

ECONnections : Lesson 10

Student Handouts & Teacher's Guide

"WHATDUNIT?" The Great Depression Mystery

One of the great mysteries of the 20th century is how the U.S. economy could have gone from a state of unprecedented prosperity in the 1920s to one of unprecedented failure in the 1930s. In the 1920s jobs were plentiful, the economy was growing, and the standard of living was rising. By the end of the 1920s, at least twice as many people owned their own homes as had at the beginning, and most of those houses were equipped with electric lights and flush toilets, once regarded as luxuries. Sixty percent of all households had cars, up from 26% in 1920. More teens were attending high school: fewer were working full time. Leading political and economic figures of the day said that the United States appeared to have reached a "permanent plateau of peace and prosperity."

But by 1933 at least one-fourth of the U.S. labor force was unemployed and about the same percentage was working shorter hours, which reduced their incomes. Families were losing their homes and many were going hungry. Adolescents who should have been in high school were riding around the country in freight cars, looking for work. Although 1933 was the low point of what came to be called the Great Depression, the unemployment rate never dropped below 14% until 1941. A decade of hope had been succeeded by a decade of hopelessness.

What happened? The United States possessed the same productive resources in the 1930s as it had in the 1920s. The great factories and the productive machinery that had raised living standards in the 1920s were still present in the 1930s. Workers still had the same skills and were willing to work just as hard as before, and farmers were producing more food than ever. How could life have become so miserable for so many Americans in such a short period of time?

A murder mystery is often called a "whodunit" because we want to know who committed the crime. The mystery of the Great Depression is a "whatdunit"—what caused the Great Depression and what made it so long? A lot of people who are neither historians or economists care about the answer because they fear that such a depression could happen again and they want to know whether such a recurrence can be prevented.

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Clue Sheet #1

Year	CPI	Unemployment Rate	Federal Spending	US Events	World Events	Other
1920						
1921						
1922						
1923						
1924						

Year	CPI	Unemployment Rate	Federal Spending	US Events	World Events	Other
1925						
1926						
1927						
1928						
1929						

Year	CPI	Unemployment Rate	Federal Spending	US Events	World Events	Other
1930						
1931						
1932						
1933						
1934						
1935						

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Year	CPI	Unemployment Rate	Federal Spending	US Events	World Events	Other
1920	20	5.2	\$6.36 billion	Woman's suffrage, Red Hunt in US, bomb explodes in Morgan Bank, anti-immigration movement	Ottoman Empire	KDKA 1 st commercial radio broadcast, Goddard's work with rockets, speakeasies open to get around prohibition
1921	17.9	11.7	5.06 billion	Congress establishes Budget and Accounting Office, US Congress declares WWI over	Washington Disarmament Conference limits naval tonnage, Pledges to protect China's integrity	Vitamins D&E discovered, Law of photo-electric effect discovered
1922	16.8	6.7	3.2 billion	Coal miners strike for 6 months, industry crippled	Mussolini forms Fascist govt. in Italy, Irish Free State proclaimed, Reparations for Germany set at 132 billion gold marks, starts the hyperinflation	Discoveries of insulin and human growth hormone
1923	17.1	2.4	3.14 billion	Harding dies, 2 nd KKK movement spreads violence and controversy	Hitler is jailed and serves 8 months out of 5 years for attempted overthrow, writes <u>Mein Kampf</u> , France and Belgium occupy the Ruhr valley of Germany to enforce reparations	1 st TV transmission tube and 1 st color tube by Russian immigrant, Zworykin
1924	17.1	5.0	2.916 billion	Computer Tab Recording Co. reorganizes into IBM, Teapot Dome Scandal with oil reserves	Lenin dies, Stalin comes to power, Ottoman Empire(1290) becomes modern Turkey	Disney's 1 st cartoon, Hubble explains spiral nebulae, Strep bacteria cause of scarlet fever, X-ray spectroscopy, EKG invented

Year	CPI	Unemployment Rate	Federal Spending	US Events	World Events	Other
1925	17.5	3.2	2.92 billion	Wyoming elects 1 st woman governor, Scopes' trial,	<u>Mein Kampf</u> published.	Baird transmits human features on TV, movie classic <u>Potemkin</u> , <u>Ben Hur</u> Costs 3.95mil to produce, Leica 35mm camera
1926	17.7	1.8	2.93 billion	US troops in Nicaragua, Father Coughlin starts racist and right-wing movement,	General strike in Britain, Chiang Kai-Shek comes to power in China	RCA, GE, Westinghouse establish NBC, Goddard fires 1 st liquid fuel rocket, Book of the Month Club founded.
1927	17.4	3.3	2.86 billion	Holland Tunnel connects Manhattan to Jersey City	German economy collapses. Socialists riot in Vienna, Trotsky thrown out of Communist Party, Lindbergh's nonstop flight	"Jazz Singer" is 1 st talking film, "Show Boat" produced, All electronic TV, Big Bang theory, malaria inoculation
1928	17.1	4.2	2.96 billion	Merchant Marine Act makes trade easier, Hoover elected 1 st	Kellogg-Briand Pact signed, Stalin's 5 yr. Plan collectivizes farms	TV image from Britain to US, GE introduces 3"x4" screen, TV sold for \$75, Disney cartoon with sound, Penicillin discovered, pregnancy test developed
1929	17.1	3.2	3.13 billion	St. Valentine's Day massacre-organized crime, stock prices plummet Nov.-Dec. Investors lose \$30bil.	Jewish-Arab clash in Jerusalem, Trotsky expelled from Russia	CBS founded, penicillin used to fight infections, EEG invented, Einstein unified field theory,

Year	CPI	Unemployment Rate	Federal Spending	US Events	World Events	Other
1930	16.7	8.9	3.32	Hawley-Smoot tariff passed, starts trade war, trade declines sharply deepening the Depression	Brit., France, US, Japan, Italy sign naval disarmament, Nazis gain in elections, Haile Selassie leader of Ethiopia	Code of decency for movies, Pluto discovered, 1 st analog computer built, Human blood groups discovered
1931	15.2	16.3	3.58	Scottsboro trial begins, Capone sentenced to 11 years for tax evasion	Spain becomes republic, Mukden begins Japanese occupation of Manchuria	30,000 TVs in US(9000 in NYC, Frigidaire make refrigerator safe for household use, heavy water discovered, electron microscope invented
1932	13.7	24.1	4.66bil.	Reconstruction Finance Corp., Bonus marchers (vets) confrontation with troops, Amelia Earhart, Lindbergh kidnapping and murder	Nazis lead German elections, famine widespread in USSR	Atom split, subatomic particles discovered, Quantum mechanics developed, function of neurons
1933	13	25.2	4.6 bil.	FDR inaugurated, prohibition repealed, Glass-Steagall Act bans banks from stocks and bonds	Nazi terror begins, Hitler becomes Chancellor, Germany and Japan withdraw from the League of Nations	F.M. invented, hereditary functions of chromosomes speed of light published, atomic theory expanded
1934	13.4	22	6.54 bil.	SEC established, FCC established, Dust storms ruin 100million acres, severely damage cropland	Austrian leader killed by Nazis, Hitler becomes Fueher, USSR into League, Mao begins the Long March with 100,000 soldiers	Fermi bombards uranium & creates new elements, Vitamin K, liver therapies
1935	13.7	20.1	6.41 bil.	2 nd phase of New Deal, social security, better housing, equitable taxes, farm assistance, Huey Long assassinated	Nazis stomp on Versailles Treaty, introduce compulsory military service, Persia becomes Iran, Nuremburg Laws against Jews to prevent racial pollution, Himmler starts breeding program for "super race"	Curies radioactive experiments, DuPont's Carothers invents nylon, aircraft detecting radar.

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Clue Sheet #2

Labor & Employment

Visit the following web sites and answer each of the questions.

Go to Overall unemployment rate in civilian labor force, 1920-2000
(<http://www.infoplease.com/ipa/A0104719.html>)

1. What occurred in the unemployment rate between 1920 and 1934? (be specific)

2. What events might explain this trend. Refer to Clue Sheet #1. (World and US Events)

Go to Employment status by industry 1929 – 1998
(<http://www.infoplease.com/ipa/A0104719.html>)

1. How many persons were employed in 1929? 1932?

2. What happened to the number employed in farming from 1929-1932?

3. What happened to labor in the goods producing sector between 1929-1932?

4. Which employment category was the only one to rise from 1929-1932?

Go to Women in the civilian labor force 1900-1998
(<http://www.infoplease.com/ipa/A0104673.html>)

1. Compare the percentage change from 1900-1940.

2. Which decade experienced the largest percentage increase before 1940?

3. What factors or events might explain that?

Poverty & Income

Visit the following web sites and answer the questions.

Go to Per capita personal income (<http://www.bea.doc.gov/bea/regional/spi/>)

1. What was per capita personal family income in 1935?

2. What happened to per capita income from 1929-1935?

3. What was the impact on farm incomes in total dollars during this time period?

Go to Farm Income (<http://www.infoplease.com/ipa/A0104738.html>)

1. When did government payment to farmers begin?

2. Why did they start?

3. What happened to cash from crops? Livestock?

4. How long did it take farmers to get back to pre-depression income levels?

Go to Retail prices of selected foods in US cities
(<http://www.infoplease.com/ipa/A0873707.html>)

1. Between 1920 and 1935, what happened to the prices of food? (be specific)

2. Why might this be a bad trend for the economy?

Economy & Government

Visit the following web sites and answer the questions.

Go to GDP 1930-1998 (<http://www.infoplease.com/ipa/A0104575.html>)

1. What was the increase in government spending from 1930 to 1940? (in dollars)

2. What percentage of GDP was government spending in 1930?

3. What would explain the increase from 1930 to 1940?

4. How does the percentage in the decade 1930-1940 compare to the percentage of government spending GDP during the last half of the century?

5. What might explain that trend?

Go to Receipts and outlays of federal government, 1789-2005
(<http://www.infoplease.com/ipa/A0104753.html>)

1. What happened to the federal budget between 1920 and 1930?

2. What might explain this?

3. What was occurring between 1930-1935? Why was this happening?

Go to The Public Debt (<http://www.infoplease.com/ipa/A0104572.html>)

1. What was the trend from 1920-1925? 1925-1930? 1930-1935?

2. What events or factors caused these changes?

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Labor & Employment

Visit the following web sites and answer each of the questions.

Go to Overall unemployment rate in civilian labor force, 1920-2000
(<http://www.infoplease.com/ipa/A0104719.html>)

1. What occurred in the unemployment rate between 1920 and 1934? (be specific)

There was unemployment in the years following WWI in the 5-6% range with a big jump in 1921 due to a recession. For the rest of the 20s, the rate was generally below 5% and was as low as 1.8% in 1926 and was only 3.2% the year of the stock market crash. It tripled during 1930, almost doubled the following year and was never below 20% through 1935.

2. What events might explain this trend. Refer to Clue Sheet #1. (World and US Events)

New businesses were developing around new products. Inventions for communication and entertainment began to grow more rapidly. Prices remained relatively stable through the twenties. Federal spending declined because the war was over so people paid less taxes so they had more money to spend on new goods like radios and cars. People were hired to produce these goods. Personal income increased so did consumption and savings. In 1928, many small investors began to put their savings into stocks rather than banks. Because of this trend, beginning in late 1929, many people lost their savings. The amount of money in the US decreased by \$26 billion from the stock market crash. People had to cut back drastically on their spending for new goods. The businesses which produce those goods began to lay people off. Instead of protecting jobs, the Hawley-Smoot tariff restricted trade with other nations who then placed high tariffs on their products. These actions by the governments made the depression worse all over the world. The Nazis were coming to power in Germany and Italy. Japan began to expand into Manchuria. Because of the terms of the Versailles Treaty their economies had been crippled. The unemployment rate continued to rise. Roosevelt began the New Deal. The government got stricter with the banks and the brokers with the Securities and Exchange Commission plus it began to make rules for broadcasting by establishing the Federal Communications Commission. Prices tumbled which meant businesses could not afford to keep workers who again lost jobs and income declined again. Farms and cropland (100 million acres) were destroyed by the dust storms. Because of the low prices for their products, many farmers lost their land and had to move and look for employment which was not available. Federal spending more than doubled from 1929-1935 because of new programs like the WPA, CCC, NRA and Social Security that were designed to put people back to work and to support income levels.

Go to Employment status by industry 1929 – 1998
(<http://www.infoplease.com/ipa/A0104719.html>)

1. How many persons were employed in 1929? 1932?

In 1929, there were 47.6 million employed and 1.6 million unemployed. By 1932, 38.9 million were employed and 12.1 were unemployed.

2. What happened to the number employed in farming from 1929-1932?

Farm employment dropped 300,000.

3. What happened to labor in the goods producing sector between 1929-1932?

Dropped from 13.3 million to 8.6 million.

4. Which employment category was the only one to rise from 1929-1932?

State and local government increased by 200,000.

Go to Women in the civilian labor force 1900-1998
(<http://www.infoplease.com/ipa/A0104673.html>)

1. Compare the percentage change from 1900-1940.

Women's participation increased by about 6%.

2. Which decade experienced the largest percentage increase before 1940?

Between 1930-1940 increased 2.3%.

3. What factors or events might explain that?

Women received the right to vote. They were looked at somewhat differently than before. Though jobs were scarce, there was a need for many families to have two incomes to survive.

Poverty & Income

Visit the following web sites and answer the questions.

Go to Per capita personal income (<http://www.bea.doc.gov/bea/regional/spi/>)

1. What was per capita personal family income in 1935?

\$474

2. What happened to per capita income from 1929-1935?

1929--\$700, 1930--\$620, 1931--\$527, 1932--\$399, 1933--\$372, 1934--\$425, 1935--\$474. Decreased from 1929-1933 and then increased.

3. What was the impact on farm incomes in total dollars during this time period?

Dropped from 7,496,000,000 in 1929 to 2,802,000,000 in 1932 and began to increase slightly to 3,201,000,000 in 1933.

Go to Farm Income (<http://www.infoplease.com/ipa/A0104738.html>)

1. When did government payment to farmers begin?

1934

2. Why did they start?

Because the farmers were losing their land since they couldn't pay their loans. They couldn't pay off their loans because food prices had dropped so much plus the Dust Bowl wiped out 100,000 million acres of cropland in central US. The food supply was in jeopardy.

3. What happened to cash from crops? Livestock?

Both dropped.

4. How long did it take farmers to get back to pre-depression income levels?

Until 1940 for crops and until the war was in full swing for livestock.

Go to Retail prices of selected foods in US cities
(<http://www.infoplease.com/ipa/A0873707.html>)

1. Between 1920 and 1935, what happened to the prices of food? (be specific)

Prices of all food dropped anywhere from about 3% for milk, bread, and round steak to as high as 70% for coffee.

2. Why might this be a bad trend for the economy?

Farmers were not getting enough money to stay in business and businesses that supplied them had to lay off workers and/or close. Land was idle.

Economy & Government

Visit the following web sites and answer the questions.

Go to GDP 1930-1998 (<http://www.infoplease.com/ipa/A0104575.html>)

1. What was the increase in government spending from 1930 to 1940? (in dollars)

\$5.1 billion

2. What percentage of GDP was government spending in 1930?

10.95%

3. What would explain the increase from 1930 to 1940?

Government increased their spending to create jobs which increases household income that is then spent on goods and services which creates even more jobs.

4. How does the percentage in the decade 1930-1940 compare to the percentage of government spending GDP during the last half of the century?

Last half of the century had significant increases in government spending up to 22% of GDP in late 1980s and early 1990s.

5. What might explain that trend?

Many of those dollars were spent on the military for the Korean, Vietnam, and Cold Wars plus there was a significant increase in transfer payments like welfare, social security, anti-poverty programs, etc.

Go to Receipts and outlays of federal government, 1789-2005
(<http://www.infoplease.com/ipa/A0104753.html>)

1. What happened to the federal budget between 1920 and 1930?

Ran huge surpluses.

2. What might explain this?

WWI was over, low unemployment so people tax revenues were high.

3. What was occurring between 1930-1935? Why was this happening?

There was less revenue coming in since so many people were out of work but the government had begun spending to put people back to work.

Go to The Public Debt (<http://www.infoplease.com/ipa/A0104572.html>)

1. What was the trend from 1920-1925? 1925-1930? 1930-1935?

Declined from 1920-1930 then increased by \$12,615,582,794 from 1930-1935.

2. What events or factors caused these changes?

Need to put people to work to increase personal income This, in turn, would increase the demand for new goods and services. Businesses would need more labor so unemployment would decrease.

Henry Ford Begins Production of the Model T in Highland Park

By Steve Cochrane

This article courtesy of The Dismal Scientist produced by Economy.com, Inc.

In 1913, Henry Ford introduced the first successful large-scale industrial use of the moving assembly line at Ford Motor Company's Model T assembly plant in Highland Park, Michigan. This was a seminal event for American industrialization that allowed manufacturing productivity to soar and prices to plummet for commercial and industrial goods. While the assembly line is the primary event that one associates with Ford and the Model T, it is just one of a number of ideas successfully implemented by Ford that changed the way manufacturers operate and changed the way consumer markets are perceived. Because Henry Ford was concerned not only with what he produced, but how he produced it and for whom he produced it, he may have had more influence on 20th century life than any other individual.

Ford's engineering skills first allowed him to produce a car that was more sturdy and powerful than other cars, yet simple to operate. It sold initially for \$825 in 1908, making it a luxury good at the time. Yet it sold over 10,000 units, more than any other model, and allowed Ford Motor Company to earn a sizeable profit. But Ford wanted to sell cars to the masses. To do this, he steadily reduced the price, and demonstrated that while profit margins on individual cars were smaller, the added volume increased profits. From farmers in the Midwest to city dwellers in the East, price elasticity proved to be uniform and consumers snapped up the cars when they became affordable, transforming them from luxury goods to necessities.

Then Ford had to change the way he produced the Model T in order to ramp up production to meet the increasing demand. This led to the assembly-line system that was introduced when Ford Motor Company's new Highland Park plant was built in 1910. While 1913 is customarily regarded as the year when the assembly line was introduced, it was experimented with and improved upon between 1910 and 1913. Without the assembly line, volume could not be increased, prices could not be decreased further, and Ford Motor Company profits would have remained only respectable, at best.

The assembly line, however, had unforeseen impacts on the workforce, which drove Ford toward innovations in workforce management. The drudgery and low pay of the assembly line caused monthly labor turnover to amount to 40% to 60% of the firm's 13,000+ workforce. Training costs became unbearable. Ford solved this in 1914 by raising workers' pay from \$2.38 for a nine-hour day to \$5 for an eight-hour day, and he instituted a profit sharing plan. Productivity rose, turnover fell and profits doubled in two years. Ford was a visionary in his day by seeing the need to pay a wage that would lift a family from poverty, and even allow the worker to buy the product that he or she is making. He is quoted as responding to critics of the salary hike by saying, "Well, you know when you pay men well you can talk to them."

Finally, Ford's willingness to take risks and to finance expansion internally allowed Ford Motor Company to pursue innovative ideas without the intrusive oversight of outside

financiers. In 1903 Ford refused to pay royalties to bankers who owned a patent on an 1879 design of an auto and who also insisted on dictating prices for Ford's automobiles. Following an eight-year legal battle, the courts decided that the patent applied only to cars copied substantially from that 1879 design. Thus, Ford's risky decision paid off, freeing Ford and all other automakers from royalty payments and from the intrusion of the bankers far away in New York. Ford gained further financial independence by maintaining enormous cash reserves at Ford Motor Company and using them to finance expansions of the company, including the Highland Park plant. This freedom allowed Ford to pursue innovative, but untested, techniques.

Henry Ford transformed the economic, social and physical fabric of the 20th century. Manufacturing productivity soared as all industries adopted the assembly line system. Wages increased, allowing workers to buy goods formerly thought of as luxuries. Volume selling at low prices was proved to be profitable. Marketing to the masses became a successful strategy.

Henry Ford's innovations have worked their way through the economy over the past century and they provide us a clue as to the vast changes that may be in store for us in the 21st century. The wave of technology change with the introduction of inexpensive computers and high-tech electronics is similar to the technology change brought on by Ford. The proliferation of stock options as a method of paying workers to put in the long hours of drudgery on computer programming has allowed the workers of the industry to share in some its wealth, just as was the case with Ford. Even the idea of maintaining large cash reserves to finance expansion and maintain independence in decision making is one adopted by Microsoft and other large high-tech companies. We can only guess at where today's technological transformations will take us, and how the newfound wealth that they have created will impact society. But if the impacts will be anything like what resulted from Henry Ford's innovations, the next century will be unbelievably different from anything that a late-20th century imagination can foresee.

Answer the following questions:

1. What were the advantages of assembly line production?

2. What were some problems associated with assembly line production?

3. How did Ford solve the problem of high worker turnover?

4. How did Ford finance his innovations?

5. What impact have Ford's techniques and management practices had on businesses today?

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Answer the following questions:

1. What were the advantages of assembly line production?

productivity soared and prices dropped

2. What were some problems associated with assembly line production?

Drudgery, boring, and low pay caused many workers to quit in short periods of time. Training costs were high. There was an unstable workforce.

3. How did Ford solve the problem of high worker turnover?

He increased pay from \$2.38 for a 9-hour day to \$5 for an 8-hour day. He also began a profit sharing plan. Worker productivity increased, turnover fell, and profits doubled in two years. His workers could afford to buy the cars they produced so that increased demand for their product.

4. How did Ford finance his innovations?

Ford refused to pay royalties to bankers who had financed him for an 1879 design patent and won a court battle that freed not only Ford but also the other car producers from paying royalties to the banks forever. He also maintained huge cash reserves from his profits to finance expansion.

5. What impact have Ford's techniques and management practices had on businesses today?

The introduction of inexpensive computers and the spread of technology has forever changed how modern society functions just as the car changed the lifestyles of the early part of the century. Technology companies have also maintained large cash reserves to finance expansion, research, and development. The payment structures of the high-tech firms have used stock options to have workers share in the wealth created by the goods they produce.

ECONnections : Lesson 10

Clue Sheet #3b

The Federal Reserve Board

By Mark Zandi

This article courtesy of The Dismal Scientist produced by Economy.com, Inc.

The Federal Reserve Act was signed into law by Woodrow Wilson on December 23, 1913. The stated purposes of the act were "to provide for the establishment of Federal reserve banks, to furnish an elastic currency, to afford means to rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes." While certainly a dry statement of purpose, there is arguably no more important institution to the well functioning of the U.S., and even global, economy than the Federal Reserve Board.

U.S. policymakers established the Fed in an effort to stave off the periodic financial panics that plagued the nation from its inception. The Panic of 1907 was particularly severe, as the fragmented and unregulated banking system was unable to keep up with the rapidly expanding industrial U.S. economy of that time. That panic convinced Congress to establish the National Monetary Commission, which put forth proposals to create an institution that would counter these kinds of financial disruptions. The Fed was to be the lender of last resort, a role it continues to play today as evidenced by its recent actions during last year's Asian economic and financial crisis.

The Fed had a somewhat inauspicious start. The 1929 stock market crash and the Great Depression that followed are in part the result of the Fed's policy actions. The Fed tightened monetary policy in the period leading up to the 1929 crash with the stated objective to cool off what policymakers deemed to be an overvalued and speculative market. When stock prices plunged, the Fed failed to step in to restore confidence and financial stability. The resulting rash of banking and corporate bankruptcies and failures was key to the deflation and economic depression that followed.

With the aid of further legislation expanding and clarifying the Fed's objectives, greater and more refined tools for managing monetary policy, and nearly a century of experience, the Fed has become increasingly successful in managing the nation's economic performance. The Fed is now charged with multiple goals, including maintaining economic growth in line with the economy's potential, low unemployment and stable prices. The Fed works to accomplish these tasks through its continuing role as a lender of last resort, open market operations and through its regulation of a large part of the banking system.

While the Fed's role as lender of last resort is perhaps its most important function, it is called upon only infrequently. Its efforts to maintain full employment and price stability through open market operations are much more common and closely followed. Fed policymakers currently target the federal funds rate, the interest rate that the reserves banks are required to hold on their deposits, by buying and selling U.S. government (mainly Treasury) securities. The funds rate, in turn, significantly influences other short-term interest rates, and to a lesser degree, long-term interest rates. Changing interest rates in turn have significant impacts on the economy's growth and ultimately inflation.

The Fed's responsibilities in regulating much of the nation's banking system can also have significant economic impacts. Banks ultimately determine who gets credit and under what terms. Even if the Fed is tightening monetary policy in an effort to slow the economy, it may be unsuccessful if banks are aggressively extending credit to households and businesses by lowering loan standards and/or not passing through to borrowers some of their own higher costs. In this case, the Fed can pressure banks to tighten their lending standards or face their heightened scrutiny.

It is fitting that the 20th century is ending with the Fed seemingly at the top of its influence and success. The U.S. economy is, for all intents and purposes, at full employment, growing at close to its potential and with stable prices. Living standards have never been higher and they are growing quickly. This has occurred despite significant global hurdles, and while the result of many factors, none is more important than the establishment of the U.S. Federal Reserve Board. It is the single most important event of the 20th century American economy.

Answer the following questions:

1. What was the main reason the Federal Reserve Board was established?

2. What is meant when the Federal Reserve is called "the lender of last resort?"

3. What actions did the Federal Reserve take leading up to the stock market crash of 1929?

4. Why is the Fed criticized that made the economic downturn worse?

ECONnections : Lesson 10

Clue Sheet #3b

The Federal Reserve Board

By Mark Zandi

This article courtesy of The Dismal Scientist produced by Economy.com, Inc.

The Federal Reserve Act was signed into law by Woodrow Wilson on December 23, 1913. The stated purposes of the act were "to provide for the establishment of Federal reserve banks, to furnish an elastic currency, to afford means to rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes." While certainly a dry statement of purpose, there is arguably no more important institution to the well functioning of the U.S., and even global, economy than the Federal Reserve Board.

U.S. policymakers established the Fed in an effort to stave off the periodic financial panics that plagued the nation from its inception. The Panic of 1907 was particularly severe, as the fragmented and unregulated banking system was unable to keep up with the rapidly expanding industrial U.S. economy of that time. That panic convinced Congress to establish the National Monetary Commission, which put forth proposals to create an institution that would counter these kinds of financial disruptions. The Fed was to be the lender of last resort, a role it continues to play today as evidenced by its recent actions during last year's Asian economic and financial crisis.

The Fed had a somewhat inauspicious start. The 1929 stock market crash and the Great Depression that followed are in part the result of the Fed's policy actions. The Fed tightened monetary policy in the period leading up to the 1929 crash with the stated objective to cool off what policymakers deemed to be an overvalued and speculative market. When stock prices plunged, the Fed failed to step in to restore confidence and financial stability. The resulting rash of banking and corporate bankruptcies and failures was key to the deflation and economic depression that followed.

With the aid of further legislation expanding and clarifying the Fed's objectives, greater and more refined tools for managing monetary policy, and nearly a century of experience, the Fed has become increasingly successful in managing the nation's economic performance. The Fed is now charged with multiple goals, including maintaining economic growth in line with the economy's potential, low unemployment and stable prices. The Fed works to accomplish these tasks through its continuing role as a lender of last resort, open market operations and through its regulation of a large part of the banking system.

While the Fed's role as lender of last resort is perhaps its most important function, it is called upon only infrequently. Its efforts to maintain full employment and price stability through open market operations are much more common and closely followed. Fed policymakers currently target the federal funds rate, the interest rate that the reserves banks are required to hold on their deposits, by buying and selling U.S. government (mainly Treasury) securities. The funds rate, in turn, significantly influences other short-term interest rates, and to a lesser degree, long-term interest rates. Changing interest rates in turn have significant impacts on the economy's growth and ultimately inflation.

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Answer the following questions:

1. What was the main reason the Federal Reserve Board was established?

It was established to keep bank panics from happening and to keep the economy more stable than it had been by centralizing the monetary and banking systems.

2. What is meant when the Federal Reserve is called "the lender of last resort?"

Banks can borrow money from the Federal Reserve for a short period of time if they have a lack of cash reserves.

3. What actions did the Federal Reserve take leading up to the stock market crash of 1929?

The Federal Reserve tightened up the supply of money leading to the crash to "cool off" a speculative and overvalued market.

4. Why is the Fed criticized that made the economic downturn worse?

As stock prices tumbled, the Fed took a hands off approach and failed to take action to stop the decline. Bank failures and business bankruptcies that followed further undermined people's confidence which then led to a recession turning into the Great Depression.

The Stock Market Crash of 1929

By Michael Boldin

This article courtesy of The Dismal Scientist produced by Economy.com, Inc.

October 24, 1929. Black Thursday. On this infamous day, the New York Stock Exchange was hit with chaos that quickly amounted to a 30% decline in the value of the Dow Jones Industrial Average. This loss marked the end of the Roaring Twenties, when many believed that the only direction for the stock market and the entire economy was up. Soon the U.S. entered into its longest and deepest economic slump, the Great Depression, and it took 25 years for the Dow to return to its previous high. While few believe that the crash on Wall Street in 1929 was the root cause of the Depression, it was an important factor in putting the economy on a road of instability and setting the stage for other problems and mistakes that produced a large black mark on this country's economic and cultural history.

Few have personal memories of the 1929 crash, but the event still colors the play of cautious investors. In a matter of hours, thousands saw their fortunes sink, turning previous paper millionaires into destitute paupers. Popular legends report numerous suicides, and there were a few highly visible and documented cases on October 24 and the weeks that followed. When the carnage ended and the market reached its low point in mid-1932, the Dow, a stock index built upon the highest quality corporations in the world, was down almost 90% in value.

To fully appreciate the impact of the crash, it is important to also look at the bull market of the 1920s and how Wall Street operated at the time. In the 1920s, many of the Dow stocks rose more than five-fold in value, enticing those with little knowledge of the financial aspects and risks of stock trading to try make a quick fortune on Wall Street. One notorious example of the exuberance was an article in the August 1929 issue of Ladies' Home Journal titled "Everybody Ought to be Rich" that claimed America was entering a golden age where returns of over 20% per year on stocks would be common.

Numerous individuals of modest means took interest and bought stock on margin in the late 1920s, putting up as little as 10% of the cash price, borrowing the remainder from a brokerage firm. As long as the market rose, everything was fine. But whenever the market showed a significant downward blip, margin calls were triggered that forced those that had highly leveraged their stock purchase to sell at a loss. These forced sales caused many to unexpectedly lose all of their savings. The stock market saw several large swings in late 1928 and early 1929 that should have warned investors of the inherent risks in stocks, but few took heed.

It is estimated that the drop in stocks in late 1929 was worth \$30 billion, which was about 30% of GDP at the time. Clearly, this had a large negative impact on the economy and contributed to the banking panic and Great Depression that followed. There were a few useful outcomes, however. Before the crash, security regulations were either lacking or rarely enforced, and stock brokers regularly hyped dubious firms. In 1934, after Congressional hearings on the problems, the Securities and Exchange Commission (SEC) was established to police Wall Street behavior and protect investors from fraud.

Also, after 1929 many more economists and financial experts became interested in studying techniques for properly valuing stocks and giving advice on how to avoid financial panics. Their research has added to our knowledge about the economy and is at least partially responsible for the greater stability in many markets.

A long-lasting negative effect of the 1929 crash was that many were turned off permanently toward stock investing. Few seem to know, however, that a purchase of diversified stocks even at their peak in 1929 would show a very healthy return (if held to today), especially compared to supposedly less risky bonds and bank CDs that historically have trouble keeping pace with inflation.

Nonetheless, despite the high, long-run positive returns that stocks can show, many ask whether another crash could happen? In one sense, it already has. On "Black Monday," October 19, 1987, the Dow lost 23% in value. The difference between this case and 1929, however, was that the market soon stabilized and a year later it was hitting new highs. Black Monday of 1987 had little lasting impact on the economy, save for the adoption of additional rules for how Wall Street operates during a sudden decline. Still, some see stock prices as overvalued in 1999; broad stock indexes such as the S&P 500 show price-earning ratios of almost 35 compared to the historical average of 15. Therefore, a decline of 30% or more to move closer to historical fundamentals is conceivable, especially if some of the high-flying Internet stocks are hit with unexpectedly bad revenue and earnings news. However, it would surely take a second Great Depression to match the problems surrounding the 1929 crash that pushed stocks to one tenth of their previous high.

Answer the following questions:

1. What factors bid stock prices up during the 1920s creating the "bull market"?

2. How did the "bull market" unravel?

3. What was the financial impact on investors and what did this do to the economy?

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Answer the following questions:

1. What factors bid stock prices up during the 1920s creating the "bull market"?

Stock prices rose more than 5 times in value which attracted many savers who had little idea of how the market operated. Media hype like "Everybody Ought to be Rich," from the Ladies Home Journal and others encouraged people to get into the market. Many bought their shares with borrowed money and paid as little as 10% down.

2. How did the "bull market" unravel?

When the value of their stock declined, they did not have the money to pay back their loans. The banks and the brokers who had loaned them the money to purchase the stocks went bankrupt. Savings were wiped out and the wealth of the country dropped significantly.

3. What was the financial impact on investors and what did this do to the economy?

An estimated \$30 billion of lost wealth, which was about 30% of GDP at the time. This led to a decrease in demand for goods which meant that workers lost their jobs. With declining incomes, overall demand kept decreasing, prices fell, and the unemployment rate increased.