially two works by Spiethoff that deserve to be mentioned in the present context. First, there is his essay “Krisen”, which is a summary account of his work on business cycles, and which established his fame as a leading German economist in Germany and beyond (Spiethoff 1925).¹⁰ The essay was translated into Japanese in 1936 and into English in 1953 (Spiethoff 1953).¹¹ Secondly, there is what may be called his *magnum opus* in two volumes entitled *Die wirtschaftlichen Wechsellagen. Aufschwung, Krise, Stockung* (Economic Cycles. Upswing, Crisis and Stagnation) published as late as 1955 (Spiethoff 1955). Spiethoff was then 82 years of age and had been pressed by Edgar Salin, one of his students, to bring out again his essay on crises with an updated and comprehensive set of time series.

Spiethoff characterized his method of analysis as “explanatory description” (*erklärende Beschreibung*); he also spoke of “historical” and “observational theory” (*geschichtliche* or *anschauliche Theorie*). What he probably had in mind may be compared to the method used by modern evolutionary economics (Nelson and Winter 1982). Richard Nelson coined the term “appreciative theory” (Nelson 2005) to describe an approach that uses judiciously theoretical tools, but seeks to stay close to the historical phenomena under consideration and respect their specificity.¹² This latter aspect is reflected in Spiethoff’s identification of

⁹ In a letter to Gustav Stolper of 24 June 1926 Schumpeter wrote about Spiethoff: “I might get Spiethoff to produce something, but the reservations of this formidable man are extremely difficult to overcome” (Schumpeter 2000: 116).

¹⁰ In his *Business Cycles*, Schumpeter (1939: 220 n.) called Spiethoff’s essay one of “the peak achievements” in the literature on histories of “crises”. The title of the essay is somewhat misleading, because the object of the analysis are fairly regular cycles and not just irregular “crises”.

¹¹ Actually, it was not just a translation into English, but the text was re-arranged and certain parts were removed.

¹² In the preface to the English version of his essay on “Krisen”, Spiethoff stresses “that the true nature of my method of enquiry has often been misunderstood. There are two kinds of theory. The one is ‘pure theory’ and it was brought to a high degree of perfection by the classical economists, particularly by Quesnay, Ricardo, Thünen, Menger, Jevons and Pareto. The other method is that pursued by the Mercantilists, List, Schmoller, Sombart and Max Weber, and this is the method which I, too, have followed.” He adds: “Unfortunately there is no generally accepted name for this method. Some call it ‘empirical-realistic’, others

different “economic styles” (*Wirtschaftsstile*).¹³ With regard to Germany, Spiethoff distinguished essentially three different styles: from the free via the interventionist to the post World War II style of a market economy with a government committed to stabilisation, growth and structural policies.

3. Spiethoff and Schumpeter

Spiethoff and Schumpeter came across each other on various occasions. They became life-long friends, with Spiethoff assuming the role of a surrogate father for his younger Austrian colleague, who had lost his real father at the age of three.¹⁴

They can safely be assumed to have been aware of each other at an early time. As a major student of Schmoller’s and de facto editor of a prestigious professional journal, Spiethoff was a well-known figure in the German-speaking academic world. Schumpeter on the other hand, at the age of 25, impressed the German economics profession with his voluminous *Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie* (The Essence and the Main Content of Theoretical Economics) (Schumpeter 1908), which contained pleas for pure economic theory as well as for historical studies: historical work was as much needed as theoretical work, both were complementary to one another and thus indispensable. Published in the year in which Spiethoff was appointed full professor it must have pleased him, because it contained a point of view that was not all that different from his own. And when in 1911 (the impressum of the book gives wrongly 1912 as the year of publication) Schumpeter’s *Theorie der wirtschaftlichen Entwicklung* appeared (Schumpeter 1911), Spiethoff understood that he and his Austrian colleague shared not only a similar methodological position, but worked in the same research area: the study of business cycles or, more generally, economic dynamics.

‘concrete’, yet others ‘observational’ (*anschaulich*)” (Spiethoff 1953: 75). Spiethoff then uses the label “observational” himself. I agree with Kurt Dopfer that this translation is unfortunate and at any rate does not (and probably never did) properly convey the meaning intended by the German word. “Appreciative” (a term used by Nelson and Winter to characterise their own approach) may be said to express better what is intended. (As Bertram Schefold (1992) recalls, the concept of *anschauliche Theorie* was developed by Salin and then adopted by Spiethoff; he suggests to translate *anschaulich* with “visual”.)

¹³ He defined such styles in terms of five characteristics: economic spirit, natural and technical basis, economic constitution, social constitution and dynamism; see Schefold (1994).

¹⁴ For a remarkable expression of Spiethoff’s friendship toward Schumpeter, see his obituary (Spiethoff 1950).

However, what were to become lifelong friends at first were rivals. When in 1911 the Law Faculty of the University of Graz was discussing who should succeed Richard Hildebrand, son of the much better known Bruno Hildebrand, a leading representative of the older German Historical School, the Faculty was divided. A minority thought that Spiethoff and Schumpeter were superior to the candidates proposed by the majority and strongly advocated this view vis-à-vis the Ministry of Education. It was apparently due to Eugen von Böhm-Bawerk, then president of the Austrian Academy of Sciences and rather critical of Schmoller and his followers – the *Methodenstreit* had left deep traces – that Schumpeter was appointed to the chair in Graz against the resistance of large parts of the Faculty.

Spiethoff's involvement in advising the German government on a variety of matters (see Kamp 1969: 27) in late 1915 appears to have brought to his attention the secret plan of the German government to build a free trade zone with Austria as a first step of the latter's *Anschluß*, i.e. its integration into a larger German nation. He informed Schumpeter about the planned tariff agreement. Schumpeter was strictly opposed to this (see Schumpeter 2000: 59).¹⁵ The idea was propagated by influential German politicians and writers, especially Friedrich Naumann, whose book *Mitteleuropa* had a great influence on contemporary thinking among German-speaking people. The basic idea was that only a sufficiently strong Germany could withstand its neighbours in the East as well as in the West and that this required a unification of all German-speaking people under the umbrella of the German Reich. The idea was adopted by the German leadership and in November 1915 led to a diplomatic note in which Germany, which had already unofficially assumed the leadership of the Austro-Hungarian Army during World War I, requested Austria to enter closer collaboration with Germany and erect barriers against the Slavs, who were said to be about to take over Austria. In a secret appendix to the note a *Zollbündnis* (tariff agreement) between the two empires was suggested as a first step towards their "fusion into a single economic unit".

When Schumpeter learned about the plan from Spiethoff he must have been shocked. In his view this would lead to a "Prussian-Lutheran-Militaristic 'Middle Europe'", a possibility he abhorred. In 1916 and 1917 he wrote several memoranda which were secretly circulated

¹⁵ It is interesting to note that Spiethoff, a German nationalist, was in favour of the plan. Despite their different points of view on this important matter Schumpeter and Spiethoff did not fall out with one another.

among leading aristocratic groups in the empire.¹⁶ Schumpeter may actually be said to have quit academia for a public career essentially to thwart this plan. However, before he became the Secretary of the Treasury in the spring of 1919, a post he held only for seven months, he made an effort to get Spiethoff to join the Graz Faculty. The plan did not materialize.

Schumpeter's unsuccessful excursions into politics and later into banking had not escaped Spiethoff's attention.¹⁷ He was convinced that Schumpeter's absolute and comparative advantage was in the field of economics, and so he wrote to him in 1921 about the possibility of joining the Bonn Faculty. Schumpeter declined the invitation on the ground that at the time the life as a scholar appeared to him "as a distant and unreachable homeland" (Schumpeter 2000: 99). Yet Spiethoff kept pressing him, and when early in 1925 Heinrich Dietzel, a colleague of Spiethoff's in Bonn, announced his retirement, Spiethoff went out of his way to recruit his friend.¹⁸

At the time, after his debacle as a banker with the Biedermann Bank (see the account of this episode in Swedberg 1991: 67-8 and McCraw 2007: 104-112 and the documents presented by Seidl and Stolper in Schumpeter 1985 and 1993), Schumpeter was desperately in need of a position which earned him a regular salary and where he could lick his wounds. The deep economic crisis in Austria had affected him badly: within a few months he lost all the fortune he had accumulated in a short while and amassed instead a huge debt, and in September 1924 he was dismissed as the chairman of the board of the bank. Things looked bleak for him: he had given up his position as a University professor in Graz and his attempts to embark on careers as a politician and a business man had ended in disaster. He was without the means to live a decent life and pay back his debts. Lucky him that he could count upon a friend!

Yet getting him appointed to a chair in Bonn turned out to be everything but easy. Schumpeter's failure as a politician and as a banker, his flamboyant life style in Vienna, his huge debts etc. were the stuff that nourished strong prejudices and vicious rumours. It was only because of Spiethoff's perseverance and cunning in combination with the help he received from a Viennese friend, the journalist Gustav Stolper, editor of *Der deutsche*

¹⁶ Some of the memoranda were first discovered by Christian Seidl and then published in a volume he edited together with W.F. Stolper; see Schumpeter (1985). Later Ulrich Hedtke came across further memoranda; see Hedtke (2004).

¹⁷ For a detailed documentation, see the volume edited by Seidl and Stolper (Schumpeter 1993: part I).

¹⁸ On Dietzel and the situation in Bonn in the period under consideration, see Kasprzok (2005).

Volkswirt (the German version of *The Economist*)¹⁹, that the opposition to the Austrian's appointment within the Bonn Faculty and the Berlin Ministry eventually crumbled.²⁰ Both supporters praised Schumpeter's talents and capabilities and defended him against the accusation of being morally unreliable. Spiethoff went so far as to write to the Ministry of Education in Berlin:

Schumpeter is a genius and, with enormous precocity, published at the age of 27 a book on the main content of theoretical economics ... In the field of the history of economic thought, Schumpeter is by far the leading German scholar. In the field of sociology, ... he need not fear any comparison. His qualification in the field of finance has been proven through his practical activity as a finance minister and as a politician. As a lecturer and speaker Schumpeter has had the greatest success. The faculty would gain a shining addition in him (cited in McCraw 2007: 129).

In this way Spiethoff and Stolper effectively managed to dispel the Ministry's and Faculty's fears and generate some understanding for Schumpeter's non-conventional way of conduct on the grounds that he was an extraordinarily talented and original scholar and that a *Wunderkind* must not be assessed in terms of petty bourgeois conventions. It is no exaggeration then to claim that Schumpeter owed the appointment first and foremost to his two prominent friends and his own impressive academic achievements.

Spiethoff's role was that of Schumpeter's saviour and fatherly friend. This also explains why Schumpeter accepted willingly not to teach economic theory, which Spiethoff had reserved for himself, but public finance. Yet, as time went by, Schumpeter could not resist getting back into economic theory also in teaching, and was extremely successful at that, which Spiethoff apparently graciously overlooked. There are no reports of conflict between the two.

In Bonn Spiethoff and his wife helped Schumpeter whenever help was needed. They looked after him when in 1926 first his beloved mother died, shortly afterwards followed by his

¹⁹ It was actually Schumpeter who told Spiethoff to involve Stolper in order to overcome the resistance to his appointment; see Schumpeter (2000: 103). On Schumpeter, Stolper and the latter's periodical, see Rieter (1998).

²⁰ For succinct accounts of the activities that finally led to Schumpeter's appointment in 1925, see Swedberg (1991: 101-103), Kasprzok (2005: 51-2) and McCraw (2007: 128-33). Ulrich Hedtke pointed out to me that the Ministry was also interested in appointing scholars who were familiar with the latest developments in their disciplines and the political situation abroad. The anglophile Schumpeter was obviously well informed about the situation in the United Kingdom (and also in the United States of America), a former enemy nation, an information that might be useful also in other contexts.

second wife, Anna Reisinger, who died in childbirth together with their son. Spiethoff assisted him in dealing with his financial obligations. He lent and perhaps even donated him money in order to pay off his debts. He organised several talks for him to be given to clubs and societies that earned him a little extra money. In the summer of 1927, essentially due to the help of Spiethoff, Schumpeter was able to pay back his most pressing debts and convert most of the others.²¹ And Spiethoff remained close to Schumpeter even after the latter had finally accepted the invitation to join the Harvard Faculty in 1932. In his letters, Schumpeter mentions repeatedly Spiethoff's "friendly attitude" and "friendly feelings" toward him (see, for example, Schumpeter 2000: 101), and in a letter sent from the United States on 8 January 1931 he thanks Spiethoff "for all his goodness and friendship" (Schumpeter 2000: 183). Schumpeter knew how much he owed to "the good Spiethoff". Spiethoff spoke of the years with Schumpeter in Bonn as the happiest and most rewarding period of his entire academic career (see Kamp 1969: 29).

Two further events are worth mentioning. At the beginning of the 1920s Spiethoff was involved in editing the *Enzyklopädie der Rechts- und Staatswissenschaft* (Encyclopedia of Law and Cameralism), a multi-volume enterprise. In 1921 he invited Schumpeter to contribute a book on economic theory. Schumpeter accepted (see Schumpeter 2000: 94-5), but was overwhelmed with other obligations and could not do it. Spiethoff waited until early 1924 when he informed Schumpeter that he had to give the task to someone else. In a letter dated 17 April 1924 Schumpeter asked Spiethoff to accept his apologies. Apparently, Schumpeter's failure did not weigh heavily on their relationship.

The other incident relates to Schumpeter's involvement in organising a *Festschrift* on the occasion of Spiethoff's sixtieth birthday (Clausing 1933). (Schumpeter contributed a preface and a paper to it.) He succeeded in getting John Maynard Keynes to write a note of some three pages entitled "A Monetary Theory of Production" (which contained the first public pronouncement of what Keynes was after in the new book he was in the process of writing – the *General Theory*). After having received the piece he replied on 22 October 1932 in an extremely flattering way: "I am delighted with your charming essay which is exactly the thing I want and which, as you of course know, is quite sufficient by itself to make that book a

²¹ Toward the end of 1928, the total amount of his outstanding debts amounted to about twice his yearly income as a full professor in Bonn; see Schumpeter (2000: 12).

success.”²² He added: “There will be, of course, a certain amount of personal friends of Spiethoff contributing to the volume which is regrettable as it is unavoidable but otherwise it will be very presentable” (Schumpeter 2000: 224).²³ Yet, from the present point of view the letter is particularly interesting because in it Schumpeter replies to Keynes’s request to nominate a German economist who after Schumpeter’s move to Harvard could replace him as a correspondent for Germany of the *Economic Journal*, which Keynes edited. Schumpeter had held this position from 1927 to 1932 (from 1920 to 1926 he was a correspondent for Austria). Schumpeter mentions first Werner Sombart and then his Bonn colleague and provides the following assessment of the latter: “As to scientific standing, I should put Spiethoff next but he could not write a line of English which, after all, is some consideration” (Schumpeter 2000: 224).

Spiethoff was deeply impressed by the fecundity of his younger colleague: “One scarcely knows which is the more amazing: that a man of twenty-five and twenty-seven should shake the foundations of his chosen science, or that a man of thirty should write the history of that discipline!” (Spiethoff 1950: 291).

4. Schumpeter on Spiethoff²⁴

During the last decade of his life Schumpeter (assisted by Richard Goodwin) was working on the *History of Economic Analysis* (1954). After his death Elizabeth Boody Schumpeter prepared the existing manuscript for publication.²⁵ In the *History* Schumpeter passes judgements on the contributions of a large number of economists since the beginning of economic inquiry. His judgements are often harsh and they are not always fair and well

²² It is somewhat ironic to note that Schumpeter apparently did not grasp the new line of thought contained in Keynes’s short piece. There is at any rate a remarkable discrepancy between how he received the paper and then the *General Theory*; see Kurz (2005: 27).

²³ The letter concludes with remarks about how much Keynes’s *Treatise on Money* was appreciated in Cambridge, Massachusetts, at the time. Schumpeter tells Keynes that on a boat he spoke to a Professor of Greek, “who delighted in classifying the scientists of his time, whether Greek scholars or not, and in the first class he included but two names, yours and Einstein’s. Do not despise this. It is true vox populi” (Schumpeter 2000: 225).

²⁴ In this section we spare out Schumpeter’s discussion of Spiethoff’s theory of business cycles contained in chapter 6 of the second edition of the *Entwicklung* (Schumpeter 1926a) and then in the English translation based on this edition (Schumpeter 1934). We deal with it in the next section.

²⁵ In the editor’s introduction she rightly stresses: “In a larger sense, he had been working on it all his life. Probably all of his writing and all of his teaching contributed to the final result” (Schumpeter 1954: vii).

founded. His views on Adam Smith, for example, are seriously misleading. What did Schumpeter say about Spiethoff?

The first reference to Spiethoff is contained in a discussion of the activities of the *Verein für Socialpolitik*, the German association of economists, and especially its publication series, the *Schriften* (Writings). Schumpeter singles out “an investigation into the influence of gold production [on price formation], directed by Arthur Spiethoff” (see Spiethoff 1914), which is said to have risen “far above the general level” (1954: 804). While Spiethoff is not explicitly praised for having contributed to refining the theoretical or statistical techniques, he is visibly set apart from the profession at large, in whose hands the analytic apparatus of economics is said to have “deteriorated”.

Subsection (d) of section 2, “Historicism”, of chapter 4, part IV, is devoted to “The ‘Youngest’ Historical School” and deals in just over five pages with Spiethoff, Werner Sombart and Max Weber (Schumpeter 1954: 815-20). Many differences among them and between them and Gustav Schmoller notwithstanding, the three are said to have “remained faithful to the fundamental principles he [Schmoller] had been foremost in assessing” and to be “by far the most eminent members” of what Schumpeter calls the “youngest” branch of the Historical School. In a long footnote Schumpeter provides short accounts of careers and main works of the three authors. He leaves no doubt that he ranks Max Weber highest and calls him actually “one of the most powerful personalities that ever entered the scene of academic science” (1954: 817 fn. 14 cont.). He is at a loss to understand the reasons for Werner Sombart’s fame and speaks of the latter’s “often unsubstantial brilliance”.

Spiethoff is the man in between, who, compared to Sombart, is said to be widely underrated despite Spiethoff’s substantial professional reputation. Schumpeter in fact writes: “The difference between the fame of the two men – not only with the public at large – provides food for thought on the subject of the sociology of science” (1954: 816 fn. 14).²⁶ What Schumpeter writes about Spiethoff deserves to be quoted in large parts:

The international reputation of Arthur Spiethoff – for a long time assistant to Schmoller (and also for a long time *de facto* editor of the latter’s quarterly journal, the [*Schmollers*] *Jahrbuch*, before Spiethoff edited it under his own name), later on Professor in Bonn – rests upon his outstanding performance in the field of business

²⁶ The memory of not having been appointed for “moral reasons” as successor to Sombart’s chair at Humboldt University, Berlin, in 1931/32 may have vividly come to Schumpeter’s mind when writing his above assessment. It was in fact Sombart who successfully thwarted Schumpeter’s appointment.

cycle research.²⁷ ... [W]e shall content ourselves with mentioning the article “Krisen” in the 4th ed. of the *Handwörterbuch der Staatswissenschaften* (vol. IV, 1925), which presents in a compressed form what really amounts to an extensive treatise. His highly interesting scientific credo – recognition of a large number of historical “styles” of economic life, each requiring its own theory in addition to a common fund of concepts and propositions belonging to “timeless theory” – is contained in his paper “Die Allgemeine Volkswirtschaftslehre als geschichtliche Theorie: die Wirtschaftsstile” in *Schmollers Jahrbuch*, 1932. Far removed from Schmoller’s position, Spiethoff’s will nevertheless bear interpretation as a development of it in a particular direction. (1954: 816 fn. 14)

The first part of the final passage is devoted to Spiethoff’s work on the pricing of dwelling room and the rent of urban land (see Spiethoff 1934). It is referred to again in the main text, in which Schumpeter describes Spiethoff’s approach:

So far as technical training is concerned, Spiethoff is no historian at all. But Schmoller’s fundamental precepts came into his approach to a problem in this way: at the beginning of each of his great research projects ... stood a simple conceptual apparatus ...; with this apparatus and a provisional analytic idea or hypothesis, he attacked in detail selected sets of facts that the apparatus and the idea indicated as relevant ...; finally, he described the general features of the pattern that emerged without the help of any elaborate method, and these general features ... were his “theoretical” results. I daresay that the reader is not much impressed with the novelty of this procedure, which may seem to him nothing but obvious common sense. But it was new in its neatness, the crystal-clear distinction of the steps, and the equal attention bestowed on all of them – in the success with which Spiethoff did not clamor for, but actually developed, “realistic

²⁷

Spiethoff was the only editor of a German economic journal whom the Nazis in 1933 permitted to stay in office. There is evidence that Spiethoff was also responsible for severe changes in an article by Keynes on “National Self-Sufficiency” that appeared in German in *Schmollers Jahrbuch* in 1933, changes obviously designed to please the Nazis. In a letter to Spiethoff Keynes protested against what he called “pure concessions to barbarism”, but in the end grudgingly accepted the publication of the distorted text. In regard to this event Borchardt speaks aptly of “cooperative self-censorship”. For details, see Borchardt (1988) and Hagemann (2008: 78-9); see also McCraw (2008: 288). Christian Scheer has drawn my attention to two interesting works: Höpfner (1999: 253-4) argues that Spiethoff cooperated with the Nazis in the hope and expectation that they would foster the revival of historicism. Blesgen (2002) provides additional evidence regarding the German “translation” of Keynes’s paper. He shows that Spiethoff, instigated by his brother, a professor of dermatology and member of the NSDAP, sent the correspondence with Keynes to the director of the Foreign Office of the Nazi party and proposed to reply harshly to Keynes’s accusations in the *Völkischer Beobachter*, the Nazi propaganda paper.

theories” of a certain type. ... He did not care to merge economics into an all-embracing sociology. In this respect he did not follow Schmoller’s example. (1954: 816-17)

While it is obvious that Schumpeter held Spiethoff in high esteem and compared him favourably to other, more famous contemporaries, he was not overly impressed by his elder friend’s respective achievements. One gets a bit the impression that what Schumpeter identified as weaknesses in his friend’s work are somewhat glossed over. Spiethoff’s “‘theoretical’ results” did not really deserve the adjective. The reader need not read between the lines in order to sense Schumpeter’s limited enthusiasm for Spiethoff’s performance as an original theorist in the field under consideration.

Things are very different when we turn to chapter 8 of part IV, dedicated to money, credit and cycles. In subsection (b), “Common ground and ‘warring’ theories”, of section 9, “Non-monetary cycle analysis”, Schumpeter deals, among other things, with the specificity of Spiethoff’s approach to the problem of business cycles and especially “that the fundamental fact about cyclical fluctuations was the characteristic fluctuation in the production of plant and equipment” (1954: 1125). He adds: “The outstanding work in the line under discussion is Arthur Spiethoff’s” (1954: 1126).²⁸ In a footnote appended to this assessment he seeks to explain why Spiethoff’s work developed so slowly and has still not been finished. The main reason for this is said to have been Spiethoff’s “heroic resolve to carry out a vast program of minute factual research single-handed – practically without any research assistance at all” (1954: 1126 fn. 10) – apparently an impossible task. Schumpeter then expounds what in his view are Spiethoff’s respective merits: “His analytic schema first lists a number of possible starters of a process of expansion of plant and equipment, which process then accounts without difficulty for all the other observed phenomena of booms, great care being taken to account for the individual peculiarities of every historical instance” (1954: 1126). He continues: “This emphasis upon the expansion of plant and equipment is reflected in the choice, for the role of fundamental index, of iron consumption (production plus imports minus exports). The problem that remains, namely why this expansion eventually runs into a general condition of production at a loss (‘overproduction’), is then solved by means of several factors, such as shortage of working capital and temporary saturation of demand in

²⁸ As early as February 1926 Schumpeter wrote to Gustav Stolper that the monitoring of business cycles published since January of the same year in *Der Wirtschaftsdienst* based on Spiethoff’s theory involved a big step forward: “As far as I know, this is the first time, not only in Germany but in general, that the observations on business cycles are based on an elaborate argument, while all others are collections of symptoms that put together indiscriminately everything that somehow changes with the cycles” (Schumpeter 2000: 107; similarly: 123-4).

particular directions” (1126-27). One of the great merits of the approach is said to be its openness, leaving “plenty of room for alternatives” and for “many other factors that are worked up into unique motors of the cyclical movement by other theories, such as ‘psychological’ factors, monetary factors, acceleration, undersaving” (1127). Schumpeter’s commendation culminates in the statement:

Spiethoff’s analysis, therefore, comes nearest to an organic synthesis of relevant elements and to full utilization of the co-ordinating power of that starting point. And it has still another virtue: with the possible exception of Marx, Spiethoff was the first to recognize explicitly that *cycles are not merely a non-essential concomitant of capitalist evolution but that they are the essential form of capitalist life.* (1127; emphasis added)²⁹

Spiethoff’s view is echoed in the *Business Cycles*: “Cycles are not, like tonsils, separable things that might be treated by themselves, but are, like the beat of the heart, of the essence of the organism that displays them” (Schumpeter 1939: v). Both economists were convinced of the *endogenous* nature of the ups and downs of economic activity and sought to understand the “beat of the heart” of the capitalist economy.³⁰

Spiethoff is then mentioned in a brief characterisation of German economics in the period of the Weimar Republic. Schumpeter illustrates the rapid improvement of teaching and research in Germany in terms of a reference to a number of German scholars. He singles out “The performances of Diehl, Eucken, and others and, above all, those of Spiethoff and Sombart”, because they are allegedly “more accessible to Anglo-American understanding (and to my own)” (1954: 1154).

Finally, in the concluding part of the *History*, Schumpeter at one point raises the question what was new in business cycle analysis post World War I, because in his view “all the fundamental ideas concerning the phenomenon of business cycles were present before 1914” (1954: 1164). He answers: “What our period added, besides critical development of these ideas, was in the first instance the new wealth of data and new statistical methods of handling them.” He adds: “Even the econometric program, barring the ‘higher’ mathematics, had been

²⁹ Haberler (1939: 32 and 73-81) classified Spiethoff’s theory as a non-monetary overinvestment theory of the cycle in which the principle of “the acceleration and magnification of derived demand” plays a crucial role.

³⁰ It should be added that Schumpeter saw an “affinity in important respects” (1954: 1127) between the work of D. H. Robertson and that of Spiethoff, which however does not extend to the method employed: Spiethoff started as an empiricist, Robertson as a theorist. For a similar assessment, see Haberler (1939: 75). This is not surprising, because Robertson was apparently influenced by Spiethoff.

carried out by such outstanding students as Juglar, Mitchell, and Spiethoff” (1954: 1164). A more sober assessment reads that Spiethoff’s “statistical technique for the measurement of the different phases of the cycle was very poor” and that he had “no reliable figures available” (Schweitzer 1941: 14).

5. Spiethoff and Schumpeter on economic cycles

As we have learned in the above, Schumpeter considered the 83 pages long 1925 essay “Krisen” Spiethoff’s main and most original work in the field of business cycles. He did not have the privilege of seeing Spiethoff’s 1955 *magnum opus*, which contained a significantly more elaborate version of his elder friend’s lifelong grappling with the problem at hand. The essay was published fourteen years after the first edition of Schumpeter’s *Theorie der wirtschaftlichen Entwicklung* and only one year before its second edition, which Schumpeter had prepared whilst he was Spiethoff’s colleague at Bonn University. The following interrelated questions are therefore close at hand: What are the characteristic features of Spiethoff’s theory of the business cycle? How does it relate to Schumpeter’s theory? What did Spiethoff say about the latter in his essay? And what did Schumpeter say in the second edition of the *Entwicklung* (and in the English translation of it) and then in the *Business Cycles* about Spiethoff’s theory?

In section d), “Doctrines of business cycles” (*Lehrmeinungen über die wirtschaftlichen Wechsellagen*), Spiethoff (1925) refers to three works of Schumpeter: in addition to the *Entwicklung* also to two easily accessible articles (Schumpeter 1910 and 1914). The section corresponds to part 5 of the essay, which bears the same title. It contains a discussion of the existing literature and is subdivided in nine sections, starting with explanations of cycles in terms of exogenous factors and ending, in section i), with what Spiethoff (1925: 69) calls “Inkräftige Wechsellagenlehre”, where both words are his creations. We may translate his concept as “doctrine of endogenous cycles”.³¹ The section is premised in the following way: “The explanation of cycles ... belongs to the group of endogenous doctrine, which on the basis of meticulous documentation and decomposition of the process seeks to identify its causes from within (*aus dessen Innern heraus*). In this place we point out only the specific aspects of other advocates of this approach or especially the ideas coming from them” (Spiethoff 1925: 69). He mentions a few authors, including Juglar, Tugan-Baranowsky and

³¹ Schweitzer (1941: 3) translates *Wechsellagen* as “alternating stages”.

Albert Aftalion, and, towards the end of the section, Schumpeter (1910).³² The latter is said to have “treated the question of business cycles as a part and parcel of pure theory and with a view to the static and dynamic economic processes and explicitly that of development” (Spiethoff 1925: 70). Spiethoff thus sees his own work as belonging to the same stream of thought as Schumpeter’s.

This is confirmed in part 6, in which Spiethoff elaborates his own “Explanation of economic cycles”. While Schumpeter is never mentioned, there are several astounding similarities, but also some remarkable differences, between the analyses of the two. The most important respects in which Spiethoff’s analysis resembles Schumpeter’s, or deviates from it, are mentioned in the following. Before doing so, three observations are apposite. First, according to Spiethoff *endogenous* cycles (as opposed to exogenously caused ones) were of a fairly recent descent and began only in the 1820’s in England (Spiethoff 1925: 47).³³ The cycles observed since that time in England and later also in Germany lasted between seven and eleven years (see Spiethoff’s periodisation, 1925: 60; 1953: 146). What Spiethoff (1925: 38; 1953: 123) considers to be a typical pattern of the cycle, or *Musterkreislauf*, is divided in three phases, the upswing, downswing, and crisis. Spiethoff’s main accomplishment consists in refining the phase schema of the business cycle within the context of his doctrine of economic styles (*Wirtschaftsstile*) and in pointing out the regularity of the elements of each cycle and its representativeness for all cycles within a given economic style.³⁴

Second, the pattern of cycles and the economic style of the system in which they take place are not independent of one another, an idea that also surfaces variously in Schumpeter’s work. Hence economic cycles may be said to be endogenous in a twofold sense: they emerge from within the economic system, and they change their characteristic features (length and amplitude) together with the system’s economic style. Therefore Spiethoff was convinced that there cannot be a single theory of business cycles, but there must be several of them, each

³² Spiethoff’s analysis was greatly influenced by Tugan-Baranovsky; see on this Hagemann and Landesmann (1998: 110-115) and Beckmann (2005).

³³ Schumpeter (1939: 224-5) basically agrees and explains the phenomenon as follows: “it is not only true but obvious that before and even during the eighteenth century crops, wars, plagues, and so on were absolutely and relatively very much more important. The impact of innovation will evidently be felt differently in a small capitalist milieu which is surrounded by a noncapitalist world of much greater quantitative importance, little affected by what happens in the former and acting as a cushion.” See also Schumpeter (1939: 254).

³⁴ For a discussion of Spiethoff’s ideal type of a cycle, see Schweitzer (1941: 3-14), Borchardt (1982) and Rieter (1994: 158-60). As Rieter stresses, Spiethoff’s respective analysis of the economic process was “the main gate for modern macroeconomics” to enter the historical-observational theory.

attuned to the particular economic style congenial to it and at the same time allowing for the mutual and interactive transformation of both, style and cycle.³⁵

Third, Spiethoff very much like Schumpeter in the early editions of the *Entwicklung*, is first and foremost concerned with business cycles, that is, what Schumpeter in his *Business Cycles* (1939) was to call “Juglars”. However, he also mentions long waves of economic development, a concept that moved to the centre of the stage in Schumpeter’s *Business Cycles*, in which he saw the actual economic development as the result of three types of cycles being superimposed one upon the other (so-called “Kitchins”, “Juglars” and “Kondratieffs”).³⁶

We now turn to a brief characterisation of Spiethoff’s theory and Schumpeter’s assessment of it. As regards the former, our main source will be his 1925 essay on crises. As regards the latter, attention will focus on chapter VI, “The Business Cycle”, of the English translation of the second edition of the *Entwicklung*, and then also on *Business Cycles* (in the index Spiethoff is referred to 27 times, as often as W. C. Mitchell).

The initial passages of chapter VI of the *Theory of Economic Development* are devoted to a critical discussion of some of the objections put forward against Schumpeter’s theory since its first publication, especially by Adolph Löwe (later Lowe) (Schumpeter 1934: 212-14).³⁷

³⁵ This twofold concept of endogeneity is also to be found in Schumpeter (see, in particular, 1928 and 1942) and in Marx. Suffice it to point out, for example, that Spiethoff thought that with the development of the banking and finance system credit crises would become less and less probable. Hence, in every stage of capitalist development there is a change in the characteristics of the cycle. Spiethoff was even convinced that cycles might become less pronounced (without however ever vanishing) in the course of the development.

³⁶ This idea is foreshadowed in a letter to Spiethoff dated 8 January 1931, composed shortly after the foundation of the Econometric Society in Cleveland (see Schumpeter 2000: 183-4). In the same letter Schumpeter expresses his overly optimistic belief that the world economy would recover from the Great Depression during the same year and that this recovery can be expected to weaken the political fringes, Nazis and communists, in Germany. He also stresses that to him “trend analysis” was becoming “more and more a *quantitative theory of evolution*” (ibid.: 184; emphasis added). (The idea of an “evolutionary schema” recurs in a letter written on 22 April 1949; see ibid.: 374.) See in this context also his letter to Wesley Clair Mitchell of 6 May 1937, in which Schumpeter informs him that “the longest cycle of my schema I call the Kondratieff.” For the U.S., the U.K. and Germany he dates the Kondratieff’s as follows: “1782-1842, 1843-1897, 1898-?.” This is said to agree “roughly, though not entirely,” with the periodisation suggested by others, including Kondratieff and Spiethoff (Schumpeter 2000: 301-302; for differences between them, see Schumpeter 1939: 164-5, 471 n. and 475 n.). On a discussion of Spiethoff’s periodisation, see Haberler (1939: 272-4).

³⁷ Löwe (1925) was not only critical of Schumpeter’s, but also of Spiethoff’s theory. He contradicted Schumpeter’s idea that an explanation of business cycles could start from the “circular flow”, i.e. a system in general equilibrium. And he accused Spiethoff of circular

Then Schumpeter turns to Spiethoff's work. He introduces his argument in the following way: "I should now like, *without any critical design* and solely in order to allow the ideas to stand out more clearly, to compare my theory with *by far the most thorough effort in this field*, that of Spiethoff – little as it is capable of comparison with the latter in thoroughness and perfection" (Schumpeter 1934: 214: emphases added).

Upswing. According to Spiethoff, an upswing consists of two phases: revival and expansion. It is reflected in changes in three groups of characteristic data: capital, production and prices.³⁸ Every revival grows out of a slump in which idle capital and unemployed workers exert a downward pressure on interest rates and wages. An upswing starts with an increase in real capital formation, i.e. investment, as a consequence of improved profit expectations due to, among other things, the opening of new markets and technological improvements. This leads to an increased demand for producers's goods, an increased production of such goods, etc. A cumulative process of expansion sets in which swiftly extends to the economy as a whole. Eventually, with the expansion in full swing, interest rates for loans, prices of producers' goods and wages will tend to increase. Schumpeter comments: "We agree that the causal nexus begins first of all with the means of production which are bought with capital and that the boom materialises first of all in the production of industrial plant (factories, mines, ships, railways, and so forth)" (Schumpeter 1934: 215). Yet, while in Spiethoff's view the economy starts from a situation with idle resources (labour and means of production) that will now find employment, Schumpeter instead starts from a "circular flow", characterised by the full utilization of productive resources.³⁹ Therefore, while in Schumpeter's view the danger of inflation, conceived as a tax that redirects scarce resources from static producers to innovators, is imminent right from the beginning of the upswing, according to Spiethoff the prices of producers' goods start rising only toward the end of the revival.

Schumpeter's disagreement with views expressed by Spiethoff in this regard in some of his early articles (see Spiethoff 1909a, 1909b, 1909c) comes to the fore in print in chapter III,

reasoning by explaining the upswing in terms of the forces unleashed during the downswing. Schumpeter (1926b: 369) defended Spiethoff against Löwe by stressing that what matters is the entire typical cyclical pattern of the cycle as the basis for an explanation.

³⁸ Employment and income are not counted among the relevant characteristic facts. They are considered derived facts.

³⁹ To Spiethoff the circular flow or general equilibrium was a purely fictitious state; the actual system was never in such a state.

“Credit and Capital”, of *The Theory of Economic Development*.⁴⁰ As is well known, a crucial element in Schumpeter’s argument is the capacity of the banking system to provide entrepreneurs with credit. This credit means new purchasing power that is added to the existing one and that, by itself, “does not increase the quantity of productive services existing in the economic system. ... It causes a rise in the prices of productive services. From this ensues the ‘withdrawal of goods’ from their previous use” (Schumpeter 1934: 108; see also Schumpeter 1926a: 155). In a footnote appended to the passage just quoted, Schumpeter first admits that Spiethoff “anticipated” a number of points relating to the problem of credit and capital formation, including “the possibility of ‘creating new money substitutes’” (Schumpeter 1934: 108 n.2). However, he takes issue with Spiethoff’s proposition that “there is an ‘unsurmountable economic limit, in the existing supply of goods. Only in so far as these artificial measures can put hitherto idle goods in circulation are they able to work.’ If this limit is exceeded prices rise. The latter is certainly correct – but the salient point for us is precisely here” (Schumpeter 1934: 108-9 n.2). Hence, while Schumpeter does not deny that hitherto idle resources may be put to productive use, he insists that inflation may in addition channel previously employed resources into the hands of entrepreneurs.

As has already become clear, both authors place a strong weight on credit, but again they differ with regard to details. In Spiethoff, banks and financial institutions, still under the impression of the slump and the failure of firms to pay back their debts and of bankruptcies, are said to be particularly suspicious of and difficult to approach by new firms especially with new ideas (1925: 70; 1953: 149). It is only after some visible successes of pioneering firms that banks are willing to ease their tight credit policy. What is needed, Spiethoff stresses, fully in accordance with Schumpeter, are “courageous entrepreneurs”, “brave, enterprising men ..., willing to risk a large part of their fortune, and often their very fate, in order to carry out an idea”. “They can”, he adds, “set the pace for investment and for the upswing only to the extent to which they are blessed with a success which will be visible as a beacon” and then become the “lodestar” of the upswing (1925: 70-71; 1953: 148-9).

The system is driven by profit expectations. In a depression, profits may be low, but they need not be nil (as in Schumpeter’s “circular flow”) or even negative. What raises profitability? Spiethoff writes:

⁴⁰ The first edition of the *Entwicklung* does not yet contain the disagreement, although Spiethoff’s papers to which Schumpeter refers were published two years earlier.

Rises in profits appear to have originated chiefly in two wide fields: the expansion of world trade, *i.e.* the *opening up of fresh markets*, and *technical development*. (Spiethoff 1925: 70; 1953: 149; the emphases are to be found only in the German original).

This covers basically the first four of the five types of “new combinations” Schumpeter is known for:

(1) The introduction of a new good ... or of a new quality of a good. (2) The introduction of a new method of production ..., which need by no means be founded upon a discovery scientifically new, and can also exist in a new way of handling a commodity commercially. (3) The opening of a new market, that is a market into which the particular branch of manufacture of the country in question has not previously entered ... (4) The conquest of a new source of supply of raw materials or half-manufactured goods ... (5) The carrying out of the new organisation of any industry, like the creation of a monopoly position (for example through trustification) or the breaking up of a monopoly position. (Schumpeter 1934: 66)

Boom. After a successful take-off, “A *chain of upswing phenomena* develops, each of which calls forth the next.” Spiethoff adds:

As with a rolling snowball, each turn expands the sphere: increased investment, increased consumption, rising prices and profits, together with the expansion of production and of capital formation and then again increased investment etc. Once the unemployed have been absorbed, industry draws the additional labour it requires from agriculture and from undeveloped regions. The result is a constant spiral-like self-raising movement. (Spiethoff 1925: 74-5; 1953: 154; emphasis only in the German original)

Spiethoff insists, in agreement with Schumpeter, that rising prices are experienced first with regard to what he calls “intermediate consumption”, that is, production or capital goods. During the upswing also financial markets pick up and equity capital increases at an accelerating speed.

Spiethoff sees the upswing reflected first and foremost in rising levels of consumption of certain “intermediate” (or capital) goods. According to his empirical studies, especially of the German case, it is the consumption of iron per capita that provides a good indicator of economic ups and downs (see Spiethoff 1925: especially 18-20; 1953: 94-6). Spiethoff in fact suggests to take iron consumption as the main quantity on which empirical research and

economic forecasting should focus attention.⁴¹ Schumpeter agrees: “the figure for the *consumption* of iron is the best index of business conditions; that is, this index which Spiethoff discovered and worked out ... is also recognised by me as the right one from the standpoint of my theory” (Schumpeter 1934: 215; emphasis in the original; see also Schumpeter 1939: 485 n.).⁴² Spiethoff comes close to saying that iron is needed directly or indirectly in the production of each and every commodity: it is a “basic product”, to use a term coined by Sraffa (1960). If capital accumulation picks up, then this is of necessity reflected in an increase in iron production and consumption. He sees this confirmed by basically all cycles in Germany since the forties of the nineteenth century and also by cycles in several other countries. He studies other inputs also, such as coal, cement and lumber, that play an important role as capital goods, but with regard to them the evidence is less compelling. We live in an “age of iron” is one of Spiethoff’s main messages, despite all the important technical changes that have taken place since the Industrial Revolution.

Overproduction, Crisis and Downswing. The boom will eventually lead to an “overproduction” of durable capital goods, in particular iron. This overproduction is associated with a lack of complementary inputs, working capital and skilled labour. Spiethoff provides several reasons in support of the necessary emergence of overproduction of durable instruments of production, one of which is that it takes time for them to be produced and brought to the market in the course of which market conditions may change considerably. Bottlenecks and disproportions hamper further economic expansion; profit margins shrink.⁴³ An extraordinary speculation overstrains the credit system and bids up the money rate of interest, which will further slow down investment and lead to a dramatic fall in the prices of

⁴¹ The question of which indicator should be used in order to forecast the economic development was one of the points in dispute between Spiethoff and several of his colleagues, including Ernst Wagemann, founder of the Berlin *Institut für Konjunkturforschung* (Institute of Business Cycle Research) in 1925; see Kulla (1996: 115-121).

⁴² Spiethoff was anticipated in this regard by Tugan-Baranovsky (1894), who had investigated iron production in England over the cycle and had identified it as the leading sector (see also Spiethoff 1903, Hagemann and Landesmann 1998: 98-104 and Beckmann 2005). (Daniele Besomi pointed out to me that as early as in the 1830s there were newspaper articles in the United Kingdom in which it was argued that the iron trade furnishes a reliable index of the state of trade in general.) In his critical discussion of Marx’s analysis, Tugan had assumed with Marx a system composed of three sectors, or departments, with department I producing means of production, department II means of subsistence (or wage goods), on which workers live, and department III luxuries, on which capitalists live.

⁴³ While in his explanation of the cycle the dynamics of income distribution and employment plays a role, it is largely neglected in his description of the *Musterkreislauf*. The mechanism Spiethoff sees at work is similar to the one contemplated by Richard Goodwin in his famous Marx inspired predator-prey model of the cycle.

shares in the stock market. In the early phases of capitalist development this will inevitably result in a financial breakdown: banks and firms suspend payments. Such credit crises aggravate the situation. The production and consumption of producers' goods and in their suite also of consumers' goods dwindles and prices of commodities fall to the bottom of the depression. Hence during the downswing all three groups of characteristic data – capital, products and prices – move downwards.

Yet the downswing is taken to activate from within the economic system forces that eventually bring the decline to a halt and trigger an economic revival. In particular, the decrease in investment entails a liquidity glut in the money and eventually in the capital market and brings down interest rates. Growing levels of unemployment lead to falling wages. Business confidence improves gradually and new investment opportunities due to technological progress and a growing world market provide stimuli for a recovery.

While according to Spiethoff phases of overproduction cannot be avoided by economic policy, crises can. They are genuinely monetary and speculative phenomena, caused by particular institutional arrangements and speculative events that are characteristic of the early nineteenth century. With an improved banking and financial system and a more rapid transmission of information, Spiethoff opines, crises would gradually disappear.⁴⁴ It is interesting to note that in his view crises are reflected in severe derangements of mass psychology and public opinion and a sudden and strong increase in liquidity preference, which precipitates the depressive tendencies of the economy.

Spiethoff rejects the idea that markets are continuously cleared, as Say's law of markets contends, and supports the view that there is the possibility of a "general glut of commodities", to use the terminology coined during the controversy between Malthus and Ricardo about whether or not effective demand can fall short of the production potential of an economy (see also Schweitzer 1941: 2 and 11).

There are a few disagreements between Schumpeter and Spiethoff, only two of which appear to be serious. The first one concerns the causes of the upswing, the second the causes of the downswing, that is, they concern the explanation of the turning points. As regards the upswing, it has already become clear in the above that "the creation of purchasing power plays a fundamental part in my argument which it does not in Spiethoff's" (Schumpeter 1934:

⁴⁴ As several financial crises in more recent times, including the current one, show, Spiethoff was unduly optimistic in this regard. Speeding up the flow of information may increase rather than decrease the vulnerability of the financial system.

215). Indeed, in Spiethoff a necessary condition for every new upswing is the existence of *idle* productive resources (labour and capital goods). He rejects Schumpeter's idea that an upswing can be brought about by an inflationary process in conditions of full employment of productive resources.

The downswing Spiethoff conceives as a consequence of emerging disproportionalities and a change of distribution away from profits.⁴⁵ It is especially a growing discrepancy between firms' "acquisitive capital" (*Erwerbsskapital*) and "productive capital" (*Erzeugungskapital*), i.e. their growing indebtedness, that is the source of the problem. Schumpeter instead sees the main cause of the downswing in the following: "capital investment is not distributed evenly in time but appears *en masse* at intervals. This is obviously a very fundamental fact, and for this I offer an explanation not offered by Spiethoff" (Schumpeter 1934: 215). He expounds:

The difference between us lies in the explanation of the circumstance which cuts short the boom and brings about the depression. For Spiethoff this circumstance is the overproduction of capital goods relative on the one hand to the existing capital and on the other hand to the effective demand. As a description of the actual facts I could also accept this.

"But", he goes on,

while Spiethoff's theory stops at this element and tries to make us understand what circumstances induce the producers of factory equipment, of building materials, and so forth periodically to produce more than their markets are capable of absorbing at the time, my theory tries to explain the state of affairs ... [and] may be summarised as follows. The effect of the appearance of new enterprises *en masse* upon the old firms and upon the established economic situation, having regard to the fact ... that as a rule *the new does not grow out of the old but appears alongside of it and eliminates it competitively*, is so to change all the conditions that a special process of adaptation becomes necessary. (Schumpeter 1934: 215; second emphasis added)

It follows that Schumpeter places greater weight on the role of innovations for the cyclical behaviour and especially on the "destructive" part of the process of "Creative Destruction", as he was to call the phenomenon under consideration in *Capitalism, Socialism and Democracy*

⁴⁵ Spiethoff's idea of disproportionalities derives from Marx and Tugan-Baranovsky; he actually illustrates it with the help of the "schemes of reproduction". There is also the idea that the growth of "organic" products, to use Sombart's term, is checked by natural laws and may fall short of the growth of "inorganic" products. (The reader familiar with Sraffa 1960 book is perhaps reminded of the case of self-reproducing non-basics, such as "beans".)

(Schumpeter 1975 [1942]: 82-5): the “competitive elimination” of the old by the new. It is the collateral damage caused by the competitive struggle between what Marx had called “inimical brothers” – capitalists striving for higher profits and using innovation as a major weapon (Marx 1972, pp. 285-90). As both Marx and Schumpeter insisted, social change was both an instrument and a consequence of that struggle (see Kurz 2008).

Who was first? If we ask, who was first with respect to the main ideas underlying their analyses, Spiethoff or Schumpeter, the answer is, of course, that they were both anticipated by other authors. Many of the ideas referred to in the above are indeed to be found already in Tugan-Baranovsky and the earlier, especially German, literature (see Streissler 1994). The role of the entrepreneur, seen as leader, was emphasized, for example, by Schumpeter’s teacher Friedrich von Wieser, and the importance of swarms of imitators for propagating the initial innovative impulse was stressed by several authors, including Albert Schäffle (see Borchardt 1961 and 1985). Marx’s account of the way capitalism develops comprises practically all the items contained in Schumpeter’s list and considers innovations as necessarily entailed by the “coercive law of competition”. The combinatoric metaphor in describing the creation of new, economically useful knowledge was prominently used by Adam Smith: his “philosophers or men of speculation, whose trade it is, not to do anything, but to observe every thing”, are said to be “often capable of *combining together the powers of the most distant and dissimilar objects*. In the progress of society, philosophy or speculation becomes, like every other employment, the principal or sole trade and occupation of a particular class of citizens” (*WN*, I.i.9; emphasis added). Interestingly, basically the same idea can be found in Marx, who actually introduces explicitly the concept of “new combinations” (Marx 1959: 255), which is nowadays typically associated with the name of Schumpeter.

While basically each and every idea put forward by Spiethoff and Schumpeter had its (often many) precursors, it is the particular blend of them that matters and defines the specificity and original novelty of the two authors’ respective contributions.

6. Spiethoff and Schumpeter vs. the others

The base line of both Spiethoff’s and Schumpeter’s view on economic cycles was that they were genuinely endogenous phenomena of the capitalist process of production and capital accumulation and that they could not possibly be eliminated without eliminating at the same time the system’s inherent dynamism. The idea of an “economy without business cycles” (*konjunkturlose Wirtschaft*) was unthinkable to Spiethoff, and also to Schumpeter. And even if

economic ups and downs could be mitigated somewhat, it was far from clear that this was invariably a good thing. As Spiethoff insisted towards the end of his essay on “Krisen”: “In the economic race of nations, the leaders are always those with whom the cyclical phases appear most clearly and most sharply” (Spiethoff 1925: 85; 1953: 171). Any people or nation desirous of gaining in importance and power and influence on a world scale, he went on, must go through a long phase of economic turbulence and growth in the interest of swiftly amassing riches (1925: 85-6; 1953: 171). One gets the impression that Spiethoff was of the opinion that in certain phases of economic development a higher volatility of some main state variables of the economic system, including output as a whole and employment, goes hand in hand with a higher trend rate of economic growth.

The view that economic cycles are unavoidable was not generally shared within the profession at the beginning of last century (for evidence, see Kulla 1996), nor is it shared today by the economic mainstream.⁴⁶ Several contemporaries of Spiethoff and Schumpeter argued that crises and cycles expressed some malfunctioning of the economic system, some anomaly, that ought to and actually can be overcome without affecting the desired properties of the system as regards its capacity to generate wealth. Such a view was advocated by scholars coming from different intellectual orientations and ideological leanings. According to “Austrian” economists from Ludwig von Mises to Friedrich August von Hayek economic cycles were essentially due to the banking system whose interventions via its interest rate policy triggered phases of accelerating and decelerating capital accumulation. Socialists in contrast were convinced that the government could stabilise the rate of investment and thus mitigate, if not entirely eliminate, economic cycles.

Interestingly, the idea that we could live in a world without economic cycles saw a strong comeback in recent time before the current financial and economic crises proved it to be untenable. The reference is to modern macroeconomics as it has been shaped by the work of Robert Lucas.⁴⁸ So-called computable general equilibrium models have been (and still are)

⁴⁶ This does not mean, of course, that Spiethoff and Schumpeter were the only scholars at the beginning of the twentieth century who advocated the idea of the endogeneity of cycles. There were many others who shared this idea, but did not give the same prominence to innovations. More recently, the question of whether or not the business cycle is obsolete has cropped up repeatedly; see, for example, Bronfenbrenner (1969).

⁴⁸ See in this context also Ben Bernanke’s view of the “Great Moderation”:
<http://www.federalreserve.gov/BOARDDOCS/SPEECHES/2004/20040220/default.htm>

fashionable among large parts of the economics profession. For the past two decades macroeconomics has been under the spell of the rational expectations paradigm. The macroeconomic models are of the “Dynamic Stochastic General Equilibrium” (DSGE) variety (see De Grauwe 2008). These models assume that agents are rational and do understand the world in all its complexities. Since all agents are taken to be cast from a single die, it suffices to look at a single agent only, the *representative* agent who is taken to maximise utility over an infinite time horizon. How could this agent ever err and get into trouble? All systemic problems and risks and uncertainties have been assumed away. Say’s law holds at each and every moment: all markets, including the labour market, are taken to clear at all times. In these models there is no room for manias, bubbles and crashes, for “overproduction” or “involuntary unemployment”. The problem of the distribution of wealth and income is effectively put on one side: the agent receives the “social dividend”, irrespective of whether it is in the form of wages or profits – why care about its composition? Business cycles are the result of exogenous “shocks”, technological and other. In terms of Spiethoff’s classification of different doctrines we are back to *exogenous* explanations of cycles (1925: 62). It is on the basis of models such as these that policy recommendations have been formulated and put in place in many countries and by international institutions, such as the International Monetary Fund.

Lucas was convinced, as he emphasized in one of his papers on economic growth, that “the balanced path will be a good approximation to any actual path ‘most’ of the time [and that] this is exactly the reason why the balanced path is interesting to us” (Lucas, 1988: 11). The market-clearing-rational-expectations paradigm involved a re-focussing of economic analysis toward steady-states. Lucas was aware of the fact that there is a “residue of things” that the “theories embedded in general equilibrium dynamics ... don’t let us think about” (Lucas 2004: 23). He mentioned the Great Depression and financial crises and their real consequences. However, in his opinion the probability of such accidents of the economic system had successfully been made to vanish due to a great leap forward in economic theory and, as a consequence, economic policy. The above lines were published at the time of what later turned out to be the final “Greenspan boom”. They reflect vividly the optimism that then spread amongst mainstream economists as to the possibility of persistent and close to steady-state economic growth. Some economists actually spoke euphorically of the “end of the cycle”. Keynesian economics had successfully been replaced with a dynamised version of the Arrow-Debreu model. The “potential” of the new theory, Lucas maintained in 2004, “is getting realized. It has completely succeeded in taking over growth theory, most of public finance,

financial economics. Now it's coming in use in macroeconomics with real business cycle theory" (Lucas 2004: 23).

The current economic crisis demonstrates that Lucas and his followers were chasing a will-o'-the-wisp. As we now understand much better, one of the main reasons of the current crisis have been numerous "innovations" of sorts, this time especially in the financial sector (derivative financial instruments, Collateralized Debt Obligations, the blending of commercial and investment banks, "shadow banks" etc.). Could someone brought up with the ideas and insights of a Spiethoff and a Schumpeter ever think that we may possibly enter the phase of a *konjunkturlose Wirtschaft*?

7. Concluding remarks

The paper discusses the relationship between Arthur Spiethoff and Joseph A. Schumpeter and the relationship between their works on business cycles. Both authors thought that theoretical and historical studies were not mutually exclusive, but complementary. The gulf separating pure theory and historical studies since the heated controversy between Carl Menger and Gustav von Schmoller during the so-called *Methodenstreit* was detrimental to the development of economics, and both authors were keen to bridge the cleavage. They were also opposed to the widespread view that cycles constituted an "anomaly" or "accident" of the functioning of the capitalist economic system that should and actually could effectively be avoided in terms of institutional arrangements and stabilisation policies. Instead, the two were convinced, in the words of Schumpeter, who thus characterized Spiethoff's position, that "cycles are not merely a non-essential concomitant of capitalist evolution but that they are the essential form of capitalist life." They were even convinced that the pattern of economic cycles interacts with what Spiethoff called the *economic style* of a socio-economic system. The re-emergence of the idea in modern macroeconomics of the rational expectations and real business cycle variety that capitalist development is possible without business or growth cycles, or, at most, with cycles that are purely exogenous, Spiethoff and Schumpeter would probably have received with astonishment and disbelief. Was there no progress in economics in the field under consideration? On the other hand, Schumpeter knew very well that economics is not a normal science. How could he otherwise have put forward the paradoxical claim that studying the history of economic analysis exposes the student to "new ideas" (Schumpeter 1954: 4). A given idea is always new to some specific person or group of persons. Ideas that have been

enunciated for the first time years or decades or centuries ago may look strikingly new to the modern economist. Severe economic crises request the economics profession to reconsider its doctrines, abandon views that can no longer be sustained, return to views that can, or create new ones appropriate to the current situation.

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