The Idea of a Social Cycle

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Preliminary draft
1 Introduction

We hope to aid our understanding of social cycles in general, but in this paper the business cycle in particular, by establishing a basic framework of ideal types with which to classify and compare cycle theories. We will simplify the schemata of cycle theories established by Haberler (1946) following our intuition that by reducing our categories to a minimum of truly fundamental distinctions in cycle theories, we can place them into broad categories more easily. We will begin with an analysis of the simplest type of cyclical social behavior of which we can conceive, move on to analyze a somewhat more complex phenomenon such as fads, then investment cycles, and finally, we examine several varieties of business cycle theory, including Real Business Cycle Theory, post-RBC cycle theories, Austrian Business Cycle Theory, and the cycle theory developed by Hyman Minsky. In the future, we hope to expand our analysis to other species of business cycle theory. Ultimately, the goal is to search for ideal types that can clarify relationships among social cycle theories in general, including not just business cycles but things such as:

1) The Aristotelean-Polybian theory of anacyclosis: Here, it is the weakness inherent in each form of good rule (monarchy, aristocracy, democracy) that drive the system into the next form in the cycle.

2) The Malthusian theory of the population cycle: Abundance drives population increase, which creates scarcity, which drives population reduction. Query: Is this really a social cycle, or is it more of a biological cycle?

3) Pareto's theory of alternation of the elites: Any elite class rules either mostly by guile or mostly by force. Whichever is the case, a group within the non-elite class gradually comes to have a decisive advantage in the other means, and then, by force or guile, it displaces the current elite.

In proceeding as we are, we are largely inspired by David Lewis’s work Convention, which seeks to identify the essential characteristics common to the various phenomena we call conventions, as well as to note how, despite sharing those characteristics, we can identify certain common variations among types of conventions, based on how they differ in embodying those essential elements. Such an analysis, to the extent it succeeds, does so by

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1 See Appendix A for our attempt to summarize Haberler’s classification scheme.

2 Lewis writes: “But how much better to know what we are talking about: to have an analysis of convention in its full generality…” (2002, p. 3).
clarifying the general phenomenon being dealt with by examinations of particular conventions and providing subsequent researchers into those particulars with a common framework within which they can discuss and compare their findings. Inspired by Lewis, our aim here is not to evaluate different social cycle theories—we have no intention, for instance, of examining empirical evidence as to which business cycle theory is most true to the “facts on the ground”—but to explore what it means for something to be a social cycle, for a theory to be a social cycle theory, and to offer a suggestion for a simple, yet, we believe, fundamentally grounded schema for categorizing them.

2 Our Fundamental Concepts, and the Resulting Classification Scheme

2.1 An Esteemed Forerunner: Gottfried Haberler

Isaac Newton famously told Robert Hooke, “If I have seen further it is by standing on the shoulders of Giants” [sic]. And so it is in our case as well: our effort stands on the shoulders of many earlier theorists of social cycles, but in particular those of Gottfried Haberler. His work Prosperity and Depression provides a systematic overview of business cycle theories. While he argues that “it is quite conceivable that, under different social and economic conditions, periods of prosperity and depression should be produced by entirely different sets of causes, so that for different groups of cycles separate theories would have to be devised” (1946, p. 276), he is interested in finding general patterns in various theories. Therefore, in the first part of this work he strives to set out the general characteristics that distinguish different “families” of cycle theories. He considers the theories’ explanations of upswing, upper turnaround, downswing, and lower turn-around. He is interested in whether they posit endogenous or exogenous causes for booms and busts and what reasons they provide for their being periodically recurring macroeconomic conditions at all. We provide an overview of his typology of business cycle theories in Appendix A.

2.2 A Simple Classification Matrix

Haberler’s classification schema has many dimensions. We aim for a simpler schema that looks only at the most fundamental properties of social cycle theories. In doing so, we are certainly not contending the Haberler’s schema is wrong; it serves its own purpose admirably. Rather, as stated earlier, we have the more philosophical aim of seeing if we can isolate
certain essential characteristics of all cycle theories, and certain basic ways they might exhibit
differences in terms of those essentials.

Our working hypothesis is that all social cycles, and thus all plausible theories of such
cycles, are characterized by patterns of disruptions and adjustments. A disruption we define as
an event that interferes with the smooth progress of the plans of one or more social actors.
Adjustments are the means by which agents whose plans were disrupted respond to that
disruption in order to continue toward realizing their goals as best they can in light of the new
circumstances confronting them.

As a first step toward understanding the occurrence of cycles in social life, we
distinguish stabilizing from destabilizing adjustments. A stabilizing adjustment creates, over
the time frame in question, a series of further adjustments by others, that are, at each moment
of time, of a lesser magnitude than the adjustment under examination. A de-stabilizing
adjustment, on the contrary, creates over the time frame in question a series of further
adjustments that are, at each moment, of a greater magnitude than the adjustment under
examination.

We might formalize this notion using the simple logistic equation that is often used for
population growth, \( \frac{dD}{dt} = rD \left( 1 - \frac{D}{K} \right) \), where \( D \) is the number of people experiencing
destabilization, \( r \) is the rate of destabilization, and \( K \) is the “carrying population,” which here
we can intuitively interpret as a limit to how much of the population can be destabilized by
others’ adjustments at one time: certainly, by the time over half the population is involved in
responding to a previous destabilization, that leaves less than half the population to be
destabilized by that adjustment, assuming the adjusters are not engaged in self-destabilizing.

Based on this distinction, adjustment processes may induce a cycle if they result in a
significant period of largely destabilizing adjustments followed by a significant period of
generally stabilizing adjustments. To generate a recurring, endogenous cycle, this pattern of
adjustments must itself, somehow, lead to a situation in which disruptions similar to those that

\[ \text{Similarly, Haberler (1946, p. 276) wonders whether there are self-reinforcing processes that will bring}
the system further away from equilibrium whenever it is disrupted (exogenously or endogenously).} \]

\[ \text{Of course, there are many complexities that could be introduced here, such as the possibility that, even}
while the majority of actors or trying to self-stabilize, their actions are meanwhile defeating the plans of others:}
collective action problems, such as the Keynesian “paradox of thrift,” are of this nature. But nevertheless, even
processes like that have some inherent limit: If everyone tries to save more, but instead has their income reduced,
than cannot gone on forever: it is a safe assumption that aggregate income will never go to nothing as a result of
an attempt by everyone to increase their savings. \]
started the cycle are the likely result of agents’ efforts to realize their goals. So in examining various cycle theories, one thing we will look at whether the disruptions that generate the cyclical behavior are endogenous to the theory, or are supposed to intervene from outside its scope.

A separate question is whether a theory provides a reason why truly cyclical patterns should occur at all. Here, the question is whether we can expect something similar to the initial disruption to recur, whether or not its source is endogenous or exogenous to the theory. If a theory gives us a reason to expect recurring patterns of disruptions at semi-regular intervals, then we classify it as a “true” cycle theory; if not, it is a “pseudo” cycle theory. We believe it is important to distinguish these two dimensions of cycle theories because logic does not forbid, and history provides examples of, cycle theories that posit true, exogenous cycles: cycle theories pointing to sunspots and other such extra-human factors were once fairly popular. In such theories, because, say, sunspots wax and wane in a cyclical pattern, the effects they are purported to have on human economies can be expected to cycle in a similar fashion. But the theory is clearly exogenous: no one ever posited that business activity could cause sunspots! In contrast, a theory is both exogenous and a true cycle theory when the pattern of adjustments to an initial disruption is such that we can expect those adjustments, over some semi-regular time frame, to finally result in something resembling the initial disruption to be brought about by those very adjustments.

This gives us a 2-by-2 matrix of cycle theory classification:

<table>
<thead>
<tr>
<th></th>
<th>Endogenous generation</th>
<th>Exogenous generation</th>
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<tbody>
<tr>
<td><strong>True cycle</strong></td>
<td>Which theories?</td>
<td>Which theories?</td>
</tr>
<tr>
<td><strong>Pseudo Cycle</strong></td>
<td>Which theories?</td>
<td>Which theories?</td>
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5 How similar this subsequent disruption ought to be to the original one will be a matter of detail internal to particular cycle theories.

6 How regular is “semi-regular”? Again, we believe that is best answered within particular theories.
3 Some Simple Social Cycles

3.1 Merging onto a Highway

Let us proceed by fleshing out our ideal types with some plausible content. In the tradition of Haberler we start with cycles that are simple to analyze (Haberler 1946, p. 12). Therefore, let us examine what occurs when drivers are forced to merge onto a busy highway at low speeds.

Above, we have defined stabilizing adjustments as those that generate further adjustments by others, that are, at each moment of time, of a lesser magnitude than the adjustment being evaluated, and de-stabilizing adjustments as those that prompt subsequent adjustments of greater magnitude. But estimating the magnitude of adjustments necessary in response to some disruption, in order to judge them stabilizing or de-stabilizing, often could prove to be a tricky matter. One of the attractions of the present example is that it reduces this problem to the relatively easy one of measuring deviations in driving speed from an initially planned speed: In one phase of the cycle, we have de-stabilizing adjustments: those adjustments are increasing the total deviation of driving speed from driver’s preferred speed. The adjustments are stabilizing in the phase of the cycle when that total deviation is decreasing, e.g., drivers are returning to the speed they preferred before the initial disruption. And note that in the present example, the phases of the cycle are spread out geographically, not chronologically: while some drivers nearing an entrance are entering the “downturn” phase of the cycle, others well past the entrance are simultaneously in the “recovery” phase.

So let us picture a busy highway with entrances and exits every mile. The entrances are not well-designed: there is no lane for smoothly merging into traffic while getting up to speed, but a stop sign at the end of the entrance ramp. (This, in fact, is pretty much a description of the Merritt Parkway in Connecticut as of 30 years ago.) What this means is that every time heavy traffic nears an entrance, there occurs a cluster of disruptions, as people enter traffic at a slow speed and force those already on the highway to adjust.

Imagine a car, in this situation, entering into the right lane, the lane in which you are driving, at low speed, a short distance ahead of you. You typically have two adjustments to this disruption that might enable you to avoid a collision:

1) You can slam on your breaks; or
2) You can shift over to the left lane.

Which of these (if either) is stabilizing and which de-stabilizing will depend upon the traffic pattern around you. Now, imagine there are four cars following closely behind you in
the right lane, but the left lane is empty. Then, hitting the breaks is de-stabilizing, since your adjustment will result in a greater magnitude of adjustments in its wake—in response to my breaking, four other cars must similarly adjust, resulting in four times the magnitude of adjustment. Shifting lanes will be a stabilizing adjustment, since in response to your move, no one else has to do anything—there is zero times your adjustment as a result of your choice.

But if traffic is heavy, say at rush hour, either adjustment is usually de-stabilizing, since the left lane is also packed with cars. In such circumstances, the disruption of a driver merging at a low speed inevitably will produce a cascade of further disruptions, as the adjustments made by drivers breaking for merging automobiles thwarts the plans of other drivers who wish to continue at a steady speed. Thus we get a logjam around the entrance ramp. This is the downturn phase of our cycle.

But, gradually, the adjustments begin to produce dovetailing plans again, as drivers re-establish comfortable spacing between themselves and other vehicles, and regain the speed they had before the disruptions at the entrance ramp. This is the recovery phase of the cycle. But just as our recovery is nearly complete, another wave of disruptions occurs—we have reached the next entrance ramp.

So here we have a simple social cycle with a period of roughly one minute (if the non-disrupted driving speed is about 60 miles per hour), exhibiting the characteristics of our ideal type very clearly. What’s more, this is very much like what driving on the Merritt Parkway really was like thirty years ago, demonstrating that even such a simple model can capture a good deal of a real-world phenomenon.

What we have just described is a genuine cycle: there is a good reason for us to expect the pattern to repeat at quite regular intervals. But its source is exogenous: the disruptions arise from outside the flow of traffic on the highway itself. The placement and design of the entrances is the cause of the disruptions. In this respect, it is similar to a sunspot theory of the business cycle. Let us turn our attention to a case of a genuine cycle that is also endogenous.

3.2 Fads

For a simple, concrete example of an endogenous cycle, let us analyze fads in social customs, such as fashions, using the ideal types posited above. We think it is important to clarify our intent here: there exists an extensive social science literature on fads and fashion, which we will largely ignore.7 That is because our aim, in this section, is not to present a superior theory

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7 We do intend to survey it looking for precursors of what we present here.
of fads to existing alternatives, but to show how our ideal types can be employed to construct
a plausible theory of fads, with the aim of elucidating the types themselves. Therefore, it is of
little importance to us that there may be some theory of fads that captures empirical reality far
better than what we present here: if such a theory exists, it would not lessen the value of our
example for our purposes at all.

However, we will launch our discussion of fads with one very early example from the
aforementioned literature. Adam Smith commented on fashion as follows:

Fashion is different from custom, or rather is a particular species of it. That is not the
fashion which every body wears, but which those wear who are of a high rank, or
character. The graceful, the easy, and commanding manners of the great, joined to the
usual richness and magnificence of their dress, give a grace to the very form which they
happen to bestow upon it. As long as they continue to use this form, it is connected in our
imaginations with the idea of something that is genteel and magnificent, and though in
itself it should be indifferent, it seems, on account of this relation, to have something
about it that is genteel and magnificent too. As soon as they drop it, it loses all the grace,
which it had appeared to possess before, and being now used only by the inferior ranks of
people, seems to have something of their meanness and awkwardness. (Smith, 1790, Part
V, Chapter 1)

Following Smith, let us posit a population consisting of two types of people: T, is a small
group of people who are trend-setters. They want to be on the leading edge and want to have
(wear, exhibit, etc.) what only some others have and to be recognized for this by their peers.
F is a large group of people who are followers. They want to have what everybody else has.

In a fad, first the population of T mutually coordinates around some fashion or other
cultural element, φ. What they wish is to identify themselves as members of T by adopting φ
while other members of T but only other members of T do so. That situation, to them,
represents a pleasing coordination.

When φ becomes widespread amongst T, the members of F begin to notice it doing so. The plans of the members of F have been disrupted. To them a pleasing coordination is to have what everybody else has. The more members of F learn about the new fad, the more members of F realize they are behind the times. Therefore, they adopt φ in an effort to adjust to the disruption the adoption of φ by the members of T created in their plans. The initial coordinative adjustments of the members of T around the new fashion turns out to be destabilizing as it results in a series of adjustments that are greater than the initial adjustment for the members of F.
But what is a pleasing coordination to members of F is very displeasing to members of T: if the "rubes" have adopted φ, then it is no longer hip. The adoption by the members of F itself is a disruption of the plans for the members of T. As φ diffuses through F, members of T find themselves no longer on the cutting edge, so they adjust plans again by seeking for some new "cutting edge" fashion to adopt. When they do so, we are back at the start of the cycle above. But since the adjustment of members of F results in a series of smaller adjustments than did those of the small group of T, the adoption of the fad can be characterized as stabilizing adjustments.

Once again, we can look to population biology to formalize our intuitions here in a simple way: here, the Lotka-Volterra equations relating predator and prey populations. In this case, the trend setters are the “prey,” and the followers the predators. (Of course, we imply no normative judgment here of whether trend-setters or followers are better people!) So, we have:

\[
\frac{dx}{dt} = x(\alpha - \beta y)
\]
\[
\frac{dy}{dt} = -y(\gamma - \delta x)
\]

Where x is the number of trend-setters adopting a fad, and y is the number of followers. This system of equations produces sine-wave-like cycles with the followers’ cycle lagging that of the trend-setters, as we would wish it to. Here, we should interpret each trough in the graph of x as an instance of the trend-setters abandoning a trend, and the subsequent peak as representing a new trend, and the same for the followers with a lag.

This analysis is, of course, highly simplified: We really have an entire spectrum of people from extreme trend-setters who are happy to, say, wear something no one else at all wears, to followers so sluggardly that they are barely now adopting fashions from a decade ago. In any event, the widespread adoption of the fashion generates the actions that will lead to its abandonment. The cyclical movement is endogenous to the phenomenon itself.

This stands in sharp contrast to an exogenous fashion cycle: the change in clothing worn, in temperate climates, from winter to summer. This, also, is a true cycle, but the driver of the cycle is something quite outside of the realm of fashion, namely, the relative movements of the earth and the sun.

3.3 From Fads to Asset Market Boom-and-Bust Cycles

In moving from these simpler examples to business cycle theory, we will first use the framework of the fads example to describe boom and bust cycles on asset markets. Imagine
there to be two types of investors who work in “exchange alley:” V is the small group of value investors, who rely on a Graham and Dodd (2008) style analysis of fundamental values. T are the trend followers, who rely on chart techniques and trends or simply popularity to decide on asset purchases (see Greenwald et al. 2001). V and T behave similarly to the trend setters and followers in the Fads example.

First, our value investors V identify an asset with fundamentals that suggest a higher value than reflected by the market price. If prices have been stable for a long time, based on chart-technique, the assets have not been very desirable and there are no gains to expect from a price rally. As enough trend followers T have divergent expectations from the value investors V, when some value investors mutually show demand for the assets, the trend-followers T sell to the value investors V.

For both the coordination process implies an improvement. One group believes it is purchasing more valuable assets and the other believes it is selling assets that are no longer desirable. As the members of V bid away several assets for a price that is above the old market price from the members of T the price of the assets increase.

The adjustment causes a series of further adjustments in the following periods when the group of T realizes that the market price of the assets has risen. As they use chart-technique to analyze the profitability of the assets, the data now suggests that prices are likely to rise and the asset has become more desirable. The new outlook disrupts the plans of the group of trend-followers T. Not holding the asset now represents a failure of concatenate coordination. With more and more members of T repurchasing the asset at a price higher than the members of V thinks the value of the asset should be, assets are handed over from V to T and prices rise again.

Now, everybody seems happy. V sold at a higher price and T has a seemingly desirable asset. The outcome represents a pleasing coordination from the point of view of V and T. The members of V, however, now have already sold all of the assets they have to sell, the members of T have now bought, and there no longer is anyone to drive the price up further.

Assuming that the group of T holds all the assets and the initial valuation of the group of V is unchanged, no one in the group of V is willing to buy assets at this higher price anymore. Members of the group of T might keep on trading stocks at ever-increasing prices within the group. But already the group of T holds assets that are less valuable (according to the value investors) than they believe. Once prices stop rising, views about the desirability of
the assets worsen, so that the chartists want to sell. Now no one wants to buy at the current price. The cycle starts over again once prices fall below the fundamental value calculated by the value investors V. This cycle is both endogenous and a genuine cycle.

4 Classification of Business Cycle Theories

4.1 Triggers

Multiple triggers have been posited for swings in outlook that may drive business cycles (Table 1), such as a rises or shortfalls in demand, a supply shock, a monetary policy shock, or technological advances in a specific sector. Kindleberger (2000, pp.38-41) argues - more generally - that to produce substantial boom periods that eventually turn bust, an (mostly external) event or change has to be important enough to substantially change the “horizons” and “expectations” of market participants, i.e., to present a major disruption requiring adjustments that are at first, anyway, de-stabilizing. From an historical perspective he finds wars, revolutions, monetary policy changes, bank deregulations, but also financial innovations such as derivatives to be capable of radically changing expectations in the market and producing cycles.

4.2 Austrian Business Cycle Theory

Let us apply our concept by analyzing the latest cycle based on Austrian Business Cycle Theory (ABCT) as, e.g., presented by Mises ([1949] 1998), Garrison (2006) or Salerno (2012), the Federal Reserve kept policy rates too low for too long following the bursting of the dot-com bubble at the turn of the millennium. The low rates resulted in destabilizing adjustments of the real economy and triggered the building-up of the US housing-market bubble.

Banks took the opportunity to provide easy credit to customers until 2005-6. The artificially low interest rates disrupted the attempts of savers and investors to coordinate their activities. Savers saved less while investors invested more. Thus, the bankers’ attempts to achieve their preferred coordination following the cuts in refinancing rates by lending at lower rates produced poor mutual coordination between savers and investors.
During the boom investors falsely assumed that the fall in interest rates corresponded to a rise in saving activity of households. And because a fall in interest rates raises the profitability of interest-rate-sensitive investments, investors adjusted to this disruption by making investment more round-about. The financial and capital goods sectors boomed. However, given lower interest rates, saving was less attractive. Households consumed more instead of less, and even went into debt. Demand for interest rate intensive goods such as housing climbed.

In ABCT, this failure to achieve mutual coordination between savers and investors is finally revealed in the bust, when the fact that many ongoing capital projects will not be completed can no longer be disguised. When nominal interest rates rose, firms and households that needed to roll-over debt were not able to do so as the marginal efficiency of their investments was below the risen interest rates. Firms closed down and households were insolvent. In response to this obvious failure of coordination, many, remembering the good times of the boom, believe the remedy is easy money and low interest rates. We end up with a vicious cycle of big player intervention, booms and crises. This is an endogenous cycle theory, at least if we include the central bank in our model, since the factors that generate the boom are inherent in the bust, and vice-versa. It is also a true cycle, since there is a reason to expect the pattern to repeat, namely, the desire for a re-inflation during the bust phase.

### 4.3 Minskian Cycle Theory

As understood through Minsky’s (1992; 2008) theory, monetary and fiscal policy has to do what it can possibly do to prevent a deflationary spiral and depression. From this point of view the Fed’s actions to stabilize the US economy following the bursting of the US dot-com bubble prevented the major disruptions that would follow from a severe and unnecessary crash of the real economy. Minsky, however, is quite clear that such bailouts are not the optimal fix for these downturns, as they themselves prepare the ground for the next inflationary boom (2008, p. 17). In this respect, he shares the Austrian concerns about recent bailouts.

As seen through Minskian eyes, the upswing started when the economy stabilized - perhaps in 2003. Because real estate prices increased faster than consumer prices since the 1990s and the US economy had not seen general declines in house prices for a long time,

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8 At least in some versions of ABCT: there exist other versions where this increase in “round-aboutness” is not important.
Americans started to buy more housing. Banks mutually financed the purchases at relatively low levels of interest. In this situation both the banks and households were trend-followers in hope for future profits.

Given the success and the development of the housing market in the early 2000s, banks as well as customers took higher risks. "Profit opportunities within a robust financial structure make the shift from robustness to fragility an endogenous phenomenon" (Minsky 2008, p. 234). Bankers moved from hedge to speculative and Ponzi finance (Minsky 2008, p. 233). The underlying investment depended more and more on low flexible mortgage rates and the rise of real estate prices themselves. In the 2000s, banks made use of new financial instruments to further expand credit and share risks with other financial institutions around the world. Banks' risk portfolios seemed to be optimized and households were happy to live in houses with ever-rising value. In the euphoria of the boom everybody coordinated around the high risk-high return scenario. From an ex-post perspective, however, the banks' risk appetite was destabilizing as more and more risks were accumulated over time, which created the necessity for larger adjustments later on. The coordination around high-risk products was revealed when inflation picked up, interest rates had to be raised, some households defaulted and the demand for housing, upon which the scheme was built, faded. The economy went to crisis in 2007-8.

As in the recession, investors, households and banks are overly risk averse and pessimistic: they coordinate around a low risk – low return strategy. Households pay down debt and prefer to hold liquidity. Banks deal with losses, shorten balance sheets and contract credit. Businesses lose equity and pay down debt instead of investing. A destabilizing deflationary spiral continuous unless monetary and/or fiscal policy stimulates aggregate demand to stop the balance sheet recession (Minsky 1992). When investment and stock markets pick up again, households, banks and businesses gain through rising equity prices. Optimism spreads again and the cycle starts over again.

Like the Austrian theory it closely resembles, Minsky’s theory is both endogenous, at least once the central bank is included in the model to re-start a boom, and a true cycle, since there is a good reason to think it will often do so.

4.4 Real Business Cycle Theory

An early species of the genus “real business cycle theories” were the “harvest” theories popular a century or more ago:
“One group of theories, which includes the writings of W. S. JEVONS, H. S. JEVONS, and H. L. MOORE, seeks to account for the periodicity of business cycles by establishing the existence of a similar periodicity in agricultural output. The chain of causation runs from cosmic influences to weather conditions, from weather conditions to harvests, and from harvests to general business.” (Haberler 1946, p. 151)

This type of theory fills in the box for "truly cyclical and exogenous." These are true cycle theories: there is a real causal explanation of the economy coming around to what is in some ways the "same" state: the economy cycles because, say, for W.S. Jevons, sunspots cycle. But obviously sunspots are about as exogenous as a cause of economic events can be.

By the way, just what constitutes a cycle, in the sense of going back through the "same" states, is going to be somewhat in the eyes of the theorist. The moon is usually thought to arrive at the "same" position vis-a-vis the earth again and again, but in fact its orbit is getting bigger by a couple of centimeters a year. But I don't think anyone will object to an astronomer who says "The moon was in the same position relative to the earth x years ago."

Obviously with business cycles there is a lot more than that (of relevance) that changes between the crest of one boom and the crest of the next: different products are for sale, different people, and a different number of people, are alive, their preferences have changed, central bank policy will not have been exactly the same, technology has developed, and so on. So what, exactly, counts as an occurrence of the "same" events in a cycle? Obviously, this will depend very much on what theory of the cycle one holds: such a theory is an abstraction from all the complexity of the real social world, and theorists will likely consider some events "the same" when the fit with identical abstractions in their theories.

Consider a medical analogy: for a doctor doing transfusions, two people are "the same" when their blood types match; for kidney transplants, they will have to have near identical genes; for a doctor looking at their risk of a heart attack, they are "the same" when they have matching genetic and environmental risk factors; and for a plastic surgeon, they are "the same" when their bone and skin structures are close enough together.

Similarly, an Austrian cycle theorist is going to look for the same sort of central bank policies, a market monetarist for the same movements in NGDP, and a psychological theorist for the same kind of mania.

In contrast to these early real cycle theories, modern real business cycle essentially denies that any true macroeconomic phenomena exist, and so there is no real business cycle.
In these models we have a collection of representative agents\(^9\) optimizing in response to exogenous shocks. One selling point of the theory is that it lends itself to DSGE models, where we have an economy always in equilibrium being bumped hither and thither by the shocks: we can easily give micro-foundations to our macroeconomics because there really is no macroeconomics per se. It is only the fact that the responses to these shocks display hysteresis that gives rise to the appearance of business cycle; as F.H. Bradley would have put it, the business cycle in RBC is appearance, not reality.

4.5 New Credit Cycle Theories

(Exploration only just started.)

5 Conclusion

We have found the ideas we have developed here useful for better understanding social cycles. Our plan is to extend our analysis to more cycles, including those named in the introduction.

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\(^9\) Summers quite accurately refers to them as “stochastic Robinson Crusoes” (1986: 26).
Appendix A: A Schemata of Haberler’s Cycle Theory Types

<table>
<thead>
<tr>
<th>Theory</th>
<th>Exogenous/endoogenous Reason</th>
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<tbody>
<tr>
<td>Purely Monetary Theory</td>
<td>Exogenous (not specified by Haberler) Changes in consumers’ outlays due to changes in the quantity of money (banking system creates credit and regulates its quantity)</td>
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Over Investment Theories

A) Monetary Over-Investment Theories (Hayek, Machlup, Mises, Robbins, Röpke, Strigl)

New upswing endogenous (seems difficult to determine whether upswing brought about by external or internal forces)

Endogeneity/exogeneity depends on causal factor of discrepancy of interest rates

Fall of prices comes to an end. If outlooks are more optimistic, the money rate falls below the natural rate, which leads to an increase in credit demand and a new upswing. No stimulus needed to start new upswing

B) Non-monetary Over-Investment Theories (Spiethoff, Cassel)

Question of endogeneity or exogeneity not satisfactorily answered by authors of school;

Response of the economic system to external shocks (Cassel: cyclical movement would die down if no stimuli (inventions and discoveries) were provided

Endogenous and exogenous forces

C) Over-investment resulting from Changes in the Demand for Finished Goods: The Principle of Acceleration and Magnification of Derived Demand

Classification not specified by Haberler: Question of endogeneity or exogeneity depends upon cause for change in consumers’ demand, since a rise in demand for consumers’ goods leads to a rise in investment and vice versa

For technological reasons, slight changes in the demand for consumers’ goods produce much more violent variations in the demand for producers' goods

Factors put forward as causes of periodic recurrence of crises and depressions

- Changes in costs and movements in efficiency
- Horizontal maladjustments (over-development of a particular branch of an industry):
- Error theories

No classification
• Over-indebtedness (Irving Fisher) (closely related to over-investment theories, Fisher stresses that these investments have been made with borrowed money as cause of depression)

• Financial organisation and severity of depression (Loveday)

• (long-term credit contracts/rigidity of claims affect distribution of income due to changes in the price level, intensify changes)

**Under-consumption theories**

(Theory of crises and depression rather than theory of business cycle)

• Over-saving theory
  Capital shortage (ex-ante investment exceeds ex-ante saving)

  • Insufficiency of consumer demand (ex-ante saving exceeds ex-ante investment)

  Monetary under-consumption theory (Neisser): *endogenous* cause of deflation

  Trouble arises at first in consumption good industries and then spreads to upper stages of production, since investment is shortened

• Lag in wage-rise (closely connected to monetary over-investment theory: profits accumulate due to an insufficient rise in wages, which provides a stimulus for credit and investment expansion. Over-investment theories: inflationary credits
lead to over-investment
Under-consumption theories: excessive profits lead to excessive savings

**Psychological theories** complementary to and compatible with all previous theories (Psychological factors: mainly expectations/anticipations)

Errors of optimism lead to errors of pessimism when optimistic error is discovered

Harvest theories, Agriculture and the business cycle (no alternative to previous theories, agricultural fluctuations as stimuli in the economic system)

Theory of under-employment (Keynes, closely related to theory of under-consumption)

Endogeneity/exogeneity (not classified by Haberler) depends upon cause of expectations

new investment possibilities due to, for example, interventions, inventions, changes in demand, and interest rate changes

Endogenous or exogenous, depending on factor that influences unemployment (not classified by Haberler)
Static nature of theory implies, however, exogeneity

Unemployment not determined by single factor: employment increases with the propensity to consume, the marginal efficiency of capital, and the decrease in the liquidity preference. Employment decreases if banks contract the quantity of money...

Classifications: active and passive factors, controllable and uncontrollable factors. More commonly, a distinction is made between causes which originate within and causes which originate outside the economic system (economic, non-economic factors or circumstances). Distinctions between factors are frequently a matter of convention rather than of argument. Closely related to economic, non-economic factors: distinction between exogenous and endogenous theories of the business cycle

Exogenous theories: assume external disturbances, law about (cyclical) change in certain data
Endogenous theories: rely exclusively on movements which can be explained economically, dynamic theory, magnitude explained by another magnitude (relating to an (earlier) point in time)

(more detailed explanation: pages 8f)
References


