



# **Modern Marvels The Stock Exchange**

The History Channel, 1998  
Terry FitzPatrick, Writer/Producer/Director

## **OPENING TEASE**

Wall street footage, street sign, trading floor	<b><u>Narrator:</u></b> It's only seven blocks long, but this may be the most important street on earth. Wall Street, where the economic health of the world depends on a high-stakes opera of hope, risk and ambition.
Paintings of early stock trading	This is the story of the men who built America's stock exchanges--history's most intricate money machines.
stock tickers, telegraph key, modern brokerage trading floor	From the early days of the ticker and telegraph, to the age the internet, the stock market has been a masterpiece of technology and organization.
Portraits: Morgan, Gould; footage of oil wells and railroads	Some would use these tools to become the most powerful men in America. Their exploits would fuel the greatest economic expansion ever known.
Footage of 1929 crash	Others would wind up in ruins, their excesses plunging millions into poverty.
Old trading footage, flags, bombing at NYSE, trading frenzy foogate	Wall Street is America at its best and its worst. A platform for patriots, and a target for terrorists. The Stock Exchange has been the arena for the bloodiest battles in American financial history.

## **Modern Marvels Series Open**

## **ACT ONE**

Opening bell/trading footage

**Narrator:** Every business day, more than a billion shares change hands on America's major stock exchanges. Nearly 90-million dollars worth of stock changes hands every minute. Brokers constantly scramble to do their client's bidding in the battlefield of high finance.

Arthur Cashin Jr.

**Cashin:** "The floor's a rather unique kind of place. It's a place where people who have known each other many years, each day get together to compete on behalf of clients they've never met."

Managing Director, Paine Webber Inc.

AMEX exchange floor

**Narrator:** A stock exchange is actually two markets in one. First, it's a place where a new company can raise millions--or billions--of dollars overnight, by offering ownership of the business to hundreds of thousands of small investors. These pieces of ownership are called "shares" of "stock." Second, the exchange is the place where people can sell their stock to someone else whenever they wish.

**Cashin:** "You can be in the airline business today and you can get out of that and you could be in the automobile business tomorrow. And that ability to enter and exit and get paid back for your investment in those shares creates a great market for the initial investment. People are more willing to put that money up if they know that some time in the future they'll be able to sell out their interest and go onto the next best-thing."

contemporary manufacturing footage

**Narrator:** 40-percent of American families own stock in U.S. companies, either directly or through mutual funds and pension plans. The exchange lets people know how these companies are doing by allowing a free market to place a value on their stock.

Richard Sylla

**Sylla:** "Well I like to say that a stock market is a market in information. I mean, it uses information from outside to evaluate companies, but then the process of the stock market creates new information by putting a price on things that everybody in the country can read."

Economics Professor, New York University

AMEX footage

**Narrator:** The modern market is a tightly-regulated and finely-tuned institution. But this wasn't always the case. Centuries ago, investing in stocks was chaos.

dip to black

Segment title: Rogues and Racketeers

Drawings of acropolis and Greek ships in port

**Narrator** The roots of investment trace back to ancient Greece. Ship captains offered part of their profits to those who'd share the risk of financing a trading voyage.

Drawing of shipwreck

These were all-or-nothing gambles. A ship might return with riches, or might never return at all.

Drawing of men gathered in roman senate

The Romans sold stock as well, for huge construction projects that were beyond the means of a single businessman.

Drawing of aqueduct

Stockholders made tidy profits by investing in companies that built roads and aqueducts for the government.

Illustration of Dutch wharf, 1600s world shipping map

Investing took a big step in the 1600's in Holland, home of the Dutch East India Company. Like the Greek seafarers before them, the Dutch needed capital for international trade.

Illustration of Dutch ships and early investors

But this investment was different. People bought a stake in the company, not in a single voyage. This led to wild speculation, because investors could sell their shares to one another over time. The price could rise or fall on the vaguest of rumors, spreading panic in the world's first stock exchange.

Robert Sobel

Professor of Business History

Hofstra University

**Sobel:** "The people who lost the money were the nobles, the merchants, a class of people who in effect were the money people of the time, who could afford to speculate. It didn't affect the economy. There was no problem there. And as far as the average person was concerned, when the crash came, he said to himself, it's a good thing it happened. These people deserved what they got. They're a bunch of gamblers."

Illustration of auction, Portrait of John Law

**Narrator:** The reputation of stockbrokers sunk even lower during the 1700's. In Paris, an escaped murderer sold stock. John Law swindled the public with worthless shares in fictitious gold mines.

Chicken and sheep drawings

In London, brokers lured investors with stories of a secret device that could turn chickens into sheep. The value of these stocks would skyrocket until reason took hold.

**Sobel:** "Nothing's being done, but the shares are becoming more and more valuable as time goes on. Eventually, one person says, how can these shares possibly be worth five thousand pounds. It's ridiculous. And he starts selling. And another person sells, and it goes to four thousand pounds and now a panic sets in and the whole thing falls apart."

London 1800's, Statue of Liberty

**Narrator:** Despite the unscrupulous brokers, stocks helped make Europe the colonial and economic powerhouse of the world. They would soon do the same for America.

dip to black

Segment title Wall Street is Born)

NY wharf, drawing of protective wall

**Narrator:** Wall Street got its name when New York was a tiny colonial outpost. In 1653, pilgrims built a wall to keep out Indians.

Illustrations of early Wall Street, slave auction, pillory

100 years later, the wall was gone. But the path that ran beside it had become the heart of New York's commerce and society. Here was the auction block for slaves, and the pillory for public humiliation.

Footage of Washington Statue on Wall St.

George Washington was sworn in as the first U.S. president on Wall Street in 1789.

Painting of street stock traders

Wall Street was also where merchants gathered beneath a buttonwood tree to auction-off stock in banks and mines, making a commission on every sale.

color photo of buttonwood agreement

This open-air market lasted until 1792, when 24 merchants signed a document known as the "buttonwood agreement." The pact was an effort to avoid government regulation of street auctions. It also blocked newcomers from the business.

**Sobel:** "And a group of auctioneers, the most powerful ones, say: you know, anyone's coming into this market. We're losing business to these people. So let's form an organization called the New York Stock and Exchange Board--in that tavern over there. And we'll have a door. And we'll keep these people out."

Drawing of Tontine

**Narrator:** The brokers met inside the Tontine Coffee House for two formal auctions per day. The public was not allowed. If you wanted to buy or sell stock, you had to hire a broker to do it.

Marshall Blume

**Blume:** "What it did is, it did one thing. It made the trading of stocks less public. So the public had less information about what was going on. In the open auction system, where it was, everybody could hear. People knew more about what was going on."

Professor of Economic Markets

University of Pennsylvania

Illustration of auction trading

**Narrator:** These indoor sessions, where a central auctioneer sold stocks one-by-one, allowed brokers to regulate themselves to prevent fraud and abuse.

Photo of trading register page

Only reputable stocks were traded...and the sales were recorded. These procedures created an air of respectability.

**Sylla:** "You changed something from mere commerce of hocking the wares on the street. You put it indoors and got a certain group of people who knew each other. You're moving from a trade or ordinary business to a profession."

Spanish coins on satin background

**Narrator:** During the auctions, prices were quoted in increments of one-eighth of a dollar, holdover from the days when people carried Spanish milled dollars and cut them into pieces-of-eight.

Photo of stock registry pages

Only 30 companies were traded inside the exchange: banks, cargo insurance companies, construction firms that built bridges and piers. Only a handful of fearless investors dared buy them.

**Sobel:** "Many people were afraid of stock because if the company went bankrupt the stock owners could lose everything. So stocks were for two kinds of people: outright speculators and people who were trying to take control of a company."

Drawing of street trading scenes, men fighting

**Narrator:** The struggle for respectability on Wall Street brought only limited success. With time, the trading of less-reputable stocks resumed on the street, among brokers who weren't allowed to join the exchange. Here, disputes were settled with fists.

1800's Stock Exchange Illustration, railroad footage, stock ticker

Big changes, though, were in store for Wall Street. America's westward expansion would soon spark an explosion of activity. And technology would speed-up the pace of business beyond anyone's wildest dreams.

dip to black

## **ACT TWO**

early agriculture footage, early industrial footage

**Narrator:** America changed dramatically during its first hundred years, from a nation of farms, to the world's industrial giant.

1800's Wall St. illustration

At the heart of this transformation was Wall Street--known as "the arena of the bulls and bears."

Segment title: Bulls and Bears

"Bulls & Bears" Postcard from 1883

**Narrator** Several legends describe how the terms "bull" and "bear" found their way to Wall Street. The most dramatic tale involves a style of bullfight in the old Wild West.

illustration of a bear, footage of bull, sculpture of bull and bear in combat

A thousand-pound grizzly would be chained to a stake in a bullfight arena. Then, a bull would charge. The bull could win the contest by thrusting upward with his horns. The bear could survive by wrestling the bull down, breaking its neck.

Drawing of men dancing on exchange floor

On Wall Street, "bulls" were brokers who expected stock prices to rise.

Drawing of shady looking traders

"Bears," were traders who anticipated drops in the market, and many bears used the declines to outwit other investors.

Robert Sobel

**Sobel:** "In those days, if you were on Wall Street, you had a dark side. Wall Street was no place for amateurs. There was no federal government on Wall Street. The state government didn't have much to do. The rules were very few and far between. In other words, it was a jungle."

Professor of Business History

Hofstra University

Photo of Green

**Narrator:** The "bulls" included colorful figures like Hetty Green, whose severe appearance and miserly character earned her the nickname "the witch of Wall Street." Green became the world's richest woman by investing in railroads.

railroad locomotive whistle

rail construction stills, montage of railroad stock certificates

America's railroads were among the most ambitious engineering projects in history. Railroad stocks fueled a frenzy on Wall Street.



Marshall Blume

Professor of Financial Markets

University of Pennsylvania

**Blume:** "Up until the railroads, corporations were small little ma and pa shops who didn't need a lot of capital. But when you're building a railroad, you need to assemble a lot of money. And at that point, the stock market became very important."

coal train

**Narrator:** With shrewd rail investments, Hetty Green amassed a fortune of 100-million dollars, the equivalent of nearly two billion dollars today. Her advice to others was simple.

Photo of Green

**Actress:** "There is no great secret to fortune making. All you have to do is buy cheap and sell dear, act with thrift and shrewdness, and be persistent. Hetty Green."

Drawing of old exchange building, drawing of new building site

**Narrator:** To accommodate the railroad boom, the New York Stock Exchange moved several times in search of larger quarters, settling in 1865 in a building near the corner of Wall and Broad.

drawing of traders on the floor, drawing of underground vaults

To create a pleasant atmosphere, the building's ventilation system wafted perfumed air across the crowded trading floor. To protect stock certificates, the basement housed hundreds of vaults.

Drawing of frenzied trading

By 1870, the old system of auctioning stocks gave way to a free-for-all. Brokers roamed the floor making deals throughout the day. In this crowd, were ruthless marauders, known as Wall Street "bears."

John Prestbo

Markets Editor, Wall Street Journal

**Prestbo:** "The markets in those days were--particularly the stock market--was an arena for the gunslingers, the takeover artists, the robber barons. This was their playground, and that's where they ran prices of stocks up and down to suit whatever shenanigans they were trying to pull at the time."

Gould portrait

**Narrator:** The most notorious bear was a former store clerk who became the market's most detested raider.

Richard Sylla

Economics Professor, New York University

**Sylla:** "Jay Gould was one of the most famous speculators on Wall Street. He was called the Mephistopheles, you know, the devil of Wall Street because he was always looking out for number one and not really thinking so much about the companies. That's what people say. I think he was also interested in building up the value of some companies, but he was a manipulator."

Gould seated with other men

**Narrator:** Gould earned his seat among the kings of Wall Street by mastering the "short sale," a technique to make money when a stock went down in price.

graphic

Gould would persuade unwitting investors to loan him their shares at a small rate of interest. He would immediately sell them at the exchange. Gould then published vicious rumors about the company, in a newspaper he owned, in order to drive its stock price down. He bought the shares back at the lower price, and returned them to their owner. His profit was the difference between the price he received when selling, and the price he later paid to buy the stock back.

Gould portrait

The fact that a company and its shareholders might be ruined in the process, seemed of no concern to Gould.

Photos of curbstone brokers on street

The "Bulls" and the "Bears" made Wall street a rambunctious place. The street itself remained a busy marketplace for the so-called "curbstone" brokers who continued to trade the stocks of smaller companies out-of doors until they formed the American Stock Exchange in the 1920's.

Photo of early Wall St. Panic

The bull-and-bear-struggle also made Wall Street dangerous. Every 20 years, the street would fill with investors panicked over a crash in prices.

Photo of empty exchange, WWI footage

Sometimes the exchange was forced to close for days. The outbreak of World War One sparked a panic that closed the market for more than four months.

dip to black

Segment title: The Information Edge

recreation of hand sending morse code on a telegraph key

**Narrator** In 1832, a simple device revolutionized the stock exchange. The telegraph allowed news from distant cities to flash across the United States.

Photo of man with telegraph

In the world of finance--where information is power--the telegraph was a godsend.

Photo of Morse, still of telegraph operators, still of Wall St. strewn with wires

The telegraph's inventor, Samuel Morse, opened a demonstration office near the stock exchange, charging brokers 25-cents to see his invention. Soon after, Wall Street was a tangle of telegraph wires. The telegraph turned New York into America's financial capital, by eliminating the need for regional markets in other cities.

**Sobel:** "The telegraph makes it possible for New York to become a central marketplace. At one time, we had dozens of stock exchanges all over the country. There was a stock exchange in Albany, there was a stock exchange in Buffalo. But once the telegraph goes to Albany and Buffalo from New York, they disappear."

footage of stock ticker, ticker tape symbols

**Narrator:** The stock ticker was the next innovation. Created in 1867, the ticker printed telegraph signals onto a narrow paper tape.

stock brokerage with tickers

The ticker brought up-to-the-minute prices to brokers throughout the nation. For the first time, people outside the exchange could tell what was going on.

issue one of WSJ, Portraits of Dow and Jones, graph of stock average

July 8, 1889. Another milestone. Issue number one of the Wall Street Journal. The price: two cents. Charles Dow and Edward Jones raised the standard of financial journalism with their new publication. The most popular feature was the daily index of twelve stocks: known as "The Dow Jones Industrial Average." By analyzing the performance of key companies, such as American Sugar, U.S. Rubber and General Electric, the "Dow" became a stock market barometer.

	<p><b><u>Prestbo:</u></b> "It made sense out of what was perceived as chaos. In the daily jumble of up-an-eighth and down-a-quarter, it was hard to tell whether stock prices were generally moving up or down. With the Industrial Average, you could keep your eye on the long-term trends and not be confused by the short-term static."</p>
woodcut montage of ticker tape watchers and market bidders	<p><b><u>Narrator:</u></b> The ticker, the telegraph, and the Wall Street Journal were powerful tools that opened the world of stocks to the general public.</p>
Dip to black	
Segment title:	
The Most Powerful Man in America	
Young Morgan photo	<p><b><u>Narrator</u></b> The most powerful man in America was the son of a prominent banker, who made his own mark in history by using the stock market to become the undisputed king of corporate mergers. His name: J.P. Morgan.</p>
railroad footage, factory footage, steel footage	<p>Morgan combined hundreds of independent railroads and factories into coast-to-coast monopolies. Morgan's greatest achievement came in 1901 when nine companies joined forces to become U.S. Steel.</p>
U.S. steel stock certificate	<p>It was the world's first billion-dollar corporation, with stock so valuable it boosted the Dow Jones Average by 500-percent.</p>
Morgan photo	<p>J.P. Morgan was a stern, autocratic man who never gambled and based his decisions on business fundamentals. To protect his customers, Morgan insisted on a role in managing every company he created.</p> <p><b><u>Sylla:</u></b> "If he sold you a security, a stock in a railroad company, if the railroad company got into trouble he would move in and try to improve the situation. He wouldn't say: 'well, you know, that's tough, you bought the stock and you know what the risks were, I'm done with it.' He wouldn't. He'd say: 'I sold you that security and I thought it was good. Turns out it's not so good. So I'm going to get involved in that railroad and I'm going to make it good.'"</p>

Morgan portrait

**Narrator:** Morgan controlled 341 seats on the boards of more than a hundred different companies. Investors respected Morgan, but the public did not.

Railroad footage, farmers footage, child labor still photo

His railroad monopoly raised shipping prices, hurting farmers. Morgan supported child labor and opposed labor unions.

**Sylla:** "Now some people said that he had too much power, he had too much control over industry, he was going to use all of American industry not for the benefit of America but for the benefit of J.P. Morgan. Well, I think that's a misreading, but it shows you how Americans are always suspicious of concentrations of financial power."

TR. Speech footage

**Narrator:** President Teddy Roosevelt used anti-trust regulations to bust-up parts of Morgan's empire.

Funeral still

But when Morgan died in 1913, he received a funeral befitting royalty. The stock exchange closed for two hours as his hearse passed by.

**Sobel:** "His death was treated like the death of a monarch. In other words, big funeral procession, front page news all over the world. Editorials--one editorial saying he was a monster, thank God he's dead. Another editorial saying the great age has passed and we have to find someone like him around. The only trouble was there was no one like Morgan. He was *sui generis*. He was just by himself."

bombing aftermath photos

**Narrator:** Some hated Morgan so deeply that his company became the target of a terrorist bomb seven years after his death. On September 20th, 1920 a wagon loaded with explosives killed 30 people and injured 100. The entrances to the Morgan Company-- and the New York Stock Exchange across the street-- were littered with bodies. The crime was never solved.

1920's NYSE trading floor footage

Wall Street quickly recovered from the 1920 blast, but more shocks were ahead. The biggest bull market in history was coming. So was the biggest crash.

1929 panic footage

dip to black

### **ACT THREE**

Segment Title: America's Spending Spree

1920s footage, parade, ford factory, movies,  
phonograph

**Narrator:** America had never seen anything like the 1920s. World War One had ended in victory. Factories were booming. Families had money to burn.

Robert Sobel

**Sobel:** "They go to the movies. They had a phonograph. The family might have had a car. All things are changing and getting better. Much better."

Professor of Business History

Hofstra University

NYSE exterior and interior footage

**Narrator:** By 1920, The New York Stock Exchange--a private institution--looked more impressive than many government agencies. The exchange had torn down its building at the turn of the century to construct a larger one that projected an image of strength. The new trading floor was enormous. Each stock was now traded at a particular spot--called a post. Steel stocks were clustered at one post. Railroads at another. Auctioneers--called "specialists"--controlled the bidding.

Ticker tape footage

When a sale was made, clerks would rush details of the transaction by pneumatic tube to the ticker-tape room, where typists would relay the news to the world. In the 20's, the exchange was a place of glamour and wonder.

Harold Geneen

**Geneen:** "I started on the floor of the New York Stock Exchange as a page in 1926, having just graduated from prep school, and I was 16-years-old at the time. It was an exuberant period. I thought it was kind of lively. A lot of fun."

Former Chairman, ITT

people with radio, GE stock certificates

**Narrator:** Stocks were becoming a national pastime. Americans bought millions of radios, and shares in the company that made them.

cars roll off assembly line, GM stock  
certificate

As cars became popular, so did auto stocks.

men counting stock certificates

The demand for stocks pushed prices through the roof. Between 1924 and 1929 the Dow Jones Industrial Average shot-up more than 300-percent.

**Geneen:** "You had a lot of people in the market that knew nothing about the market except they were going to make some quick money. And the thing was obviously overblown."

men counting stocks

**Narrator:** Unscrupulous brokers made things worse by pressuring investors into buying questionable stocks.

John Prestbo

**Prestbo:** "There was a lot of opportunity for people to believe in what they were being told. And there were a lot of people there willing to take advantage of telling them that this company or that stock or something was going to just really go gangbusters."

Markets Editor, Wall Street Journal

men counting stock certificates

**Narrator:** Even more dangerous: many investors bought stock on credit--known in the trade as buying on "margin."

**Sobel:** "You could buy stock if you were a good customer for ten-percent margin. So, if you wanted to buy a share of hundred-dollar stock, you could put up ten dollars and the stock itself became collateral for a loan for the other ninety dollars."

stock exchange interior

**Narrator:** The widespread use of credit--and the tremendous rise in stock prices--made some investors wonder how long the good times could last.

portrait of Merrill

In 1928, stockbroker Charles Merrill of the firm Merrill-Lynch, sent a bluntly-worded warning to clients.

re-creation of typing the letter on an old manual typewriter

**Actor:** "Now is a good time to get out of debt. We do not urge that you sell securities indiscriminately but we do advise, in no uncertain terms, that you take advantage of present high prices and put your own financial house in order. Charles E. Merrill."



dip to black

Segment Title: Panic and Ruin

Wall St. exterior footage

Brokers on phone

graphic

men walking into the exchange, opening bell

Arthur Cashin

Managing Director, Paine Weber Inc.

trading footage panic

**Narrator:** Disaster struck Wall Street in October of 1929. Consumer spending on big-ticket items hit a slump, causing several key stocks to decline. The drop sparked a rash of "margin calls," where brokers demanded that investors put more cash into their stock-market accounts.

This was the risk of buying stock on credit. When a stock shrinks in price, it's no longer valuable enough to be collateral for the loan. Investors must put-up cash--or "margin"--to even the scales. If they don't, their account will be liquidated.

October 24, 1929. Thousands of investors failed to come up with the necessary cash by the time their brokers entered the exchange. When the opening bell rang at 10 a.m., the liquidation sale began.

**Geneen:** "Well it started off as I recall like a busy day, and pretty soon it got worse and worse."

**Cashin:** "Suddenly it appeared that everyone wanted to sell and no one wanted to buy. And there was a sense of frenzy."

**Narrator:** The credit binge that had built-up the market, was suddenly eating through it like a virus. The imbalance between sellers and buyers pushed all stock prices lower, forcing margin calls on other investors--and more liquidation.

**Sobel:** "So it's a cascading effect. In other words, selling causes selling causes selling. And no one can see the bottom."

**Geneen:** "You just got a lot of people yelling and screaming. The place was bedlam. I can't describe it except to say that it was out of control."

ticker tape footage	<b><u>Narrator:</u></b> So many shares were sold so quickly that the ticker was running four hours late.
footage of investors in front of the exchange	Thousands of investors flooded the financial district, desperate for news.
Richard Whitney still photo with arm raised	And, suddenly, there was hope. Richard Whitney, vice president of the exchange, met with the nation's top bankers and marched onto the trading floor.
	<b><u>Sobel:</u></b> "And he walks up to U.S. Steel and says: 'what's Steel at?' And someone says 200. 'I'll buy ten thousand shares of Steel at 200.' And a roar goes up. The big guys are coming in. They're saving us."
Whitney photo	<b><u>Narrator:</u></b> Whitney bought 20-million dollars worth of stock in a matter of minutes. It was a powerful symbol.
	<b><u>Geneen:</u></b> "Recovery, Resistance, Hope. Don't forget people are seeing the whole place fall to pieces. Here's a guy who steps up and starts showing courage."
Whitney portrait	<b><u>Narrator:</u></b> It turned out Richard Whitney was not trying to save the market, but to fool it--so the banks could eventually sell-out at a better price.
exterior of exchange	His triumphant stand stopped the panic temporarily. But the downward spiral resumed the following week with a bigger crash, and continued for the next three years.
ticker	The drop was staggering.
stock certificates	General Electric went from more than 16-hundred dollars per share to 154. General Motors: 1075 dollars to 40.
still photo of empty exchange floor	The Dow Jones Industrial Average fell 89-percent. 72-billion dollars in investments, wiped out.
	<b><u>Sobel:</u></b> "And people who had their whole life savings tied up in Wall Street: vanished. It's out, no more. Zero. A person went from \$500 to \$15,000, and now he's down to zero."

depression soup lines

boarding up storefronts

U.S. Capitol, FDR bill signing

dip to black

**Narrator:** Economists contend the crash alone didn't cause the Great Depression that followed. But the public blamed Wall Street. The panic frightened people, and as they stopped spending money the economy ground to a halt.

The crash revealed major flaws in America's unregulated marketplace for stocks. Now, with the nation in ruins, the federal government was about to impose radical changes in the way the exchange does business.

## **ACT FOUR**

FDR Inaugural footage

**Roosevelt:** "I Franklin Delano Roosevelt do solemnly swear that I will faithfully execute the office of President of the United States, and will to the best of my ability, preserve, protect and defend the constitution of the United States, so help me God."

Segment title: Reform and Renaissance

**Narrator:** Franklin Roosevelt was elected president in 1932 as a reformer. In his very first speech in office, he took aim at the stock market.

FDR speech

**FDR:** "There must be a strict supervision of all banking, and credits, and investments. There must be an end to the speculation with other people's money."

FDR at desk signing documents

**Narrator:** On his second day in office, the president ordered the New York Stock Exchange to close for a week.

Congress, banks, brokers, stock certificates

He then pushed through congress the most sweeping set of financial reforms ever enacted. Banks could no longer gamble on stocks. Brokers must act responsibly, treating their customer's money as if it were their own. And corporations that offered stock to the public must file annual financial reports with the government.

Richard Sylla

Economics Professor, New York University

**Sylla:** "So the amount of information people had went up a great deal. And I think eventually that got institutions and individual investors saying: 'well, we want to buy stocks now because the deck isn't stacked against us. We really have better information than we used to. And so now Wall Street isn't the den of thieves that we used to think it was. It's more of an honest place."

Whitney speaking...

**Whitney:** "This bill, if passed by congress...(fades under)"

	<p><b><u>Narrator:</u></b> Richard Whitney, now president of the exchange, spoke against the new regulations, saying the market could police itself. But nothing could stop the President's push for government oversight.</p>
SEC photo	<p>Roosevelt created the Securities and Exchange commission--the S-E-C--to enforce the new rules Its first chairman: Joseph Kennedy.</p>
Police prisoner van rolls down Wall Street, Whitney walks into courthouse, Whitney released from Sing Sing	<p>The SEC would indict more than 300 people in an effort to clean-up Wall Street, although the agency found it virtually impossible to win convictions. The only major figure to go to jail was Richard Whitney himself, convicted of embezzlement. The man who led the market through its deepest crisis, spent three years in Sing Sing before being released.</p>
Footage of men on NYSE floor reading newspapers	<p>The newly-reformed market was a sleepy place in the 1930's and 40's as a wary public stayed away. Thousands of Wall Street workers lost faith in the paper chase and quit.</p>
Harold Geneen	<p><b><u>Geneen:</u></b> "You really didn't believe in paper anymore. You wanted to go out and earn your living doing something a lot more concrete."</p>
Former Chairman, ITT	
World War Two Footage	<p><b><u>Narrator:</u></b> During World War Two, the federal government---not the stock market--generated most of the money needed to reinvigorate American industry. The market generated less than 20 percent.</p>
arms production factory	
women enter the exchange floor	<p>The War did bring an historic milestone to Wall Street. Women, who had worked in the back rooms, now appeared on the stock exchange floor, ending a male-only tradition that had lasted 150 years.</p>
ticker tape parade	<p>With victory came the market's most unique war-time contribution: the mountain of ticker-tape confetti that welcomed America's troops home.</p>

Jazzy music montage with images of post-war suburbia, photo of Merrill

The baby-boom years after World War Two sparked another major expansion of the American economy. But unlike the 1920's, this boom was fueled by solid investing, instead of speculation and fraud. Leading the charge was Charles E. Merrill, who opened hundreds of new Merrill-Lynch offices in the suburbs.

Robert Sobel

Professor of Business History

Hofstra University

**Sobel:** "The whole atmosphere changes. Brokerage houses in the past were either for the sleazy characters or the big Whigs. Now it's middle-class Americans. And Merrill says the person we're after is the GI--or the ex-GI--with a wife and three kids and a Chevy. And that person should own shares. 'Own your share of America.' And it works."

women's investment class photo, how-to investment booth photo

**Narrator:** Merrill-Lynch offered investment classes for women. And placed a "How-to-Invest" exhibit in New York's Grand Central Station. Commuters could drop in to see if stocks were right for them.

**Sylla:** "One of their innovations was to make research reports, which they gave out free to clients. And they'd be saying: 'here's what our company thinks. It's investigated this company and here's how we see it's prospects.'"

Footage of brokers trading in 1950's

**Narrator:** As American investors returned to stocks, the market finally recovered. In 1954, the Dow Jones Industrial Average broke 300, the mark it had set 25 years earlier, just before the 1929 crash.

University of Chicago campus footage, Markowitz still photo, montage of stock certificates

One of the biggest innovations in the 50's came not from Wall Street, but from a university campus 800 miles away. Economist Harry Markowitz at the University of Chicago developed the theory of "stock diversification." Investors--he said--should buy a wide range of stocks to reduce the risk of bankruptcy when a single stock goes bad.

Marshall Blume

Professor of Economic Markets

University of Pennsylvania

**Blume:** "What Markowitz was saying is: 'put your money into lots of different things and on average you're going to do pretty well. Even though you're never going to be at the top, you're never going to be at the bottom.'"

50's stock trading footage, still of Markowitz

**Narrator:** The concept of a diversified stock portfolio is a basic tenet of modern investment. But for the 50's the idea was so radical that it earned Harry Markowitz the Nobel Prize for Economics.

floor trading footage, Kennedy, Vietnam,  
OPEC meeting, gas lines, computers

In the decades that followed, there were downturns in the market. In the 1960's there were major slumps prompted by bad news during the Kennedy years and setbacks in the Vietnam war. The OPEC oil embargo hurt stock prices in the 1970's, as Americans waited in line for a gallon of gas. But the most dramatic event since the '29 crash was coming soon: the introduction of the computer.

Dip to black

## **ACT FIVE**

Segment title: The Speed of Light

1960s exchange exterior, brokers handling paperwork

**Narrator:** A different kind of panic hit Wall Street in the 1960's. A paper panic. The rise of pension plans and mutual funds pushed the trading volume to 11-million shares per day. Every transaction was still processed by hand.

Marshall Blume

**Blume:** "So you'd have piles and piles of papers on desks. And you had a lot of these clerks just moving these papers back and forth. It's not surprising that when you had a lot of volume, you had a crisis."

Professor of Economic Markets

University of Pennsylvania

trading floor and back-office footage

**Narrator:** For brokerage companies, the "paper crunch" was terrifying. Exhausted clerks were unable to balance the books each night. The New York Stock Exchange had to close on Wednesdays to give clerks a chance to catch up.

Robert Sobel

**Sobel:** "The clerks would work around the clock. And every once in a while they'd go on a cot and sleep for an hour and come right back again. They wouldn't go home for weeks."

Professor of Business History

Hofstra University

floor trading

**Narrator:** At its height in 1968, the paper crunch touched-off a devastating cash-flow crisis, which forced nearly a hundred brokerage companies into bankruptcy.

Computers on floor of NYSE

Computers solved the problem, with their ability to document stock transactions at the speed of light. Since the 1970's computers have assisted brokers with every aspect of the securities business. They route smaller transactions directly to the trading posts, ending the delay caused by hand-carrying an order across the floor. Computers have vastly improved the market's ability to handle the ever-growing volume of trades.



1987 crash footage

Computers, though, have had a dark side. They were largely responsible for the biggest single-day drop in stock market history. October 19th, 1987: the market began a decline that raced out of control. Lightning-fast computers had been pre-programmed to rapidly sell stocks when prices hit a pre-determined level.

**Sobel:** "And you just pressed the button and you sold, which set off something at another computer, and a third computer and a fourth computer. Now what happened was the volume was tremendous. People couldn't keep up with these things."

Computer operators on NYSE floor

**Narrator:** The Dow Jones Average plunged 508 points, a drop of 23-percent. The plummet taught traders a lesson. The new York Stock Exchange has installed "circuit-breaker" programs that restrict trading when the Dow fluctuates too rapidly, to prevent runaway disasters in the future.

dip to black

Segment Title: The Virtual Market

NASDAQ computer center

**Narrator:** This computer in Connecticut has brought the marketplace for stocks to an historic crossroads. This is "NASDAQ," built in 1971 by the National Association of Securities Dealers. The NASDAQ system is a quick and inexpensive way to trade without the need for face-to-face encounters.

Smith Barney trading floor footage

NASDAQ links hundreds of brokerage houses world-wide.

Deborah McCrann

**McCrann:** "What we're doing is, we're replacing the people on the floor congregating in a group, to various people in different houses on the street at their desks, bidding and offering in this box. And everyone has access to what is going on at the same time."

Smith Barney Inc.

Footage of nasdaq trading screen

**Narrator:** The NASDAQ interactive screen displays two columns for every stock: a list of brokers trying to buy shares for their clients along with the price they're willing to pay, and brokers trying to sell stock and the price they're willing to accept.

Smith Barney trading floor, NYSE trading floor

NASDAQ primarily handles stock in America's younger, smaller, high-technology companies. But NASDAQ's phenomenal success is prompting some observers to wonder about the future of the New York Stock Exchange--where shares of larger, more-established corporations are bought-and-sold in a traditional auction. Some economists think the days of face-to-face trading are numbered.

Richard Sylla

Economics Professor, New York University

**Sylla:** "We're always going to need a centralized place. The question is: does it have to be a physical location on Wall Street? It seems to me that technology is changing now so that we can have a centralized market just by looking at our computer screens."

NYSE footage

**Narrator:** Officials at the New York Stock exchange maintain there are advantages to their time-tested way of doing business. Most important is the role of the 450 specialists on the floor--who act as referees between the 900 brokers and sometimes buy and sell stock on their own to ensure the market keeps functioning during periods of crisis.

NASDAQ computer, Tokyo exchange, Amsterdam exchange, Amex exchange

Whether the future belongs to computers or traditional traders, or a combination of the two, stocks seemed destined to continue their central role in the global economy. Stock trends now circle the globe 24 hours a day, from the United States to Tokyo to Europe and back to America again. In the U.S., stocks generate 48 billion dollars of capital every year. Money to get new companies started and help older ones to expand.

NYSE exterior

The stock exchange is place where the capital comes from to make capitalism work.

fade to black, closing credits