

HAYEKIAN TRADE CYCLE THEORY: A REAPPRAISAL

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I. Introduction

If general acceptance by the economics profession were the criterion for success or failure of a theory, the theory of the trade cycle attributed to F. A. Hayek would have to be declared a failure.¹ Many economists do not know what the theory is, and many others are sure that the theory is fundamentally wrongheaded. Personal experience has taught me that these two groups are not mutually exclusive. Even those who recognize the logical integrity of the theory may have doubts about both its historical significance and its present-day relevance: Hayekian trade cycle theory might explain certain aspects of specific 19th- and early 20th-century trade cycles, but it does not explain much, and it does not explain anything about modern fluctuations in economic activity.

Yet, there remains a small minority of economists who see both virtue and relevance in the Hayekian theory of the trade cycle. For this minority the theory enjoys a certain prominence within a broader theoretical framework. Expositors of Austrian economics save the trade-cycle theory for their climactic chapter. Comparisons of the Austrians with the Keynesians or Monetarists invariably hinge on differing views about the nature and causes of cyclical fluctuations.

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¹The title phrase "Hayekian Trade Cycle Theory" was suggested by the editor of the *Cato Journal*. Murray Rothbard has reminded me that in its heyday it was known as the Mises-Hayek theory of the business cycle. There is no dispute in the present paper over names and credits. The more broadly conceived "Austrian theory of the business cycle" would serve just as well.

And historical applications of Austrian monetary theory focus attention on the Great Depression. The status accorded the Hayekian theory of the trade cycle seems—especially to those outside the Austrian tradition—to be out of proportion to the significance of the phenomenon this theory is intended to explain.

A half-century after Hayek outlined its essential features, the theory has strong but narrow support. What follows is an attempt to account for this limited success. Section II provides a brief outline of the theory and suggests that, ironically, the many virtues of the theory are collectively an obstacle to a broader acceptance. Section III contrasts the Austrian view with the alternatives of Keynesianism, Monetarism, and New Classicism, paying special attention to the notion of rational expectations. Section IV deals with the issue of expectations in the context of Hayek's theory. Section V considers some common objections to the Austrian view, and Section VI offers a summary assessment.

II. The Theory and Its Elements

The Austrian theory of the trade cycle draws heavily from Knut Wicksell's work on the relationship between money and interest. Ludwig von Mises (1953, pp. 357–66; also see 1966, pp. 538–86; 1983, pp. 1–6) was the first to combine Wicksell's monetary dynamics with Böhm-Bawerk's capital theory so as to produce a distinctly "Austrian" trade-cycle theory. Hayek (1967) formalized the theory and bolstered it with the insights of David Ricardo and John Stuart Mill. In its essentials, the Hayekian theory shows how a monetary disturbance can induce an intertemporal discoordination of economic activities (the artificial boom), how the discoordination eventually comes to be recognized (the bust), and what adjustments are made necessary by the money-induced discoordination (the recovery).

In brief, the injection of new money through credit markets suppresses the rate of interest, thereby causing resources to be intertemporally misallocated. Capital goods appropriate for a relatively lengthy, or time-consuming, structure of production are created at the expense of capital goods that would be more compatible with the existing, less time-consuming, structure. The credit-financed capital restructuring entails a net increase in economic activity, which constitutes the boom. But with the passage of time, the still-incomplete capital restructuring is revealed to be inconsistent with actual resource availabilities. The newly perceived scarcities are reflected in increased prices of uncommitted resources and in a corresponding increase in the demand for credit. These increased costs necessitate the liqui-

dation or abandonment of misallocated capital. Labor which was complementary to the abandoned capital becomes unemployed. The bust is followed by a recovery in which market adjustments in relative prices and wages allow for the eventual re-absorption of unemployed capital and labor into the structure of production.

The Austrian theory of the trade cycle draws from price theory, capital theory, and monetary theory. Hayek's formulation, in effect, "puts it all together." It allows the insights of the Austrian school, together with insights from other schools, to gel into a cohesive account of cyclical fluctuations. And it puts it all together in a theoretically satisfying and historically relevant way. Those who appreciate each element in the Hayekian theory and see how all the elements fit together will have a special appreciation for Hayek's achievement. They will see the trade-cycle theory as a veritable showcase for the contributions of the Austrian school.

There is a high degree of complementarity among the several elements of the theory. Thus, those who reject any one element or fail to appreciate its significance will fail to appreciate the theory as a whole. More likely, they will be puzzled by it. The following identification of individual elements of the theory will help to establish the significance of each for the composite theory as summarized above.

1. *Prices are signals.* While prices are determined by the interplay of the activities of all market participants, they convey essential information to each market participant about the changing valuations made by consumers and about the relative scarcities of alternative resources (Hayek 1948b). This particular insight—that the price system is a communications network—is well recognized by the profession. Less well recognized is the fact that price changes do not come clearly marked "nominal" or "real."² The price theorist can conceptually distinguish between a real price change and a money-induced price change in a simple and unambiguous way. But the market participant cannot. The market participant does not possess a "knowledge of the real factors" that would allow him to sort out the nominal and the real; he in fact depends upon nominal price changes to tell him what the real factors are. Thus, price signals provide the basis

²In the Austrian literature, the difference between a nominal price and a real price involves more than a simple adjustment for expected changes in the price level. Important differences are attributable to "injection effects," which vary across goods and exist independent of any actual or expected change in the general level of prices. The relevant contrast is between actual money prices and prices that are consistent with the underlying real factors.

for economic coordination; price signals falsified by monetary manipulation create a basis for economic discoordination.

2. *The interest rate facilitates intertemporal coordination.* The interest rate clears the market for loanable funds. It matches saving with investment. These statements are acceptable summaries of the function of the interest rate, but they severely understate its importance. Changes in the interest rate—caused, for instance, by changes in savings propensities—affect not only the total amount of investment but also the *pattern* of investment. A lower interest rate encourages investing for the more remote future. Under favorable circumstances, the interest rate allows the preferred time pattern of consumption activity to be translated into a corresponding time pattern of investment activity; it coordinates the two kinds of activities intertemporally (Hayek 1984).

3. *Money can masquerade as saving.* When the monetary authority pads the supply of loanable funds with newly created money, it drives a wedge between saving and investment. An artificially low rate of interest induces investors to borrow more while income-earners are saving less. And the falsified interest rate causes the time pattern of investment to be inconsistent with the amount of real saving and with the preferred pattern of consumption (Hayek 1967, pp. 54–60; also see O’Driscoll 1977, pp. 70–82). Monetary manipulation creates unfavorable conditions that give rise to intertemporal discoordination. Credit expansion whets the appetite of producers causing them—collectively—to bite off more than they can chew, to undertake more time-consuming production projects than can be completed.

4. *Capital is characterized by intertemporal complementarity.* Capital goods are heterogeneous in nature and are related to one another by various degrees of substitutability and complementarity. Given the time-consuming nature of the investment process, the problem of investment from a societal point of view is one of committing some resources to the early stages of the process while reserving enough resources for the later stages. The capital goods associated with the early and the late stages, or alternatively, higher-order capital goods and lower-order capital goods, are intertemporal complements. Intertemporal discoordination triggered by an artificially low interest rate manifests itself initially as overinvestment in higher-order capital goods. But only the passage of time and the subsequent scarcity of (complementary) lower-order capital goods will reveal this intertemporal discoordination (Hayek 1967, pp. 85–100; also see O’Driscoll and Rizzo 1985, pp. 160–87; Lachmann 1978, pp. 117–18 and *passim*).

5. *The Ricardo Effect.* In its original form, the Ricardo effect pertained to the substitution of machinery for labor in response to changes in the rate of interest. Machinery represented the long-term factor of production, and labor the short-term factor. In the context of Hayek's trade cycle theory, the substitution is between higher-order capital goods and lower-order capital goods. During the early phase of the cycle, an artificially low rate of interest favors investment in higher-order capital goods. The subsequent scramble for the complementary lower-order capital goods causes their prices to be bid up sharply. Increased demands in credit markets—called “desperation borrowing” in the Monetarist literature—drive the interest rate up.³ The sharply increased interest rate severely discourages further investment in higher-order capital goods and encourages the liquidation of some partially completed production projects (Hayek 1948a, 1977).

6. *Mill's Fourth Fundamental Proposition.* John Stuart Mill's cryptic aphorism, “Demand for commodities is not demand for labor,” warns us against the simplistic incorporation of derived demands into macroeconomic theorizing. Some such notion of derived demand, whereby the demand for final output and the demand for the factors of production always move in the same direction, characterizes virtually all modern macroeconomic theories. The recognition that the two demands can move in opposite directions characterizes the Austrian formulation and constitutes one of the most fundamental differences between the Austrian theory and its rivals.

In accordance with Mill's Fourth Proposition, a decrease in the current level of consumption does not necessarily mean a decrease in the demand for labor (and for other factors of production); a decrease in the current level of consumption may mean instead an increase in the level of saving, an increase in the level of future consumption, and a corresponding shift of resource demand away from the production for current-period consumption and toward the production for future-period consumption (Hayek 1941, pp. 433–39). There may even be a net increase in the current demand for capital and labor.

Hayek and other Austrian theorists have heeded Mill's Fourth Proposition by recognizing that in a given period consumption spending and investment spending can—and, in conditions of full employment, must—move in opposite directions. In fact, it is the shifting of resources between consumption and investment activities—and between the different stages of the production process—

³Note that this bidding up of the rate of interest at the end of the boom is quite independent of any rise in the general level of prices. That is, the Ricardo effect is distinct from the more widely recognized Fisher effect.

in response to changing intertemporal consumption preferences that allows the economy to achieve intertemporal coordination. And it is the similar shifting of resources in response to monetary manipulations that constitutes intertemporal discoordination.

7. *Two kinds of knowledge.* Monetary manipulation can fool market participants into behaving differently than they would otherwise behave. This fooling, of course, would not be possible if market participants had enough knowledge—knowledge about consumer preferences, resource availabilities, and technology, about the plans of other market participants, and about how all these plans will affect one another as the market process unfolds. It is true but trivial that if market participants were already in possession of all the information that the price system conveys, then distortions of price signals could not cause cyclical fluctuations or any other kind of disequilibrium.

Hayek's distinction (1948b, pp. 79–80) between two kinds of knowledge allows us to take account of what market participants can and cannot reasonably be expected to know. The distinction is that between the knowledge of the particular circumstances of time and place (that is, normal market information coupled with various degrees of entrepreneurial insights) and scientific knowledge (that is, an understanding of how the economic system works—knowledge of the structure of the economy). Market participants can reasonably be expected to have the first kind of knowledge, but not the second kind. Given their knowledge of the particular circumstances of time and place, they can be induced by market-determined prices to behave “as if” they understood the structure of the economy. But they cannot be expected to correct for money-induced price distortions on the basis of an actual understanding of the economy's structure.

Each of these seven elements contributes in an important way to a full understanding of the Hayekian theory of the trade cycle. To reject any one element is to threaten the logical consistency of the theory. But the acceptance of all seven elements still leaves unanswered many questions about the relative merits of the Hayekian theory in comparison with alternative theories, as well as questions about the role of expectations and about the historical applicability and significance of the theory.

III. Alternative Views

Challenges to the Hayekian theory were based first on Keynesianism, then Monetarism, and now on the New Classicism. Keynes (1936, pp. 320–29) faulted his contemporaries (Hayek and Robertson) for believing that the interest rate was too low during the boom. He

was convinced that it was too high. Keynes could not understand why they advocated nipping the boom in the bud; he suggested instead that it was the bust whose bud should be nipped. Keynes did not see the logical connection between the boom and the bust because he failed to treat the rate of interest as a device for facilitating intertemporal coordination. He believed, instead, that the interest rate is a highly psychological, highly conventional phenomenon and is determined by the interplay between the supply and demand for money.

Monetarists recognize the role of the interest rate in achieving intertemporal coordination, but downplay the possibility that monetary manipulations distort the interest rate. In formal theory, questions about interest-rate effects are skirted by assuming that newly created money is introduced into the economy in ways other than through credit markets, such as by means of a helicopter drop (Friedman 1969a, p. 4). In applied theory, the injection effects of monetary expansion—whatever their actual form—are trivialized as “first-round effects.” Attention is directed instead to the long-run effects of money creation on nominal incomes and the level of prices.

When attention is focused specifically on the issue of monetary dynamics—the “transmission mechanism” in the terminology of Monetarism (Friedman 1976)—the analysis is typically confined to the labor market. Lagging adjustments in the perception of real wages allow for trading-off unemployment for inflation as suggested by the Phillips curve. While squaring the existence of short-run negatively sloped Phillips curves with a vertical long-run Phillips curve, the Monetarists simply neglect the possibility of intertemporal discoordination within the market for capital goods.

The New Classicists accept the Monetarist propositions about the long run and argue that the assumption of “rational expectations” allow those propositions to apply to the short run as well (Maddock and Carter 1982; also see Butos 1985 and Lucas 1981). In effect, the New Classicists deny the significance of Hayek’s distinction between two kinds of knowledge. Market participants behave “as if” they actually know the structure of the economy. They react to monetary expansions in ways that compensate for price and interest-rate distortions. So long as expectations about future price and interest-rate movements are not systematically in error, there will be no intertemporal discoordination, and no discoordination of any other kind that can be attributed to the monetary expansion. In this view, a Hayekian trade cycle anticipated is a Hayekian trade cycle avoided.

The rational-expectations argument is nothing new to Austrian theory. In fact, Mises (1953, p. 419) recognized the kernel of truth in

this argument long before the appearance of John Muth's (1961) classic article. He warned the advocates of inflationary finance against ignoring Lincoln's dictum: You can't fool all the people all the time. In the early 1940s Ludwig Lachmann (1977) called the Austrian theory into question on the basis of what was, in effect, a rational-expectations argument. The rise of the New Classicism in recent years has refocused attention on the role of expectations in trade cycle theory. Without doubt, the course of the trade cycle is influenced in a fundamental way by the expectations of market participants. But the idea of rational expectations is not quite the show stopper that the New Classicists believe it to be. Again, the critical difference between New Classicism and Austrianism lies in differing treatments of the knowledge problem.

It is peculiar for economists to assume that market participants know, or behave "as if" they know, the structure of the economy. After all, economists have had disagreements among themselves for more than 200 years about how the economic system works. Some believe that the economy works in the manner envisioned by Keynes or by his many interpreters, some believe that the economy is more accurately depicted by the Classical model, and some believe that the economic relationships identified by the Austrians are essential to the understanding of the economy's structure. There are important differences even within each of these three theoretical frameworks, and there exist still other, more radical alternatives such as Marxism and modern Institutionalism.

It would be an amazing feat for market participants either individually or collectively to single out not only the correct theoretical framework but also the parametric values that are currently applicable. And if they actually performed this feat (or behaved "as if" they had performed it), the question of just how they did it would be the most challenging question the economics profession has yet faced.

Visions of the economy that are based on the assumption of rational expectations can be put into perspective by the use of a simple Venn diagram—so simple that it is not necessary to actually draw it. Let one circle represent "what economists know"; let a second circle represent "what market participants know." The two circles overlap but do not coincide. The area common to both circles represents the common knowledge that makes a science of economics possible. It represents, for instance, the knowledge that under normal market conditions a surplus of some particular commodity means the price is too high and that a shortage means the price is too low. The area unique to market participants includes entrepreneurial insights and what Hayek (1948b, p. 81) called knowledge of the particular circum-

stances of time and place. The area unique to economists includes knowledge of the structure of the economy.⁴

This Venn diagram allows for the identification of two fundamental ways in which economists can go awry. First, they can deny the existence of knowledge unique to market participants. With this fundamental misperception, economists believe that it is possible to construct and implement a *comprehensive economic plan*—one that will coordinate economic activities at least as well as and possibly better than the market itself. Second, they can deny the existence of knowledge *unique to economists*. With no unique knowledge of their own, economists fail to see how policies that have systematic effects on the price system can have systematic effects on the activities of market participants. Rational expectations would enable the market participants to make corrections for all such effects. But the possibility that market participants can form such rational expectations is on a par with the possibility that central planners can devise rational economic plans. And rejecting both possibilities requires only that the *significance of the Venn diagram* be recognized.⁵

IV. Expectations in the Hayekian Theory

Each market participant pursues his individual interests on the basis of the knowledge of his own circumstances coupled with the information conveyed to him through the price system. If a monetary disturbance has created systematic distortions in the price system, market participants will be basing their choices and actions on misinformation, and the economy will be characterized by discoordination. To be sure, expectations about future movements or counter-movements in prices come into play.⁶ Market participants will respond

⁴The relative size of the intersection, the area common to both circles, is determined endogenously, by the interaction between *economics and politics*. No doubt, the size of the common area is positively related to the extent of government intervention: With increasing intervention, market participants find it more worth their while to learn how the market process works and how it is affected by government policy; and economists *cum* policymakers find it increasingly necessary to understand the particulars of the markets that are being affected by government interventions.

⁵Thus, the Venn diagram helps to reconcile the fact that the *rational-expectations* approach to understanding business cycles has important Hayekian roots (see, for example, Lucas 1981, p. 215) with the realization that the *New Classicists'* vision of how the market process works and how policy can affect it is fundamentally at odds with Hayek's own vision. The *New Classicism* incorporates the *Hayekian insight* that the price system facilitates the use of knowledge in society but fails to maintain the distinction between the two kinds of knowledge identified by Hayek. For a complementary view of the relationship between Lucas and Hayek, see Butos (1985).

⁶See Hayek (1975c) for an early recognition of the importance of *expectations in trade-cycle theory*.

to a change in the rate of interest or to a price change in different ways depending upon whether they suspect that the change is attributable (in large part or in whole) to some policy move on the part of the central bank. But in the context of Hayek's theory, the claim that expectations will simply nullify the effects that monetary policy would otherwise have had cannot be supported.

First, assume that some—but not all—market participants know that credit expansion triggers an artificial boom and that such an expansion is currently under way. They rationally expect, then, that the boom will eventually end and that widespread economic losses will be suffered. (Not even the economists can predict just when the bust will occur and just who will suffer the losses.) Yet, for the individual market participants (especially for the ones who understand the economics of booms and busts), there are profits to be made by responding to the distorted prices in near-conventional ways. The fact that production processes are not characterized by complete vertical integration gives scope for profiting from the early stages of production processes even if each production process taken as a complete sequence of stages turns out to be unprofitable. Resources can be profitably misallocated in response to a distorted price so long as the resources are sold before the bust. To argue that the expectation of an eventual bust would prevent the boom from materializing is analogous to arguing that similar expectations with regard to a chain letter would prevent the chain letter from being initiated.

Second, even if all market participants understood the economics of booms and busts, they would have no method of accurately correcting for money-induced distortions. Here the analogy between the price system and a communications network—between price signals and radio signals—can be pushed further: knowing that a signal is being jammed is not the same thing as knowing what the unjammed signal is. During a monetary expansion the price of iron ore, for instance, may rise by 8 percent. This 8 percent rise may consist of an increase in the real price of iron ore (due to coincidental changes in the underlying real factors) of 2 percent plus a money-induced price rise of 6 percent. Or it may consist of some other combination of real and money-induced changes whose algebraic sum is 8 percent. Possibly the most plausible assumption that market participants could make is that there have been no changes in the underlying real factors since the beginning of the monetary expansion. Economic activity based upon this assumption is analogous to a “dead reckoning” on the basis of the most recent unjammed signal. After a protracted period of monetary manipulation, the economy may well find itself considerably off course. The ensuing readjust-

ments would conform in the large—if not in the small—to those that Hayek originally envisioned.

Third, the claim—based on a weak form of the rational-expectations assumption—that there would be no systematic undercompensation or overcompensation for money-induced distortions across markets, even if true, is no basis for complacency. Resources are allocated or misallocated on the basis of price differences, not price averages. Resources would be allocated away from activities in which there was an overcompensation for money-induced price changes and into activities where there was an undercompensation.

Further, even if the market-clearing price in a particular market reflects the “correct” amount of compensation (such that the total volume of trade is unaffected by monetary manipulation), there is still an element of *discoordination*. The market process imposes a *certain uniformity* of price for a given good, and each market participant pays the same price. But during monetary disturbances, each market participant has a different idea about how changes in the price are divided between real and money-induced changes. The market process imposes no uniformity here. The absence of *uniformity of perceived real price changes* gets translated by market participants acting on the basis of differing perceptions into a *discoordination of economic activity*.⁷

V. Some Common Objections

The range and variety of objections to the Hayekian theory of the trade cycle reflect the richness and complexity of the theory itself. There are objections found in the literature or heard in the classroom that call into question each of the seven elements discussed in Section II. The following discussion, however, looks beyond the theory’s individual elements and deals with four common objections or questions raised about the theory, based on considerations of method and history:

1. Does Occam’s Razor provide a justification for rejecting the Austrian view in favor of some simpler alternative?
2. What empirical evidence is there to substantiate the Austrian theory?

⁷This aspect of money-induced discoordination as it relates directly to the rate of interest is clearly recognized by Leijonhufvud (1984, pp. 31ff.) The market imposes a uniformity on the nominal rate of interest but *not on the way in which that nominal interest rate is divided, in the minds of individual market participants, between the real rate and the inflation premium*. My own formulation consists of a simple extension of this important *insight from the interest rate itself to the interest-dependent prices of capital goods*.

3. Does the Hayekian theory account for the length and depth of the Great Depression?
4. Can the Depression be wholly attributed instead to the fact that the Federal Reserve ineptly allowed a severe contraction of the money supply?

The Question of Complexity

Complexity per se is not a virtue. No one prefers the Hayekian theory over alternative theories *because* of its complexity. But cyclical fluctuations are themselves complex, and any trade-cycle theory that fails to recognize this fact is unlikely to contribute to our understanding of them. Understanding the market forces that generate fluctuations requires that we draw upon and integrate insights from price theory, monetary theory, and capital theory. This integration is precisely what Hayek accomplished. He built his theory on a solid microeconomic foundation; he identified the effects of credit expansion on relative prices; and he drew on capital theory to show why the boom was inherently unsustainable and why the bust was characterized by an excess of higher-order capital goods and a shortage of lower-order capital goods.

Occam's Razor allows us to choose on the basis of simplicity between two alternative theories *that account for the same phenomena*. For a given explanatory power, the simpler the better. But Occam's Razor does not allow us to reject a complicated theory that explains a complicated phenomenon in favor of a simple theory that explains a simple phenomenon. The proposition, for instance, that given wage and price rigidities, a monetary contraction will be accompanied by unemployment is a relatively simple proposition—and a valid proposition, as far as it goes. But it is simply not in competition with the Hayekian theory of the trade cycle. It does not constitute an alternative explanation of the intertemporal discoordination that characterizes business cycles.⁸

⁸Strictly speaking, to qualify as a theory of *cyclical* fluctuations, the theory must account for at least one endogenous turning point. It must show, for instance, how an artificial boom contains the seeds of its own undoing. We can compare on a one-to-one basis the self-reversing processes identified by Hayek and by Friedman. One focuses on the market for capital goods and spells out the cyclical process in terms of Hayekian triangles; the other focuses on the market for labor and spells out the cyclical process in terms of short-run and long-run Phillips curves. But an account of monetary disequilibrium—even of snowballing monetary disequilibrium—that is triggered by an exogenous contraction of the money supply does not constitute a theory of cyclical fluctuations.

The Question of Empirical Validity

Another common objection is based upon the perceived lack or paucity of empirical research that lends support to the Hayekian theory. Was there a systematic misallocation within the market for capital goods during the boom that preceded the Great Depression? Where is your data? This mode of questioning is evidence of a misunderstanding of the relationship between Hayekian theory and historical experience. Sharply stated, Hayek's theory is not a theory in search of data. The question of why cyclical booms are characterized by overinvestment in fixed capital (the most conspicuous form of higher-order capital goods) is a question that predates any theoretical account—Austrian or otherwise—of this phenomenon. And historical accounts of the economic developments during the 1920s leave little doubt that this boom was so characterized. Lionel Robbins (1934, p. 46), for instance, charts the output of producers' goods and the output of consumers' goods for the late 1920s. Using U.S. data he shows that the former rises with respect to the latter in a way that is consistent with the Hayekian theory.

Charles Wainhouse (1984) has recently employed the now-popular Granger-Sims technique to show that movements in the interest rate, the volume of credit, and in the relative prices of consumer goods and producer goods during the 1960s and 1970s are also consistent with the Hayekian theory. But while this study provides an added increment of confidence in the theory, it is unlikely to constitute a decisive margin. Those who question the applicability of Hayek's theory to the experience of these or earlier decades are unlikely to change their view on the basis of these Granger-Sims tests.

The broader methodological issues concerning the relationship between theory and history cannot be addressed here at any length. The commonly encountered perception that "the Austrians believe that facts are irrelevant" is, of course, a misperception. What the Austrians reject is the present-day economists' adaptation of positivism in which history, stripped of all nonquantifiable elements, unilaterally tests theory. Following Mises (1969), modern Austrian economists recognize that theory and history are complementary disciplines.

The Question of Explanatory Power

Still another common objection is based upon the inability of the Hayekian theory to account for the extraordinary depth and length of the Great Depression or to account for all economic downturns (Haberler 1976, p. 25; Yeager 1986, p. 380). The theory is being faulted, in effect, for not explaining more than it actually does explain.

It certainly cannot be argued that Hayek and his followers claimed too much for the theory. Hayek's principal contribution to the development of the Austrian theory was in the form of lectures at the University of London in 1930–31, well before it was known just how deep (25 percent unemployment) and how long (1929–39) the Depression would be. The best-known accounts of the Great Depression from an Austrian point of view are those by Lionel Robbins (1934) and Murray Rothbard (1975). Robbins's book deals with events up through 1933; Rothbard's book, though originally published in 1963, traces the course of events no further than 1932. Neither of these authors can be accused of trying to push the Hayekian theory too far.

Nor is there any reason to try to push the theory too far in this respect. Explanations for the Depression's extraordinary depth and length are not in short supply: there was the severe monetary contraction that followed on the heels of the initial downturn, the Smoot-Hawley tariff, and the many counterproductive programs and policies of the Hoover and Roosevelt administrations—programs and policies aimed at cartelizing industry, subsidizing loans to failing firms, destroying agricultural output, and otherwise preventing wages and prices from adjusting to the existing market conditions.

Hayek's theory demonstrates that an economic boom fueled by credit expansion contains the seeds of its own undoing. But to endorse this theory is not to deny that many of the complications and exacerbations of the economic bust are to be attributed to unique historical events.

The Question of the Impact of Fed Policy

Finally, the Hayekian theory is rejected by some (Haberler 1976, p. 26; 1986, p. 380) on the grounds that one of those unique historical events, the severe monetary contraction, completely swamped the effects of the intertemporal discoordination identified by Hayek. Economists, it is argued, should focus attention on the contraction and its consequences. This trivialization of Hayek's insights is puzzling for two reasons. First, the monetary contraction was a unique historical event only in the sense that it was not made inevitable by the preceding boom. The central bank might have avoided the monetary contraction, in which case economic recovery—intertemporal recoordination—would have been achieved much more quickly. But surely, it was the disruption in economic activity associated with the discoordination in capital markets that set the stage for the Federal Reserve's mismanagement of the money supply.

Second, it is not clear why we should expect economists to direct our attention to the most salient features of the Great Depression. Economic difficulties and hardships whose proximate cause was the collapse of the banking system can be seen by historians and even by journalists. We do not expect a meteorologist to direct our attention to the six feet of snow lying on the ground. The crystalization in the upper atmosphere that precedes a storm is his proper concern. Accordingly, the economists' proper concern is with those characteristics of the boom that can precipitate a bust. Hayek's theory has a claim on our attention that is not diminished by the events, however dramatic, that were subsequent to the initial downturn.

VI. A Summary Assessment

The Hayekian theory of the trade cycle offers insights into the workings of the economy that are as valuable today as they were a half-century ago. But prospects for widespread acceptance of the Austrian view remain dim. Nor is the theory likely to be used as a basis for policy prescription. As in so many other instances where policymakers confront economic issues, considerations of political expediency and economic soundness cut in opposite directions. The short-run political gains associated with an artificial boom take precedence over the long-run stability associated with monetary responsibility.

But the Hayekian theory of the trade cycle is also unlikely to be wholly forgotten. Those who are willing to discover just what the theory is, how all its elements fit together, and what it can and cannot explain will find their efforts rewarded. They will have an understanding of the market mechanisms that can achieve an intertemporal coordination of economic activities and of the consequences of interfering with those mechanisms.

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AUSTRIAN INFLUENCE ON BUSINESS CYCLE THEORY

Michael D. Bordo

Roger Garrison (1986) sketches out the principal elements of F. A. Hayek's theory of the business cycle, favorably compares it to its principal rivals, defends it against criticism, and makes a plea for more recognition of the theory than it currently receives. Unfortunately, by not clearly presenting the rival theories that he wishes to denigrate and by being overly pessimistic about the chances of his own theory's acceptance he unduly weakens his own case.

Garrison's paper suffers from five serious shortcomings:

1. His characterization of the rival theories of the business cycle—the Keynesian, Monetarist and New Classical—is just too simple to support the criticism he levels at them.
2. He attacks a simple version of the New Classical model without recognizing that much of its development can be traced to the work of Hayek.
3. The author is caught in the Austrian trap of not believing in quantitative evidence generated by current statistical techniques when such scientific evidence actually may be sympathetic to his theory.
4. The author's belief that it is unreasonable to criticize the Hayekian theory for its inability to explain the severity of the Great Depression begs the key question of whether there is a difference in more than degree between mild and severe cyclical contractions.
5. The tone taken by the author is simply too defensive and defeatist to establish credibility for his case.

Let me elaborate on each criticism in turn.

Cato Journal, Vol. 6, No. 2 (Fall 1986). Copyright © Cato Institute. All rights reserved. The author is Professor of Economics at the University of South Carolina and a Research Associate at the National Bureau of Economic Research.

Rival Theories

Garrison compares his version of the Hayekian theory to those of its principal rivals: the Keynesian theory, the Monetarist theory, and that of the New Classical economists. He argues that their models suffer in comparison to the Hayekian model for their lack of complexity. The problem with this comparison is that he presents very misleading and overly simplified caricatures of his rivals.

For the Keynesian theory, he picks a statement by Keynes criticizing Hayek for believing interest rates to be low in the boom. Surely no self-respecting Keynesian would accept that as the Keynesian theory of business cycle. I would have thought some version of a multiplier accelerator model like Samuelson (1939) or Hicks (1950) or econometric models like these of Tinbergen and Klein-Goldberger would be the proper rival. Then on Austrian grounds he could have criticized the assumption of fixed wages and prices, the absence and/or relative unimportance of a monetary sector and the mechanical nature of these models.

For the monetarist model, he singles out two attributes: (1) money growth tracks nominal income with long and variable lags, and (2) the expectations augmented Phillips curve. In defense of the monetarists, the leading proponents have spelled out their theories with a degree of complexity easily comparable to that of Hayek. Thus, Friedman and Schwartz (1963) develop a monetarist model of the business cycle which has a transmission mechanism involving changes in the relative prices of all assets in the community's portfolio including physical and human capital, and Brunner and Meltzer (1976) develop a complex monetarist model including markets for goods, labor, credit, and capital.

For the New Classical model, the author singles out the simplest version of a rational expectations model with no frictions, continuous market clearing and the public pursuing a complete understanding of the process generating the absolute price level. In such a model, there is no possibility of any business cycle arising. A more reasonable candidate for a fair comparison would be a story allowing for temporary confusion by market agents possessing rational expectations between a change in the absolute price level and a change in relative prices. In such a model random monetary shocks could generate changes in real output, employment, and the capital stock. Moreover, the persistence observed in business cycles could be generated by phenomena such as real adjustment costs and allowing for time to build.

New Classical Theory as Neo-Austrian

As Lucas (1977) has stated (see Zarnowitz 1985 for other references), his New Classical theory has strong Austrian antecedents, and has been dubbed Neo-Austrian by Laidler (1982). This linkage is based on the Austrian principles of maximizing behavior and equilibrium, of discoordination of the signaling mechanism of the pricing system, and of the importance of knowledge. Perhaps what Garrison is upset about is that the Neo-Austrians have made obsolete the original Austrians.

Testing Hayekian Theory

In various places Garrison implies that the widely accepted criterion in economics that the true test of a theory is its ability to explain (predict) the data should not be applied to the Hayekian theory because it is the description of a true phenomenon. Thus, according to the author: "Sharply stated, Hayek's theory is not a theory in search of data. The question of why cyclical booms are characterized by overinvestment in fixed capital . . . is a question that predates any theoretical account . . . of this phenomenon" (p. 449).

This statement is confusing. Surely every statement about facts and their relationship to each other involves theory, and once you start comparing theories you get into the debate over the descriptive realism of assumptions versus predictability. Indeed, the author's preference for the criterion of descriptive realism over the Popper-Friedman positivist methodology (whether valid or not) suggests that he must then demonstrate that a full-blown Hayekian model is more realistic than any of its rivals, a demonstration which he has not made.

Most puzzling, he cites evidence by Wainhouse, based on modern statistical techniques, favorable to the Hayekian theory and then dismisses it. Other evidence by McCulloch (1981) for the Hayekian view should also be noted. Surely it is only on the basis of empirical testing that economic science progresses and on this ground, there is no presumption why Hayekian hypotheses cannot be confirmed or disconfirmed by the same testing procedures as are Keynesian, Monetarist, and New Classical hypotheses.

Explaining Cyclical Contractions

Garrison argues that it is invalid to criticize Hayek's theory for failing to explain the depth and severity of the Great Depression. First, Hayek was writing before the Great Depression. And second,

his theory explains why we have a cycle, but to explain why a particular contraction is severe we need to turn to unique historical phenomenon such as the failure of Federal Reserve policy.

Such a view, however, completely ignores the extensive evidence on the U.S. experience gathered by Friedman and Schwartz, and by Cagan. These authors show that there is a major and significant difference between mild and severe cycles. They demonstrate quite convincingly that every severe cyclical downturn was preceded by a downturn in the money supply whereas for mild cycles a combination of both monetary and real forces were at work.

An All-or-None Posture

In many places Garrison states that the profession at large does not place much value in Hayek's theory of the business cycle. Moreover, he states that if we cannot accept all seven of the key elements of the Austrian theory that we must reject the theory.

Surely the fact that the dominant research strategy in business cycle research has been dubbed Neo-Austrian should be regarded as a sign of success. The acceptance of a part of the Austrian paradigm into mainstream Neo-Classical economics should be treated as evidence of optimism not pessimism. The profession does not currently accept pure Smithian, pure Ricardian, or pure Keynesian views, why should the Austrians feel especially slighted.

On the positive side, Garrison correctly criticizes the rational expectations approach for its simplistic treatment of expectations. The information requirements necessary to achieve the *strong* version of rational expectations—that the public acts as if it fully understands the economic models policymakers use in generating forecasts of key macro variables—are impossibly stringent (see Laidler 1982; Frydman and Phelps 1983). Consequently, much of the profession is against blind acceptance of such an approach. Still, most would accept the weak version of rational expectations—that market agents will not persist in making forecast errors and that they will invest resources in obtaining information on how the economy works. Current research in business cycle theory (Zarnowitz 1985) suggests that progress is being made on several fronts: (a) in understanding the learning requirements necessary to achieve rational expectations results; (b) in understanding the real phenomena required to produce persistence in such models; and (c) in developing alternative approaches to the assumption of continuous market clearing, such as models embodying wage and price contracts. Some of this research has been influenced by Austrian views.

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