

Compulsory Consumption

Productivity (output per worker hour) tends to go up over time because better technology is used for production. During the twentieth century, productivity increased by just over 2.3% per year. This productivity growth has a huge impact when it is compounded over a century: the average worker in 2000 produced eight times as much in an hour as the average worker in 1900.

There are two common fallacies about the relation between productivity and unemployment:

- ▶ **The Lump of Labor Fallacy:** From the nineteenth century through the 1930s, labor unions commonly said that shorter work hours would reduce unemployment. Some economists claimed that unions believed there is a certain amount of work to be done; as productivity increases, workers get this work done in less time, causing unemployment. Economists called this the “lump of labor fallacy,” because there is not a fixed amount of work to be done, and: we can take advantage of higher productivity to produce more.
- ▶ **The Compulsory Consumption Fallacy:** Since the end of World War II, most economists and politicians have said that we must promote economic growth to avoid unemployment: we must stimulate the economy to provide jobs. This assumes that there are fixed work hours, so workers produce more as productivity increases. To avoid unemployment, we must consume as much as the workers can produce. This is the conventional wisdom of our time, and it should be called the “compulsory consumption fallacy,” because it says we must produce and consume more, whether we want the products or not, purely to avoid unemployment.

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Productivity and Unemployment

We can see more clearly why these are fallacies by expanding the equation used to calculate productivity:

$$\text{productivity} = \text{total output} / \text{total hours worked}$$

Total hours worked are equal to (average hours per employed worker * total number of employed workers), so we can expand this equation to:

$$\text{productivity} = \text{total output} / (\text{avg hours per employed worker} * \text{employed workers})$$

This expanded equation makes it very clear that, as productivity increases, any combination of the following can happen:

- ▶ Total output can increase. In other words, there can be economic growth.
- ▶ Average hours per employed worker can decrease. In other words, there can be shorter work hours.
- ▶ The number of employed workers can decrease. In other words, there can be higher unemployment.

We generally want to avoid higher unemployment, and the other two possibilities are the sources of the two fallacies. The lump of labor fallacy assumes that work hours must decrease and ignores the possibility that economic growth can absorb productivity gains. The compulsory consumption fallacy assumes that total output must increase and ignores the possibility that shorter work hours can balance the productivity gains.

“Market theory gives us a very clear answer: optimum output depends on each worker’s choice between more free time and more income.”

Optimum Output

Clearly, we can avoid unemployment either by shortening the work week, or by increasing output, or by some combination of the two.

Which of these should we do? Which combination gives us the optimum level of output? Market economic theory gives us a very clear answer: workers should be able to choose their hours, and optimum output depends on each worker’s choice between more free time and more income.

In market theory, the choice between free time and income is the same as the choice between any two commodities. To maximize their satisfaction, consumers have to be able to choose how much of each of the two commodities they want to buy.

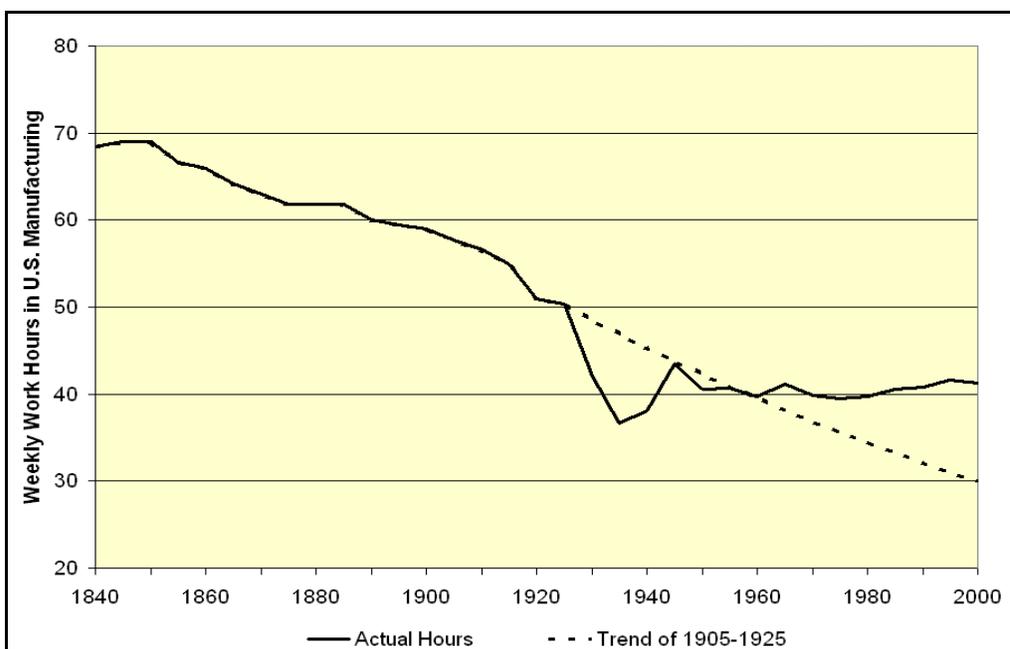
Imagine, for example, that you could not buy beef and beans separately, because traditional custom and government regulation require you to buy packages that include one pound of beef and one pound of beans. This would be completely unsatisfactory for people who are wealthy enough to eat beef at every meal and who do not like to eat beans. It would also be completely unsatisfactory for people who are too poor to afford beef and who just want to eat beans (and, of course, for vegetarians). There would be some people in the middle who happen to want this exact combination of beef and beans, at current prices, but they would be in the minority. Most people would get less satisfaction from buying this standard package of beef and beans than they would from choosing how much of each they want to buy.

This is just the situation that most people find themselves in when they look for a job. Because of traditional custom and government regulation, most jobs are forty-hour-per-week jobs: you must take a package that gives you this combination of work and

free time. There may be some people who happen to want this exact combination of work and free time, at current wages, but they are in the minority. Most people get less satisfaction from this standard package of income and free time than they would from choosing how much of each they want.

This basic principle of market theory gives us a first approximation of optimum output: optimum output is the amount of output that we would have if people could choose between more income and more free time. For a more complete view of optimum output, we would also have to consider external costs of economic growth. These external costs make optimum output less than output would be if people chose their work hours freely, thinking of benefits and costs to themselves and ignoring the environmental costs of consuming more.

But since the end of World War II, under the influence of the compulsory consumption fallacy, we have systematically distorted the market in the opposite direction. We have promoted more consumption than people would choose freely, in order to stimulate the economy and avoid unemployment.



Average Work Week in American Manufacturing

(source: Historical Statistics of the United States)

“Since the end of World War II, we have taken all our increased productivity in the form of economic growth, with no reduction in work time”

The graph of the average work week in American manufacturing shows this very clearly.

From the beginning of the industrial revolution until the depression, the standard work week went down persistently, largely as a result of labor union demands. In addition to getting higher wages, workers wanted to take some of their increased productivity in the form of shorter work hours.

But ever since the end of World War II, the standard work week has remained constant at 40 hours. In a reaction against the depression, everyone embraced the compulsory consumption fallacy. Federal policy was designed to stimulate the

economy and create jobs. And we took all our increased productivity in the form of economic growth, with no reduction in work time.

There is uncertainty about what balance of free time and income people would choose if they had the choice, but the inflection in the graph of the work week shows clearly that we have distorted this decision in the direction of more income and faster growth. From the beginning of the industrial revolution to the depression, work time declined. Suddenly, after World War II, work time stopped declining. This sudden change cannot be explained as a result of choice; it was a result of federal laws establishing a 40-hour week and of federal policies to stimulate the economy and provide more of these 40-hour jobs.

If the historical trend had continued, the standard work week would now be about 30 hours. This would reduce the total environmental impact of our economy by about 25%, dramatically reducing environmental threats such as global warming.

“Economists ignore the compulsory consumption fallacy, though we have tried to promote growth to fight unemployment ever since 1945.”

With or without choice of work hours, the federal government would have to fine tune the economy using fiscal and monetary policy to control inflation and unemployment. The point is that this planning currently aims at providing 40-hour jobs, and we must consume enough to provide those 40-hour jobs whether people want the products or not. With choice of work hours, this planning would aim at providing the amount of work hours that people need to purchase things they actually want.

Our Conceptual Blind Spot

It is common to attack the errors of the past and to ignore the equally blatant errors of the present. Our economists still attack the lump of labor fallacy, though the historical graph of work time shows that we have not tried to fight unemployment by reducing the work week since 1945. And our economists ignore the compulsory consumption fallacy, though we have tried to stimulate the economy and promote growth to fight unemployment ever since 1945.

The overwhelming majority of economists and politicians fall into the compulsory consumption fallacy and tell us we need to promote growth to avoid unemployment.

An increasing number of environmentalists tell us that growth is no longer increasing our well being, and that growth must slow or end to avoid ecological collapse. But virtually none of those environmentalists talk about shortening work hours, so their prescriptions for slower growth will fail because they will increase unemployment.

This paper belabors the very obvious point that we can avoid unemployment either by promoting growth or by shortening work hours. We have to belabor this point, because most people ignore it, as obvious as it is.