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Short and Long Period-of-Provision Goods During an Austrian Trade Cycle

The modern Austrian theory of the trade cycle, as expressed in Mises's *Human Action* (1966) is based on the simple proposition that, under the conditions specified in the definition of the pure market economy, individuals acting in the role of the entrepreneur (entrepreneurs) function to identify and utilize resources in an effort to satisfy consumer wants. Those wants exist in a time dimension. So the entrepreneurs must allocate their own efforts and the resources they control to different projects that they expect to yield goods and profits at different future times. A sudden and unexpected increase in the quantity of money injected via loan markets and of which entrepreneurship does not predict its effects will lead to *malinvestment*. In other words, faced with an unbeknownst-to-them-temporary fall in the market rate of interest, the entrepreneurs overinvest in long-term production projects and under-invest in short-term production projects. They begin new projects that take longer to complete and the completion of which requires future loans at low interest which they now expect. But because the real (i.e., price level-adjusted) rate of interest cannot for very long remain below the hypothetical natural rate, they eventually discover their malinvestment. When this happens they will partly stop their long-term investments and liquidate some of the capital goods they have produced along the way. In general, they will have to adjust to the natural rate of interest. The abrupt reduction in capital goods production brings unemployment in the long-term capital goods industries (i.e., in the industries where capital goods that are only valuable in long-term production projects are produced).

The reason for the liquidation is the change in relative entrepreneurial appraisals of resources. The appraisals of resources that are particularly suited to helping in long-term investments fall relative to the appraisals of resources that are particularly suited to helping in shorter-term investment. This change in appraisals corresponds to a change in the prices of the goods that these resources are best suited to produce. The prices of goods that can be consumed immediately or very soon increase rise which the prices of goods that can only be consumed in the more distant future fall.

The Austrian theory of the trade cycle is a logical proposition, like the law of demand. If the conditions stated in its assumptions are present in the real world, the conditions that we deduce will occur in the real world. Absent those conditions, the data may seem to reflect an Austrian trade cycle, but the trade cycle would not be present. Moreover, even if a trade cycle is present, its presence may be difficult to identify. It may be obscured by the other conditions. Indeed, in 20th century data that seem likely to contain a trade cycle because the conditions necessary and sufficient for the cycle to exist seem to be present, there are so many other conditions present that the trade cycle is only one of many parts to the explanation of the data (Haberler 1932). This implies, of course, that in other cases, even if the trade cycle is present, the Austrian theory may have such little relevance that one would be better off neglecting it, lest one fail to deal with the more important conditions needed to explain the historical data. This does not mean that the theory is wrong in any sense but only that it is not as relevant as other factors and that relying on it may lead one away from considering the other factors. The same can be said of the law of demand when the “other things equal” condition is violated.

Another fact that is relevant to using the theory of the trade cycle to interpret historical facts is that the terms used to describe the theory often have different meanings from the same terms in ordinary speech. This is important because ordinary speech is often used to describe the historical facts. Specifically, in ordinary speech, we often use the term “consumer good” to refer to such items as refrigerators, cars, washing machines and so on. In economic theory, however, these are primarily long-

term capital goods; since they provide consumer services over a very long period of time. This helps to explain why the depression, or contractionary, phase of the business cycle is often characterized by the buildup of inventories of “durable consumer goods.” In Austrian theory consumer goods mean goods of the first order, following Menger (1981). But in ordinary speech, the class of consumer goods includes goods whose benefits to consumers will not be felt until long into the future. Most of the benefits of a new car purchased today will be felt not this year but in distant years. Such a good is more a capital good than it is a consumer good. This point was appreciated by Ludwig von Mises when he suggest the use of the term “period of provision” to refer to the time interval between when the production of a good begins and when its consumption occurs (Mises: 1966: 493-9).

The purpose of this essay is to help describe the trade cycle with special reference to the difference between goods with long periods of provision and goods with short periods of provision during an Austrian trade cycle. To do this, it will try to deduce the changes caused by an increase in a quantity of money via the loan market in two different industries. The good in the first industry has a long period of provision. For illustrative purposes, we use the case of a new house. The good in the second has a short period of provision. An example is fast food.

We assume that the central bank increases the quantity of money by permitting increased loans. To simplify, we assume that no one anticipates this and that no one can predict in advance what its effects will be even after they find out about the policy. We also assume, for simplicity, that the central bank's intervention is only a one-shot affair. Finally, we assume that the social, political, and material environments are constant. We now consider the two industries.

The Housing Industry in the First Round

The lower market rate of interest is a signal to house suppliers that long term projects (goods with long periods of provision) started today can be financed at a cheaper rate. They see that they can

borrow money at a lower market rate today and *they also believe that they will be able to borrow it at lower rate through the indefinite future*. They do not know and do not care to predict the Austrian trade cycle. They are not economists. They use today's rates to make predictions about future market rates.¹

With the newly-borrowed money, they aim to begin building new houses. To do this, they bid workers and other needed resources away from other industries. Thus, there is an increase in pay for the resources used to produce houses, including construction workers. In addition, the period of provision may be extended. The lower rate market rate of interest makes it profitable at the margin to begin a house that will take a longer time. At a higher market rate, construction of the house using such a long period would not be undertaken.

The Fast Food Industry in the First Round

For the good with a short period of provision, consider the supply of fast food. Shortly after the central bank's action, the costs of supplying fast food rises, mainly because of the increased opportunities for fast food workers to receive higher pay in, for example, the house construction industry. Facing higher per unit costs, fast food suppliers raise their prices.

The change in relative prices changes the way that consumer-savers allocate their money. Because the price of fast food rises, they buy less. They would buy more houses if they could. However, the houses take a long time to produce. Whether consumer-savers as a whole would save more or less depends on the specific preferences of consumers.

¹To assume otherwise would violate our assumption about inflationary expectations.

For convenience, we use the term "first round effects" to refer to these changes in the interest rate and in the prices of resources, houses, and fast food. The first-round effects are caused by the change in resource appraisals of entrepreneurs due to the lower market rate of interest.

Second Round Effects

We can use the term "second round effects" to refer to the changes that occur after the new money gets into the hands of individuals in their role as consumer-savers. We begin our discussion of second round effects by recognizing that the income receivers of the first round are the consumer-savers of the second round. Since those income receivers receive all of the new money plus what the money they had previously received, their spending and saving rise more or less proportionately with the increase in quantity of money. Their demands for each of the separate goods rises proportionately and their supply of loanable funds rise proportionately, more or less. (The proportion would change to some degree because there has been a redistribution of income. Moreover, preferences change over time. But these changes ordinarily have minor importance.)

The Loan Market

Consider first the effects on the loan market. As mentioned, we assume that the central bank's intervention is a one-shot affair. Accordingly, the supply of loanable funds in the second round comes entirely from the consumer-savers, who maintain more or less the same proportion between their spending on consumer goods and saving. Since their money income has increased by approximately the same per cent as the per cent increase in the quantity of money, their supply of loanable funds rises by approximately the same percent. In the first round, all of the new money entered the loan market because that is where the central bank put it. However, in the second round only part of the money that was new

in the first round enters. Only the proportion that consumer-savers ordinarily save enters.² The supply of loanable funds falls.

The demand for loanable funds rises. This is because when suppliers of consumer goods begin to experience increases in demands for their products, they immediately begin to bid against each other for the limited resources. Their bids rise to more or less the same amount as they were before the increase in the quantity of money plus a per cent that is more or less equal to the per cent increase in the quantity of money. They need funds to make all of these bids.

Since there is a more or less equivalent rise in the demand and supply of loanable funds in relation to the demand and supply before the central bank's intervention, the market rate of interest goes more or less back to where it was before the central bank intervened in the first round.

Housing

The house suppliers are surprised by the higher interest rate. As before, they adjust by changing their plans to build new houses. They reduce their demands for resources. Relative resource prices, including the pay to construction workers, fall. The resource market in the housing industry is further effected by the addition to inventory that occurred when the rate of interest was low. Entrepreneurs started some new houses that they now regard as unprofitable to complete. Although some of the capital goods that were produced in order to start the new houses will be abandoned, other of them will be transferred to other uses, thereby adding to the supply of that particular kind of capital goods and reducing its price. This kind of change may lead builders to reduce employment below what it was before the increase in the quantity of money. The extent of this effect depends on the convertibility of capital

²It is possible that savers would have reacted to the lower interest rate in the first round by reducing or expanding their supply of loanable funds. We assume for simplicity that there is no change in their supply of loanable funds in the first round due to the central bank's intervention.

(Mises, 1966, 503). The greater the convertibility of capital, other things equal, the greater the unemployment.

Fast Food

Now we turn to the fast food market. The money demand for fast food rises due to the increase in incomes. In the meantime, the reduced real demand for workers in the construction industry reduces the opportunity costs of supply in the fast food industry. The increase in demand and increase in supply lead fast food entrepreneurs to increase output.

We should keep mindful of the increase in absolute prices. Because more money is in circulation, the absolute prices of both new houses and fast food will be higher. And so will the absolute prices of the resources used to produce them. Both fast food workers and construction workers will earn higher money incomes.

Shortage of Consumer Goods During the Boom

What can we say, now about the infamous "shortage of consumer goods" during the "boom period?" First, we have to realize that by consumer goods in economic theory we mean goods with short periods of provision. In our example, this was fast food. In what sense was there a shortage of fast food? We can find an answer by focusing on the fast food entrepreneurs. In the first round, they had reduced their work force and raised prices when wages rose in the housing construction industry. When demand rises in the second round, but before they hired additional workers released by the construction industry, they would be short of fast food. The price of fast food rose.

The shortage of consumer goods during the boom refers only to the deduction that, in the second round, employers in fast food perceive more or less the same profit opportunities that they perceived

before the increase in money. Until they respond to these perceptions by increasing the output of food, there would be a shortage of fast food, prompting an even higher increase in the price of fast food in the shorter term.

Remarks on the Procedure Used to Illustrate the Austrian Theory

As one can see, to give even these simple examples requires a meticulous and detailed description of the sequence of events. Moreover, it requires making a number of assumptions that may not be realistic. Of special significance are the assumptions about expectations in light of the central bank's monetary expansion.

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Identifying the Austrian Trade Cycle in the Historical Data

Abstract

This essay presents a model of the effects of an increase in the quantity of money introduced through loan markets under rigid assumptions. It traces those effects through loan markets and resource markets. Its main contribution is its focus on two different consumer goods industries: a durable good industry with a long period of production and a perishable good industry with a short period of production. It is especially concerned with the theory's deduction that there will be a shortage of the latter good during the contractionary phase of the cycle.

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