Economic booms and busts

In fact ... the very measures which the dominant "macro-economic" theory has recommended as a remedy for unemployment, namely, the increase of aggregate demand, have become a cause of a very extensive misallocation of resources which is likely to make later large-scale unemployment inevitable. The continuous injection of additional amounts of money at points of the economic system where it creates a temporary demand which must cease when the increase of the quantity of money stops or slows down, together with the expectation of a continuing rise of prices, draws labour and other resources into employments which can last only so long as the increase of the quantity of money continues at the same rate—or perhaps even only so long as it continues to accelerate at a given rate.

Friedrich Hayek (1974). The Pretense of Knowledge.

Lecture given in acceptance of the Nobel Prize for Economics. In Bruce Caldwell (ed.), *Markets and Other Orders*, XV (Liberty Fund Library, 2014): 367.

I. The role of "aggregate demand"

Business people know that their profits rise and fall with rises and falls in the demand for the products they sell. If more paying customers are streaming through the doors, times are good. Fewer customers, in contrast, mean worsening times—and, for many firms, even bankruptcy.

Likewise for workers. They understand that the greater the demand for their employers' outputs, the greater the demand for their labour services.

When business is booming, their jobs are more secure and their wages rise. When business is bad, jobs are less secure and wages stagnate.

This understanding by business people and workers of the importance of high demand in their industries and firms is correct. But as explained in the previous chapter, our roles as producers can mislead us into making mistaken conclusions about the larger economy. One such mistaken conclusion about the larger economy is that economic downturns—recessions—are caused by too little overall demand. A follow-up mistaken conclusion is that the appropriate cure for recessions is a set of government policies that increase demand.

Because an economy-wide recession affects nearly all firms and industries and not just a few, the demand that is said to be too low during recessions is called "aggregate demand." Aggregate demand is the *overall* demand in an economy for all goods and services.

The single most influential economics book written in the twentieth century is *The General Theory of Employment, Interest, and Money*, by the British economist John Maynard Keynes (1883–1946). Keynes reasoned that, just as high demand is key to the success of an individual firm, high *aggregate* demand is key to the success of a whole economy.

In Keynes's view, economic recessions are caused by too little aggregate demand. The cure for recessions, therefore, is higher aggregate demand. And the best way to increase aggregate demand is for government to ramp up its spending until economic health is restored—that is, until full employment is reached.

This Keynesian view is widespread. It seems to make so much sense. But it suffers serious flaws. And perhaps its biggest flaw is its focus on aggregate demand.

By focusing on aggregate demand, Keynesian economics ignores the all-important ("microeconomic") details of an economy. These vital details are how well or poorly each of the economy's many individual parts "fit" together and work together to generate goods and services for consumers, and to create job opportunities for workers.

If you have all of the parts of, say, an automobile scattered randomly about a large room, the main reason you do not have a functioning car is not that you do not want, or that you fail to "demand," such a car. Instead, the chief reason you have no functioning car is that those parts aren't fitted together in ways that allow them all to operate smoothly together so that a drivable

and reliable car exists. It's true that no one will exert the energy and initiative required to assemble all of the parts into a working vehicle if there is no (or too little) demand for such a vehicle. But your *desire* to have a drivable car is not really the main obstacle standing between you and a working vehicle. The main obstacle is the challenge of mobilizing all the knowledge involved in assembling these pieces into a car *and* motivating people to put forth the effort to perform that assembly.

The desire of nearly everyone to possess and consume automobiles, along with lots of other goods and services, can be depended upon always to exist. The challenge is to ensure that producers have the knowledge and the incentives actually to produce the goods and services that people want. The challenge, in other words, is to get the economic *details* right so that producers have both the knowledge and the incentive to produce the "right" mix of outputs.

Relative prices are the main source of both this knowledge and these incentives. Relative prices are the prices of some goods and services *relative to* the prices of other goods and services. Examples are the price of a Toyota automobile relative to the prices of a Ford automobile and of a Honda automobile, or the price of a bushel of wheat relative to the prices of a bushel of rye and of a bushel of rice.

Relative prices are the most important "directors" of economic activity. If the pattern of relative prices accurately reflects the many different demands of consumers as well as the costs of the inputs that can be used to satisfy these demands, then entrepreneurs, investors, and consumers will be led by these prices to act in ways that result in all of the economy's "pieces" being fitted together into a productive whole. The economy at large will work pretty smoothly.

If, for example, consumers come to like oranges more than they had in the past, then the price of oranges will rise relative to the price of grapefruits. Farmers will soon produce more oranges and relatively fewer grapefruits. Or if supplies of iron ore fall, the price of steel will rise relative to the price of aluminum. Manufacturers will shift their production so that they use less steel and more aluminum to produce their products. If the price of gasoline rises, consumers will find ways to drive less, and they'll also buy more fuel-efficient cars. If the wages of nurses rise relative to the wages of school teachers, more young people will study nursing and fewer will study education. If interest



But how was I to know people didn't want grapefruit anymore? I'm still charging 25 cents a pound for them, like I did last year, and the year before that.

rates fall, businesses will increase their investments in activities such as factory expansion, worker training, and research and development.

Changes in prices relative to each other directs businesses to increase their outputs of goods and services that consumers now demand more intensely (goods and services whose prices are rising) and to decrease their outputs of things that consumers no longer want as intensely as they did in the past (goods and services whose prices are falling). Importantly, the pattern of relative prices also "tells" businesses and entrepreneurs how to produce their outputs at the lowest possible costs. For instance, if the price of natural gas falls relative to the price of electricity, some business owners who would otherwise have used electricity to heat their factories or office buildings will instead use natural gas.

If the pattern of relative prices of consumer goods and services accurately reflects differences in the intensities of consumer demands for all of the different outputs produced in the economy—with prices rising for products in higher demand and falling for products in lower demand—producers will "know" what is the best mix of outputs to produce for sale to consumers. The pattern of prices tells them. And producers will have incentives to "listen" to these prices. The reason is that producers earn higher profits by expanding production of outputs whose prices are rising. Likewise, producers avoid losses by producing fewer of those outputs whose prices are falling.

Getting all of these details of pricing right is key to economic health.

In a competitive market economy based on private-property rights, people tend to make correct decisions. Not always, of course. But by and large the economic decisions people make in markets are sensible ones. The reason is that each individual personally gains by making wise choices about how to use his resources, and personally loses by making poor choices.

Our trust in the overall "correctness" of people's economic decisions, however, requires that the prices that people use to guide their decision-making are reasonably accurate sources of information. There's trouble if prices do not reflect realities. If consumers come to demand more oranges and fewer grapefruits, but the price of oranges doesn't rise relative to the price of grapefruit, citrus growers won't "know" to produce more oranges and fewer grapefruit. Too many workers and resources will be used to grow grapefruit; too few workers and resources will be used to grow oranges. These workers and resources will be invested in production processes that do not best meet the demands of consumers.

Likewise, if supplies of steel fall while supplies of aluminum rise, but the price of steel doesn't increase relative to the price of aluminum, producers will not "know" to use less steel and more aluminum in their production plans. Shortages of steel will eventually arise, disrupting the production of goods that are made with metal.

If prices in only a handful of markets fail to accurately reflect underlying economic realities (such as the intensity of consumer demand for oranges relative to the demand for grapefruit), the economy won't suffer greatly. But when prices in general are out of whack—when prices in most markets send out *mis*information—widespread economic troubles arise. Entrepreneurs and investors throughout the economy will then act on false information about what consumers want and about what inputs make possible the lowest-cost ways to satisfy those wants.

With such widespread failure of prices to coordinate the plans of producers with the plans of consumers, economic activity stagnates. Some producers discover that they can't sell all of the output that they have produced. Other producers find themselves unable to get all of the inputs necessary to carry through with their production plans. Yet other producers learn that, had they produced more output, they could have sold more output.

If prices are free to adjust in response to these discoveries of errors, they will eventually do so. The pattern of prices will then give entrepreneurs and investors more accurate direction about what to produce and how best to produce those goods and services. Such adjustments in production activities, however, are not instantaneous. They take time. Orchards planted with grapefruit trees cannot immediately be transformed into orchards planted with orange trees. Redesigning an automobile body or the casing of MP3 players to be made with more aluminum and less steel can't be done with the snap of a plant-manager's fingers.

Unemployment rises during the time it takes for these adjustments to be made. Workers in industries with unsold inventories are laid off, and time is required for them to find employment elsewhere. Even industries that expand in response to more accurate prices typically require some time to rearrange their production plans and facilities in order to make profitable the hiring of new workers.

The time it takes for the firms to adjust away from the production plans they made when prices were inaccurate is time during which unusually large numbers of workers are unemployed.

Such unemployment is not caused by too little aggregate demand. Therefore, such unemployment cannot be cured by more government spending or other efforts to raise aggregate demand. Instead, such unemployment is caused by the widespread failure of individual prices to convey accurate information to entrepreneurs and investors about what specific products they should produce and about how best to produce these products. The only way to cure this malinvestment is to allow prices to adjust so that they better reflect consumer desires and the realities of resource availabilities. This cure, again, requires time—time for prices to adjust and for workers to find and move to jobs that are more economically sustainable.

II. The effects of poor monetary policy

What might cause such a widespread failure of prices to convey reasonably accurate information? The most likely culprit in reality is poor monetary policy.

If the money supply is stable—that is, if the money supply is not expanding or shrinking arbitrarily—the pattern of prices is likely to be mostly correct. There's no good reason to suppose that in an economy in which markets are reasonably competitive and well-working that, suddenly, prices *generally* will

become so out of whack that significant amounts of labour and resources are drawn into industries where they don't belong. But if the money supply itself is changed, the pattern of prices might well become grossly distorted.

If the monetary authority (in most countries, a central bank with the power and authority to raise of lower the supply of money) injects streams of new money into the economy, significant distortions can occur. The reason is that new money enters the economy in particular places—specifically, through commercial banks making loans. This new money then spreads out to the rest of the economy from those places of entry. The people who are the first to get the newly created money spend it on particular goods and services. To make the explanation smoother, let's assume that the new money is spent first on purchases of new automobiles (by bank customers who use their borrowed money to finance such purchases).

The injection into the economy of streams of newly created money will thus cause the price of automobiles to rise relative to the prices of all other goods and services. These higher automobile prices tell an economic lie to people throughout the economy. Entrepreneurs and investors, seeing automobile prices rise relative to the prices of motorcycles, air travel, jeans, bread, and every other good and service, are misled into the false conclusion that there is a genuine increase in the demand for automobiles relative to the demands for other goods and services.

In fact, however, the higher prices of automobiles reflect only the fact that automobile buyers include lots of people who are lucky enough to be the first to spend the newly created money. This additional demand for automobiles isn't "real." This additional demand doesn't reflect people producing more output in order to earn more income to spend on new cars. Nor does this additional demand for automobiles come from these people decreasing their purchases in other markets in order to increase their purchases of automobiles.

In short, this higher demand for automobiles reflects only the fact that new money was created and spent, as it entered the economy, first on automobiles.

Once the stream of new money entering the economy stops flowing and these people no longer have this newly created money to spend, they will resume spending as they did before they got the new money. Demand for automobiles will fall back to its previous level (that is, demand for automobiles will fall to its level before being artificially driven up by the spending of the new money). But if enough new money is created and continually injected into the economy for a long-enough period of time, the prices of automobiles will rise by enough—and stay artificially high for long enough—to cause entrepreneurs and investors to shift some resources out of other industries and into automobile production.

Automobile producers will be the next in line to spend the newly created money. If automobile producers spend all of the additional money they get on, say, clothing, the prices of clothing will be the next to rise. Clothing sellers will, in turn, spend the new money that *they* get in some particular ways—say, on children's toys and kitchen appliances. The prices of children's toys and kitchen appliances will then rise.

Eventually, the newly created money works its way throughout the whole economy. This new money is ultimately spread out evenly across all markets. The final result is that the overall price *level*—that is, the average of all prices—is higher, but all individual prices *relative to each other* are unchanged from what they were before the new money was injected into the economy. For example, if as a result of the injection of new money the price of automobiles rises from \$20,000 to \$30,000 and the price of motorcycles rises from \$10,000 to \$15,000, the attractiveness to producers of producing automobiles relative to the attractiveness of producing motorcycles is unchanged: cars still fetch twice the price of motorcycles.

III. Where interest rates fit in

What's true for distortions in the relative prices of consumer goods (such as automobiles and motorcycles) is true also for distortions in the prices of consumer goods relative to the prices of capital goods (such as bulldozers and skyscrapers). Indeed, Hayek argued that distortions in the prices of capital goods in relation to consumer goods are the chief source of booms and busts. The reason has to do with the central role of one particular set of prices: interest rates.

Interest rates reflect people's "time preference"—that is, their preference for consuming today rather than delaying consumption until tomorrow. The lower is people's time preference, the more willing they are to delay consumption. And the more willing people are to delay consumption, the more they save. More savings, in turn, mean lower interest rates. (Banks have more

money on hand to lend.) The lower are interest rates, the more attractive are long-term investments.

For example, a transcontinental railroad that takes ten years to build is a more attractive investment for the potential builder if the interest rate is 3 percent than if it's 10 percent. That's because the amount of interest that must be repaid when the railroad finally starts to operate and generate revenue will be much lower if the railroad builder borrows funds at an interest rate of 3 percent than at a rate of 10 percent. So although this railroad might not be profitable to build at the higher interest rate, it will perhaps be profitable to build at the lower interest rate.

Low interest rates signal to entrepreneurs that people in general are very willing to forego consuming today so that resources can be used to produce, not MP3 players, hot tubs, and other consumer goods today, but instead steel rails, locomotives, bulldozers, and other capital goods.

But what if people really *don't* want to delay their consumption for very long? What if interest rates "lie"—telling entrepreneurs that people are saving more than they really are saving? Hayek argued that such a lie plays an especially critical role in business cycles. When the money supply is increased, the new money typically enters the economy through banks—and to loan this new money, banks lower the rates of interest they charge borrowers. In Hayek's view, the prices that are most dangerously distorted by expansions of the money supply are interest rates. The artificially low interest rates prompt entrepreneurs and businesses to borrow too much—that is, to borrow more than people are really saving. Artificially low interest rates lead producers to undertake more time-consuming—"longer"—production projects than they would undertake at higher rates of interest.

Unfortunately, interest rates are lower not because people are saving more but only because the creation of new money pushed these rates lower. In this case, plans to build long-run projects—such as, again, a railroad that takes ten years to complete—will eventually run into trouble. With people saving too little to allow all of the necessary steel rails, workers' barracks, and other capital goods to be produced, the railroad builder in time finds that he cannot complete his project profitably. He must lay off his workers.

As time passes and the investments in excessively "long" business projects are finally entirely liquidated, laid-off workers find other jobs. This result, however, occurs only in the long run. Much economic trouble arises during the short run (which can be a long time when measured on a calendar). Once again, before all of the newly created money finally ("in the long-run") is spread evenly throughout the economy, the pattern of relative prices is distorted by the stream of new money injected into the economy. During the time it takes for the newly created money to work its way from the markets where it is first spent into each of the economy's many other markets, the distorted relative prices—including artificially low interest rates—mislead people into making economic decisions that are inconsistent with the true patterns of consumer demands and resource supplies.

It is regrettable that the process of unwinding unsustainable investments takes time. But lasting economic health requires that such unwinding occurs. Unfortunately, during the time required to unwind the unsustainable investments there is indeed a great deal of economic suffering. And, understandably, there are many appeals to political authorities to ease the suffering. As we'll see in the next chapter, political authorities too often respond to these appeals with policies that only mask and worsen the problem.