Economics is the only discipline with a theory of how things “ought” to be.

Economics is a theory of efficiency:

It is always best to move to the efficiency frontier.

This is based on two assumptions:
1. More output is always better than less
2. Winners will always compensate the losers (in absolute income)

However, this is very theoretical. In reality, compensation almost never happens.

Deregulation

It takes enormous capital to deregulate an industry because you will always have some losers. For example, airline stewardesses and truck drivers both suffered significant paycuts when their respective industries were deregulated. Capital is needed for government to compensate that.

Reagan said that he would deregulate everything but in fact, he deregulated just about nothing. It was Carter who deregulated transportation and telecommunication and Clinton who deregulated the power industry (which was state-run so circumstances were a little different). Power is a prime candidate for regulation because it is a natural monopoly. Deregulation involved a couple problems: Power can’t be stored and consumption is cyclical. This means that plants had to be built with a 20% excess capacity which is inconsistent with competition. Because of the California fiasco with this, it is unlikely that there will be further power deregulation.

Impact of 1970s Oil Crisis

In 1973, OPEC restricted their oil output with drove the price up to $80/bbl adjusted to today’s dollars (compared ~$30/bbl currently). Looking at national income accounting:

\[
Y = \frac{C + I + G + (X - M)}{1 - C*(1 - t)Y}
\]

With high oil prices (effectively a tax), t goes up, so the multiplier, and thus GDP, go down. The result is slow (or negative) growth and high unemployment.

Contrary to micro theory, which says there is no inflation because high prices will be offset in other areas of the economy (notes from 7 Feb), this spike in oil prices did indeed cause inflation:
This is because in the real economy, the prices of other things do not fall – they stay the same. When demand falls due to a price increase in another industry, suppliers will cut supply to maintain prices in their own industry. In fact, prices may even go up due to increase production costs. Additionally, if prices are to fall, then wages must fall too so the effect is minimal.

In the Great Depression, unemployment was 29%. During such high unemployment, nominal wages did fall a little but prices fell much faster meaning that real wages actually rose. At this time, which real wages were rising, growth was falling. This means that unit labor cost of output, defined as the wages required to produce a unit of output, was rising significantly.

But why were real wages rising? Why didn’t nominal wages fall faster? It’s because wages are in fact quite sticky. They don’t fall nearly as they ought to. It is difficult to measure motivation which is a big factor in wage levels. Minimum wage has very little impact in the U.S. because most everyone makes more money than that (Europe is a different story).

Since wages don’t fall, high producer costs (i.e., high oil costs) can result in high unemployment coupled with high inflation. This was the situation Reagan inherited from Carter in 1981 (some would say he inherited it from OPEC, but whatever…).

The Reagan Plan

At the Federal Reserve Board, Volcker was busy raising interest rates, which caused a double dip recession in the early 1980s. This was his intention as he thought this was the only way to stop inflation. In theory, higher interest rates result in lower investments ($I$) and lower consumption ($C$) which stops prices from rising.

In conjunction, Reagan lowered income taxes but increased payroll taxes (Social Security, Medicare…). Since most normal people pay taxes mostly on payroll, their tax bill was actually increasing instead of decreasing. Only the rich saw tax reduction with Reagan’s plan – the cuts didn’t help the entire bottom half of the population. Reagan aides probably knew this and may have been manipulating the public, but Reagan himself probably genuinely believed that these policies would help.

What Reagan believed in was supply-side economics which works in two ways:

\[
\text{Savings (S) } \uparrow \Rightarrow \text{Investment (I) } \uparrow \Rightarrow \text{Output } \uparrow \Rightarrow \text{Earnings (E) } \uparrow \Rightarrow \text{Wages (W) } \uparrow
\]

or

\[
\text{Work Effort } \uparrow \Rightarrow \text{Output } \uparrow \Rightarrow \text{Earnings (E) } \uparrow \Rightarrow \text{Wages (W) } \uparrow
\]

Theoretically, a tax cut to the wealthy would increase their savings and their work effort which would both result in higher wages, which would help the poor (well, middle class because no one cares about the poor). Believing this, Reagan cut the top tax rate from 76% to 36%. This supply-side argument is based on the Laffer Curve, which says that a certain point, tax revenues actually go down with an increase in the tax rate. Reagan was assuming America was at this point.
So what was going on in the economy when Reagan was elected in 1980?

<table>
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<th>Indicator</th>
<th>1980</th>
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<th>1982</th>
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<tbody>
<tr>
<td>GDP Growth</td>
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<td>Unemployment</td>
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<tr>
<td>Inflation</td>
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<tr>
<td>CPI</td>
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<tr>
<td>PPI</td>
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Economy was in a classical stagflation – high unemployment with high inflation.

What does Reagan do? In addition to the big tax cut, there is a huge increase in government spending (mostly in defense). Although Reagan would loathe to admit it, this was classical Keynesian economics because he cause a big increase in demand (also, the supply-side effects never materialized because the rich don’t save and don’t work harder). Reagan also gave businesses the accelerated depreciation schedule and investment tax credit which both encouraged investment (I ↑). However, because of the huge government debt that resulted from Reagan’s policies, private investments were crowded out and investment actually went down.

Reagan is also given credit for destroying the Soviet Union. Argument is that defense build-up cause the Russians to follow suit and when their economy couldn’t support it, it fell from under them. Is this true? Maybe not because the ramp in defense (in as a % of GDP) was not that big and the Soviet economy most definitely could support it. Also, the Russians have historically been very resilient and able to put up with hardships. No one really knows what caused the collapse but most likely, the problem was that people lost faith in the system. After 70 years of being promised utopia, they were probably ready for something else.

Important points from the exhibits in Reagan Plan Update in coursepack:

1. Actual output was lots less than Reagan expected. Inflation was down faster than expected (as a result of falling oil prices and the recession). Unemployment was much worse than expected (there was a recession going on).

2. Government revenue was much lower than expected but expenditures were much higher. Putting this in the context of national income accounting:

\[
Y_{\text{total}} = Y_{\text{People}} + Y_{\text{Gov}} = C + I + G + (X - M) \\
(C + S) + T = C + I + G + (X - M) \\
S - I = X - M
\]

Assuming a balanced budget, \(G = T\)

So, with a decrease in savings, you maybe produce a trade deficit instead of crowding out investment.

3. Reagan cause a huge trade deficit. However, the trade deficit exists even today, in a time of budget surplus. This is because of hysteresis, which says that the path makes a difference. This trade deficit is Reagan’s legacy.