-

Aggregate Demand

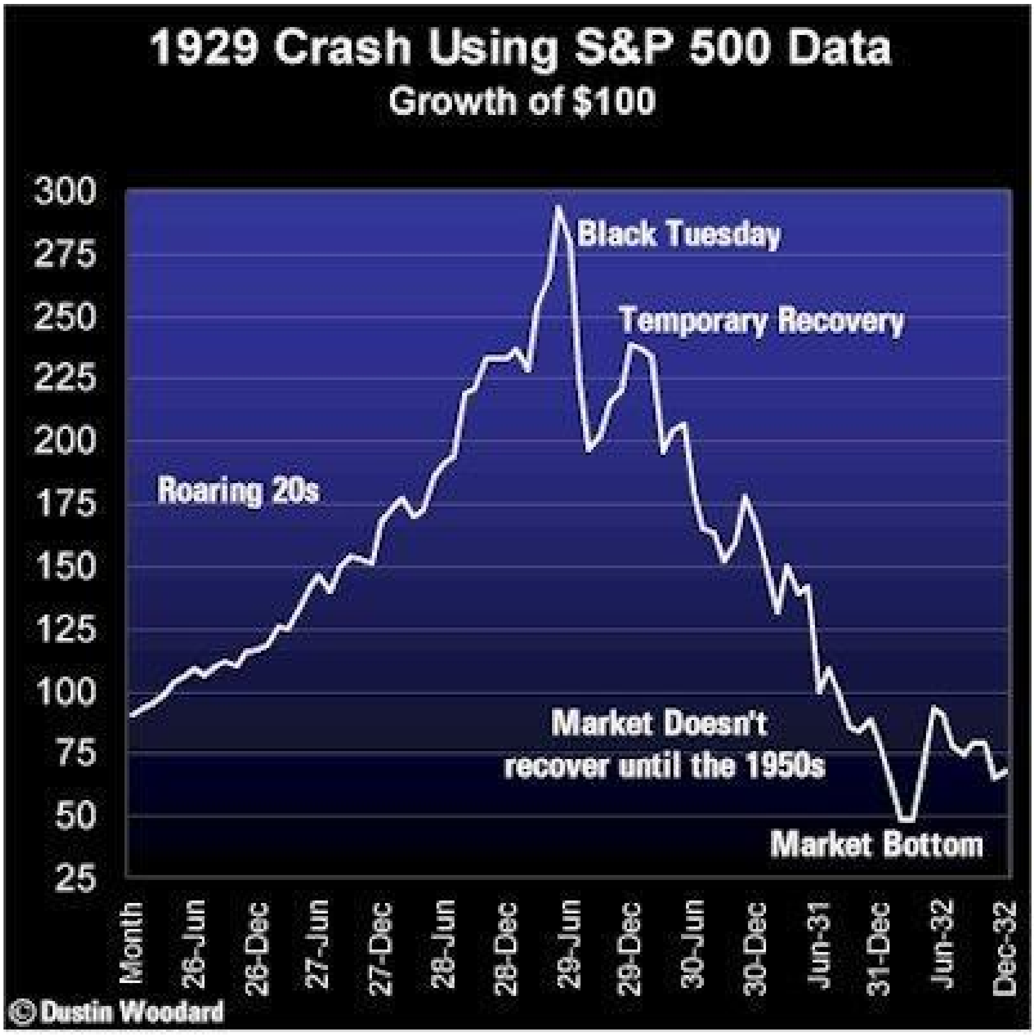
Thirty-First President 1929-1933

Herbert Hoover – November 1928

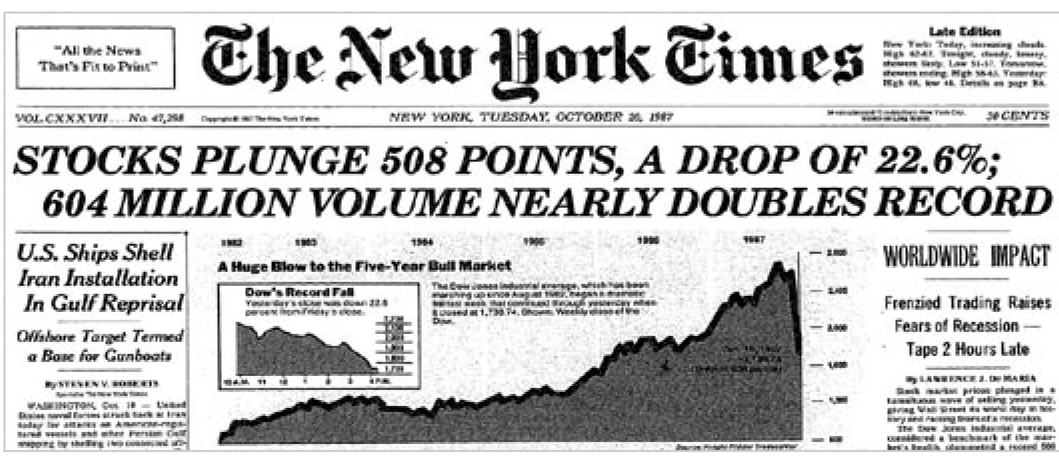
"We in America today are nearer to the final triumph over poverty than ever before in the history of any land… We shall soon with the help of God be in sight of the day when ***poverty will be banished*** *from this nation."*

The US economy was doing very well in 1928, and its unemployment rate was only 3 percent. The economy was in fact "roaring" along with the stock prices.

Hence, it is no surprise that President Hoover was so optimistic about the US economic prospects, and investors drove stock prices ever higher. (See the chart below.)



Suddenly, the roaring US stock market crashed in October 1929. Why? This is being debated even today.



"All the News That's Fit to Print"

The New York Times

Late Edition

NEW YORK, TUESDAY, OCTOBER 20, 1987

STOCKS PLUNGE 508 POINTS, A DROP OF 22.6%; 604 MILLION VOLUME NEARLY DOUBLES RECORD

U.S. Ships Shell Iran Installation In Gulf Reprisal

Offshore Target Termed a Base for Gunboats

A Huge Blow to the Five-Year Bull Market

Dow's Record Fall

WORLDWIDE IMPACT

Frenzied Trading Raises Fears of Recession — Tape 2 Hours Late

A contemporary newspaper, The World, reported on October 25, 1929, that...

> *"The stock markets of the country tottered on **the brink of panic** yesterday as a prosperous people, gone hysterical with fear, attempted simultaneously to sell a record-breaking volume of securities for whatever they would bring.*
>
> *The result was a financial nightmare, comparable to nothing ever before experienced…"*

Check out this video for more on the Black Friday stock market crash.

Do you have any thoughts on how the crash may have affected the economy's circular flow? The crash was an unexpected shock, resulting in the GDP contracting by 27 percent in the subsequent years and the unemployment rate increasing to 25 percent.

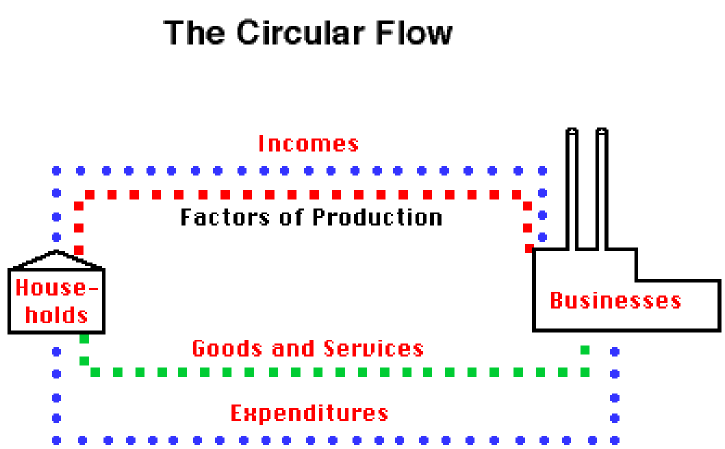
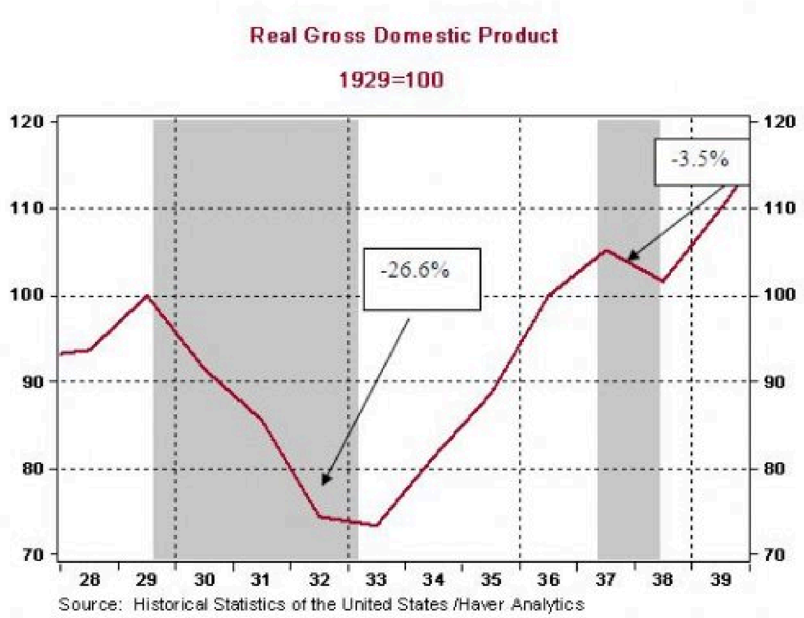


Chart 1



Note: Shaded regions denote periods of recessions in all charts.

But President Hoover remained optimistic through the crash of the stock market. How come?

His Treasury Secretary Andrew Mellon welcomed the financial panic that brought on the Depression as the means to “purge the rottenness out of the system.”

Secretary Mellon recommended letting the destruction run its course like a fever-killing germ that had invaded the body. (Why? Hint… Laissez-faire)

President Hoover and his advisers believed that markets would adjust or self-regulate. They believed in the **Say's Law**.

Jean-Baptiste Say was born in Lyons, France. Say read Adam Smith's book and fell into a group of *laissez-faire* economists.

In 1803, he published his most famous work, *Treatise on Political Economy*. It was in the *Treatise* that Says outlined his famous "Law of Markets."


A TREATISE

POLITICAL ECONOMY;

PRODUCTION, DISTRIBUTION, AND CONSUMPTION

WEALTH.

BY JEAN-BAPTISTE SAY.

NEW AMERICAN EDITION.

BY CLEMENT C. BIDDLE, LL.D.

Philadelphia:

Roughly stated, the Say's Law claims that total demand in an economy cannot exceed or fall below total supply in that economy. In other words, supply creates its own demand.

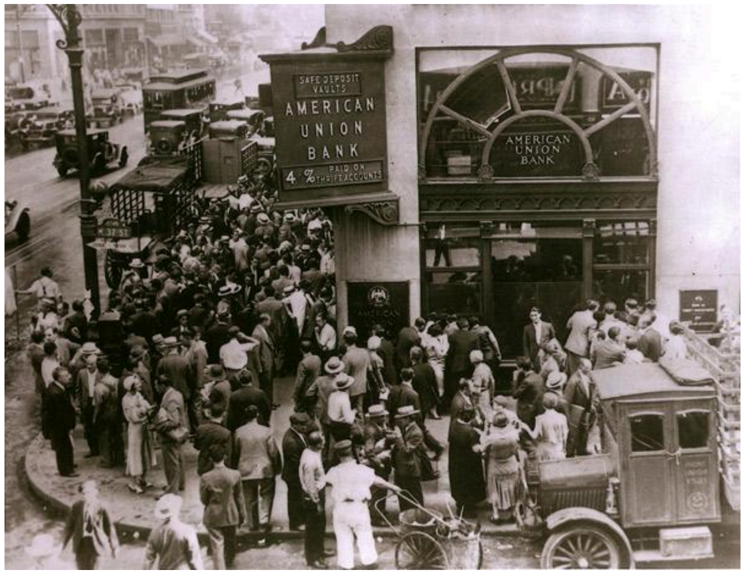
So how does this work? According to Say's Law:

> Supply of labor increases (unemployment) ➔ Wages fall ➔ Demand for labor increases ➔ Supply of labor equals Demand of labor

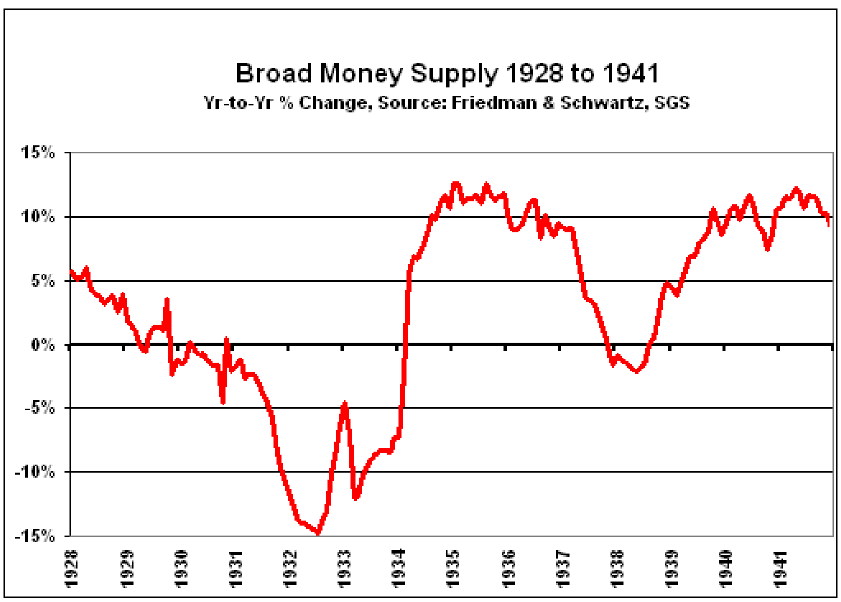
The law affirms Adam Smith's idea that markets self-adjust (under laissez-faire.).

Unfortunately, back in the real world, the high unemployment rate remained well into the 1930s. And to many, it became apparent that the labor market was not adjusting.

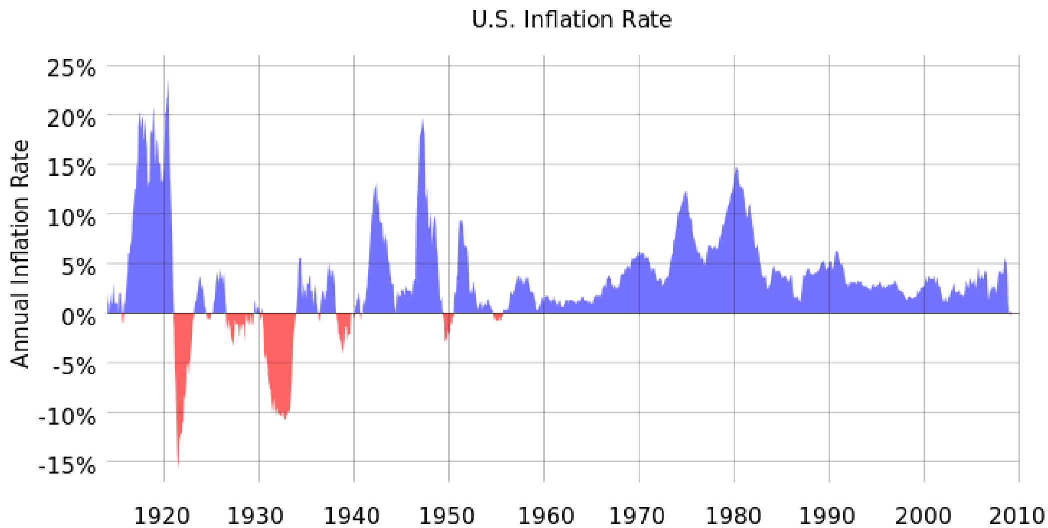
By March 1930, there were 13M unemployed (out of the population of 123M) and one out of three banks closed their doors.



And as banks closed, the money supply in the economy collapsed.We have to wait until our Monetary Policy (lecture) discussion.

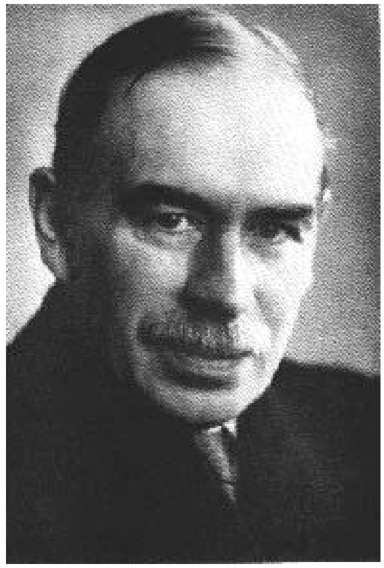


Predictably, as the money supply declined, the general prices also fell. This ushered in a “bad” deflationary period in which prices and income fell together.



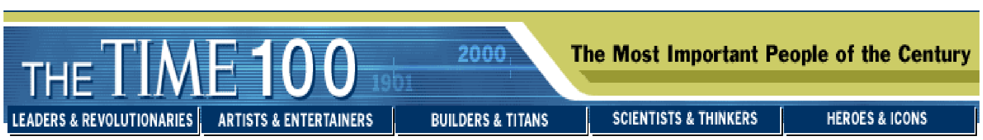
Something had to be done. So It was no surprise that Franklin Roosevelt was elected President in November 1932. In his inaugural address, Roosevelt said, "*This Nation asks for action and action now.*"

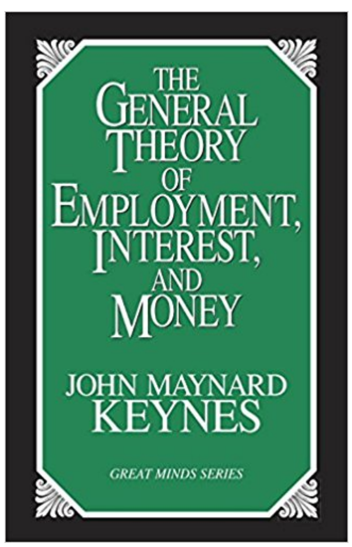
President Roosevelt immediately looked for a "new" idea to deal with the economic slump. And eventually, he found his economist who lived on the other side of the pond. His name was John Maynard Keynes.



John Maynard Keynes (1883 – 1946) was doubtlessly one the most important figures in the entire history of economics. He revolutionized economics with his classic book, *The General Theory of Employment, Interest, and Money* (1936).

Keynes' book is regarded as probably the most influential social science treatise of the 20th Century, in that it quickly and permanently **changed the way the world looked at the economy** and the role of government in society. No other single book, before or since has had quite such an impact.





BOOK I
INTRODUCTION

Chapter 1
THE GENERAL THEORY

I have called this book the General Theory of Employment, Interest, and Money, placing the emphasis on the prefix general.

The object of such a title is to contrast the character of my arguments and conclusions with those of the classical theory of the subject, upon which I was brought up and which dominates the economic thought, both practical and theoretical, of the governing and academic classes of this generation, as it has for a hundred years past.

I shall argue that the postulates of the classical theory are applicable to a special case only and not to the general case, the situation which it assumes to be a limiting point of the possible positions of equilibrium.

Moreover, the characteristics of the special case assumed by ***the classical theory happen not to be those of the economic society in which we actually live, with the result that its teaching is misleading and disastrous*** *if we attempt to apply it to the facts of experience.*

Keynes said the classical idea of markets will self adjust is not only “misleading” but “disastrous” if the idea is practiced.

does not self-adjust…

The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influence, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back.[4]

And with this observation, Keynes launched a revolution in economics. Its central claim is that the Laissez-Faire policy failed. It supposes that:

> Markets do NOT self-adjust. (Why?) **Prices and Wages must be sticky.** Therefore, the economy ended up with long-term surpluses and shortages. Not good.
>
> Therefore, the government must intervene to achieve its public policy objectives, such as Growth, Jobs, and price stability. This is the New Deal, which involves more active government interventions in the economy.

4/ TODAY IN HISTORY

April 8, 1935

Bettmann Contributor / Getty Images

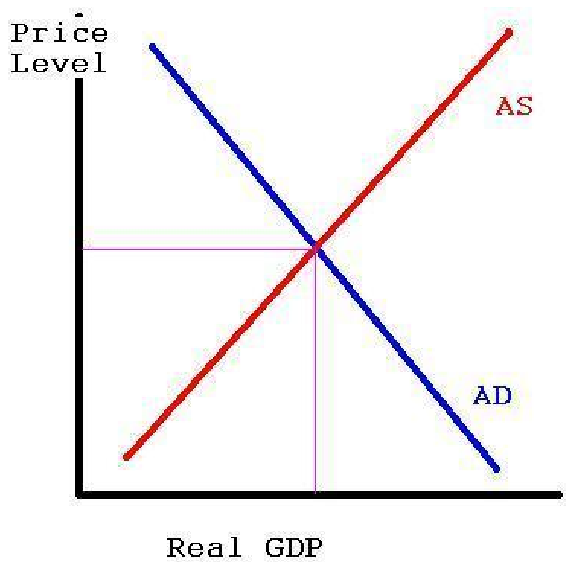
On this day in 1935, Congress passed the Emergency Relief Appropriation Act of 1935, which funded the Works Progress Administration (WPA).

The WPA was part of then-President Franklin Roosevelt's New Deal, designed to help get the nation out of the Great Depression by putting unemployed Americans to work on public works projects.

More than 8.5 million people were employed through the WPA, building 1.4 million roads, bridges, parks, and other public facilities before the program was ended in 1943.

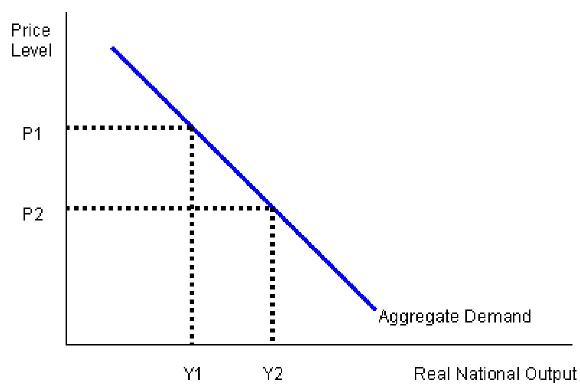
Source: Library of Congress

To understand Keynesian economics, we use the aggregate supply and demand model that we used to understand inflation better.



AD: *the total quantity of output demanded at alternative price levels in a given time period*

AS: *the total quantity of output producers are willing and able to supply at alternative price levels in a given time period*



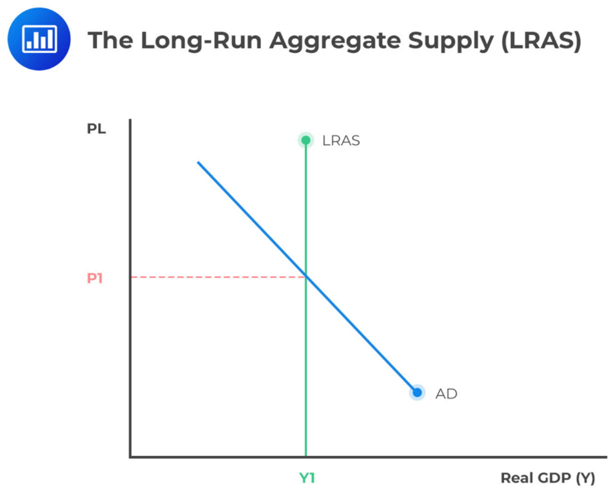
Why does the AD have a negative slope?

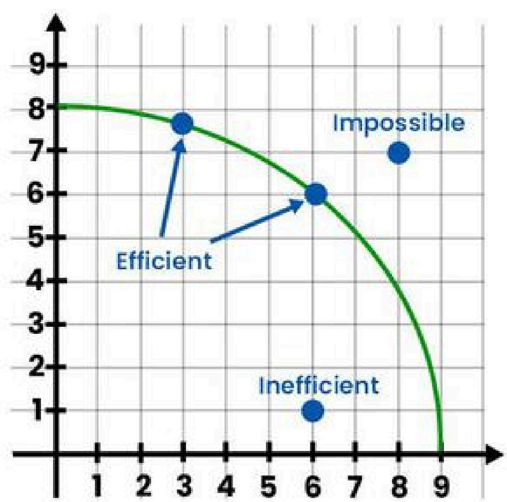
> Wealth Effects (Walmart Effect)
> Price Level declines ➔ Purchasing Power increases ➔ AD increases (more is good)
>
> Foreign Purchase Effects
> Price Level declines ➔ Imports declines ➔ AD increases (via substitution)

What about the AS? The limit or the frontier of what is possible to produce in the long run is a function of its key determinants. They are:

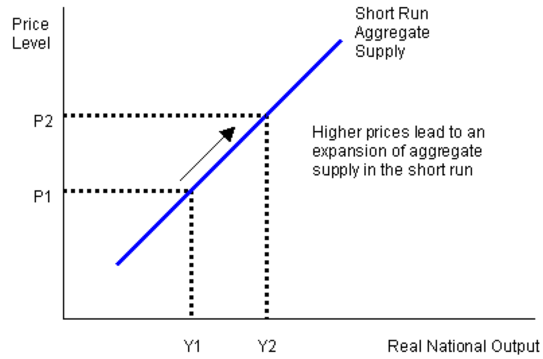
Inputs (mostly labor or the "wage" that is assumed to be "sticky" in the short run.)

Productivity (technology & human Capital)





But in the short-run (SRAS), the SRAS has a positive slope when the economy is "inefficient." Why? Firms are driven by the desire to maximize their profit.



And since Profit = ((P x Q) – Costs), when Price Level increases ➔If Costs (= Wages) is "sticky" ➔ more Output (Y2) ➔ more Profit (until they reach their limits.)

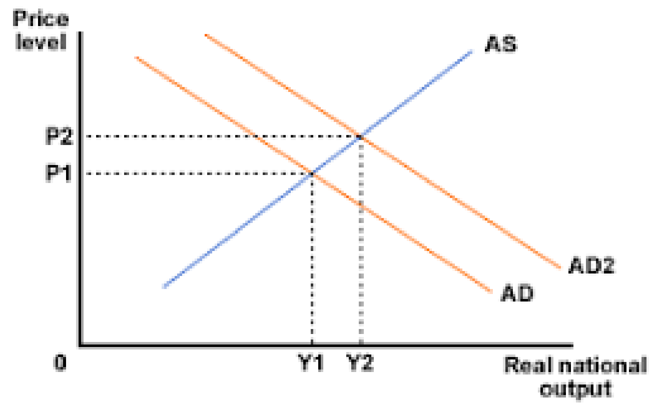
Why are production costs or wages "sticky" in the short run? There are many reasonable hypotheses. They are:

- Unaware of inflation (education)
- Fixed wage contracts (12 months)
- Efficiency wage (wage > marginal product of labor)

In the 1999 book *Why Wages Don't Fall During a Recession*, Yale University economist Truman Bewley concluded, after hundreds of interviews with business insiders, that the key reason for downward rigidity might simply be that pay cuts are too damaging to morale, even more so than outright layoffs. (For more, look over this Richmond Fed brief.)

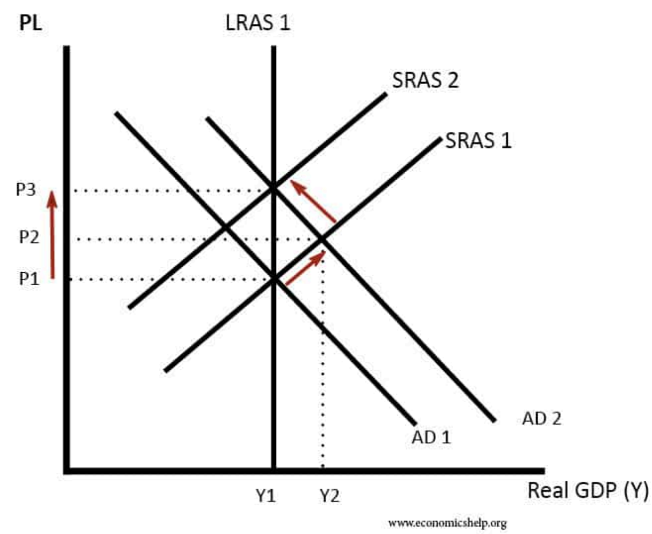
The mechanics of a short-run AS becoming a long-run AS is well explained in this YouTube video. It is worth a look.

According to Keynes, when the economy is operating below its "potential", its AD needs to shift to the right to jumpstart the economy for now (and yes - in the short run). This can be done by affecting one of its determinants. (Recall AD = C + I + G + (X-M))



What about in the long run?

Keynes famously observed, "We are all dead in the long run." So in the long run, the economic growth or expansion is driven by the long-run AS just like the production possibilities frontier (that we studied earlier.)



In our next lecture, we will build on the Keynesian (AD & AS) framework and discuss how the government can help stimulate a downturned economy.

Meanwhile, what are your thoughts on the Covid related stimuli of 2021? Do you think Professor Keynes would have approved?

LEGISLATION ENACTED TO COMBAT THE CORONAVIRUS PANDEMIC

	Cost of COVID-19 Relief Provided So Far (Coronavirus Preparedness and Response Supplemental Appropriations Act, Fammilies First Coronavirus Response Act, CARES Act, PPP and Healthcare Enhancement Act, and Consolidated Appropriations Act of 2021)	Cost of American Rescue Plan	Total Cost of COVID-19 Relief
Support for Small Businesses	$909 Billion	$59 Billion	$968 Billion
Economic Stimulus Payments	$456 Billion	$411 Billion	$867 Billion
Expanded Unemployment Compensation	$561 Billion	$203 Billion	$764 Billion
Public Health and Related Spending	$483 Billion	$174 Billion	$657 Billion
Tax Incentives	$390 Billion	$176 Billion	$566 Billion
Direct Aid to Governments	$150 Billion	$362 Billion	$512 Billion
Educational Support	$112 Billion	$170 Billion	$282 Billion
Other	$418 Billion	$301 Billion	$719 Billion
Total Cost	**$3,479 Billion**	**$1,856 Billion**	**$5,335 Billion**

PETER G. PETERSON FOUNDATION Learn more at **pgpf.org/coronavirus**

MONEY Inflation Add Topic +

Does government spending cause inflation, and did Biden-Harris make it worse?

Daniel de Visé
USA TODAY

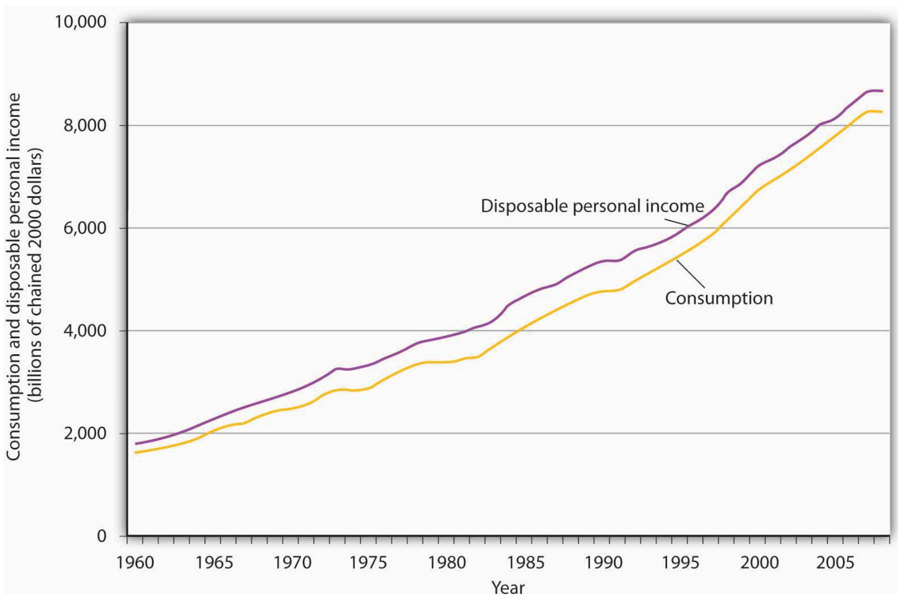
Published 5:02 a.m. ET Nov. 24, 2024 | **Updated 5:02 a.m. ET Nov. 24, 2024**

CPI Data: Inflation Rises by 2.6%

(**Optional Topic**) Do we have an AD model that we can work with? Yes. We have the Keynesian Cross.

As we know, Personal Expenditure or consumption is the main driver of aggregate demand. It is about 68 percent for the US. For this reason, Keynesian economics focuses on consumption (C).

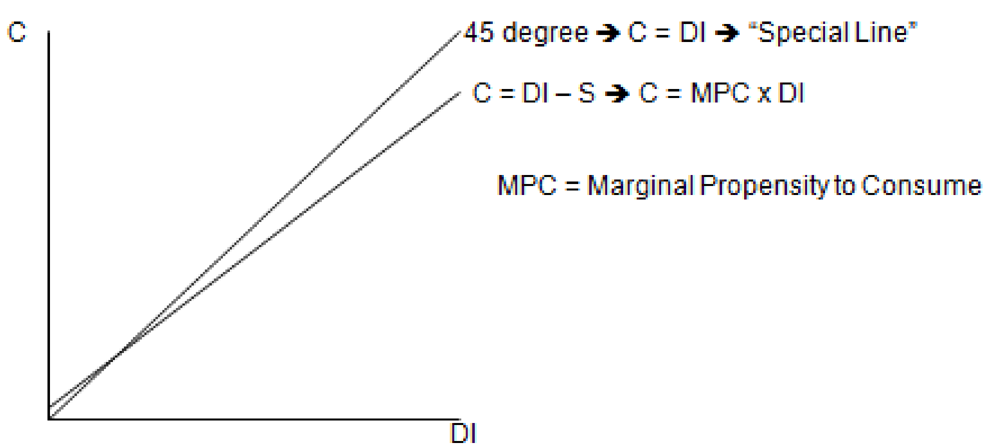
And digging deeper into the model….



The data suggests that the main driver of consumption (C) is Disposable Income (DI). DI is equal to C plus Savings (S).

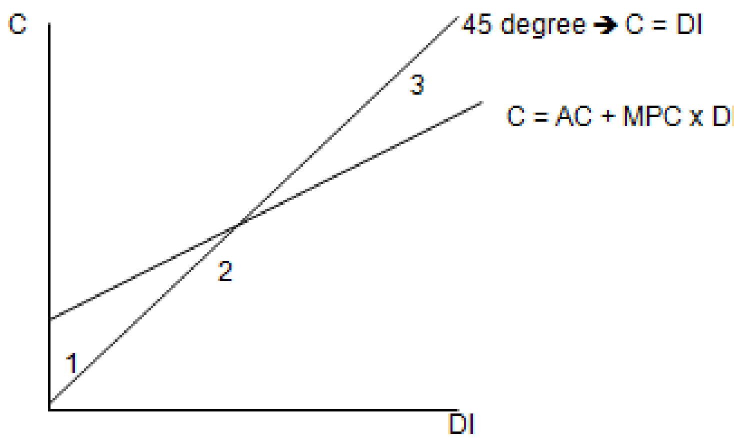
If S = 0 THEN C = DI

If S > 0 THEN C = DI - S



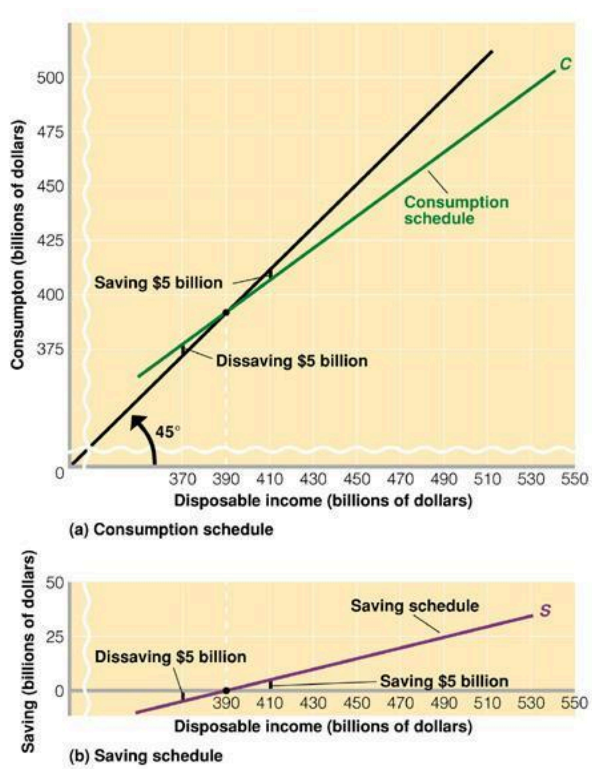
Logically, when DI = 0 then C should be > 0 instead of C = 0. People still have to consume when there is no disable income. Therefore, we assume Autonomous Consumption (AC) is determined by:

Wealth & Credit



What does each numbered area suggest?

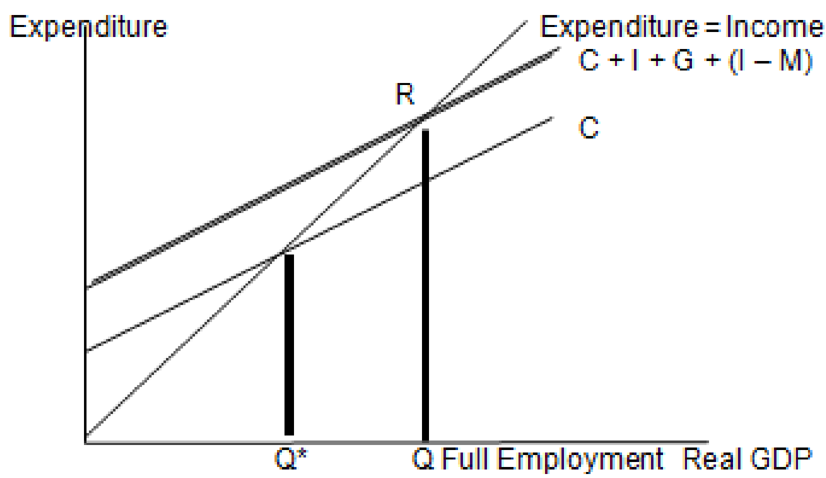
1. C > DI thus Dissavings
2. C = DI
3. C < DI thus Savings



(a) Consumption schedule

(b) Saving schedule

Within this model framework, expenditure equals income or real GDP. However, if AD is less than AS at any given level of Q then real GDP will decline until AD = AS. Note that at Q*, we may have unemployment while the economy is stuck.



What can we do?

Keynes suggested that the government or G should intervene to fill the AD and AS gap at Q*. This gap is also known as the recessionary gap.

> Recessionary gap is *the amount by which the aggregate expenditure schedule must be shifted upward to increase the real GDP to its full-employment and higher employment.*

For In-Person Classes Only…
Group Questions

9.0 What are the four categories of aggregate expenditure (demand)? Give an example of each.

9.1 Calculate the Marginal Propensity to Consume and the Marginal Propensity to Save. Fill in the blanks in the following table. Show that the MPC plus the MPS equals 1.

National Income & Real GDP (Y)	Consumption (C)	Saving (S)	MPC	MPS
$9,000	$8,000			
$10,000	$8,600			
$11,000	$9,200			
$12,000	$9,800			
$13,000	$10,400			

9.3 If planned expenditures are below actual production, what will happen to income? Explain the process by which this happens.

9.4 View a rap battle between Keynes and Hayek (Neo-Classical Economist) and summarize why Hayek thought Keynesians are wrong about their view of economics (in dealing with downturns). [Video]

"Fear the Boom and Bust": Keynes vs. Hayek Rap Battle