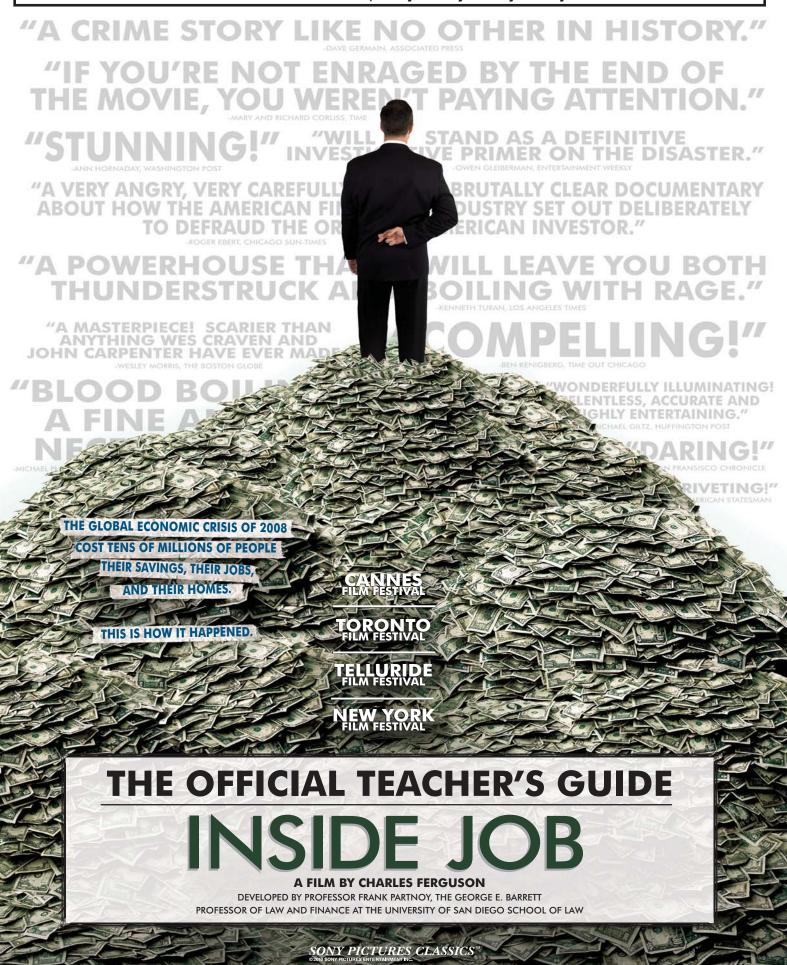
## THE FILM THAT COST OVER \$20,000,000,000 TO MAKE



#### **Note to Teachers**

Inside Job, the critically acclaimed movie by Academy Award nominated filmmaker, Charles Ferguson, is the definitive film about the economic crisis of 2008 and the role of Wall Street in modern society.

It is a substantive and entertaining film that is ideal for educational purposes. I have shown it to my class, and I encourage you to show it to yours. The film is sweeping and non-partisan in its critique, and covers both the historical roots of the crisis and the central flaws of global financial regulation. It includes comprehensive coverage of the major financial players at the center of the recent boom and bust. The film draws heavily on interviews with a "Who's Who" of financial markets, including major financial insiders, politicians, journalists, and academics. (I have a very small part as well). These interviews, and the film's engaging and provocative narrative by Matt Damon, will introduce your students to key financial issues, economic history, and current debates and news about the markets. Inside Job is colorful and comprehensive, and is guaranteed to generate lively discussion among your students. As Time magazine put it, "If you're not enraged by the end of this movie, you weren't paying attention." The people at Sony Pictures Classics asked me to write this teacher's guide to help provide some content and lesson plans for teachers interested in showing Inside Job as part of their classes. I have included four lesson plans to be used in conjunction with the film. These lessons will help your

students to connect the film to important financial issues that touch their lives. They are designed to assess several important questions that your students inevitably will confront in the future. The material is designed to be flexible. The topics are modular, and the lesson plans can build on each other, or be used alone. They can be used with the entire film, or just selections. You should feel free to print and duplicate these materials for your students and colleagues. They are available for free on this website: www.sonyclassics.com/insidejob. Each lesson is designed for about 50 minutes of class time, though you easily could devote more or less time. I hope you and your students enjoy watching Inside Job and that you find the materials in this guide to be a provocative and use-

ful way to engage your students in a conversation about the past, present, and future of our economy.

## **About Frank Partney**

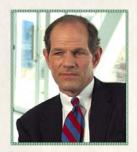
Professor Frank Partnoy is the George E. Barrett Professor of Law and Finance and the founding director of the Center for Corporate and Securities Law at the University of San Diego. He is one of the world's leading experts on the complexities of modern finance and financial market regulation. He worked as a derivatives structurer at Morgan Stanley and CS First Boston during the mid-1990s and wrote F.I.A.S.C.O.: Blood in the Water on Wall Street, a best-selling book about his experiences there.

Since 1997, he has been a law professor at the University of San Diego, and an expert writing and speaking about markets to Congress, regulators, academics, and investors. He has written numerous opinion pieces for The New York Times and the Financial Times, and more than two dozen scholarly articles published in academic journals including The University of Pennsylvania Law Review,

The University of Chicago Law Review, and The Journal of Finance. His recent books include Infectious Greed: How Deceit and Risk Corrupted the Financial Markets, a leading corporate law casebook, and The Match King: Ivar Kreuger, The Financial Genius Behind a Century of Wall Street Scandals, about the 1920s markets and Ivar Kreuger, who many consider the father of modern financial schemes. Professor Partnoy also has been a consultant to many major corporations, banks, pension funds, and hedge funds regarding various aspects of financial markets and regulation.

You can find out more about Professor Partnoy at his website, www.frankpartnoy.com, where there are descriptions of his books and links to some of his recent articles and media appearances (including his interviews with Jon Stewart on The Daily Show and Terry Gross on NPR's Fresh Air).

#### **Before Viewing the Film**



Tell your students that although the basic function of financial markets is straightforward – to match people who have money with people who need money – the way finance and Wall Street actually operate can get very complicated. Learning about the financial crisis will be a

bit like learning a foreign language, so you should talk about a few terms that are common in the markets, and in Inside Job.

Some of these terms are defined on the lesson plan website at http://www.sonyclassics.com/insidejob/site/#/the-

jargon. You should give the students a copy of this list of terms, so they can take notes about their meaning and how they are used while watching the movie. At first, the words, and especially the acronyms, might look like alphabet soup. But assure your students that soon they will be saying "CDO"

and "CDS" as effortlessly as they say "ABC."

You might start by telling students you are going to explain some of the most important terms in the movie by telling a brief story about how subprime mortgages were transformed into complex bets that nearly brought down the financial system. Although the film does a superb job of explaining this transformation, it might be easier for students to understand the details if they have a bit of background. The easiest place to begin is with the transaction at the core of the crisis, something simple that most students have heard of: a home mortgage loan.

Ask your students if they know what a home mortgage loan is. Do they know anyone who has borrowed money to buy a house? Who lent them that money? Did the borrower have to make a downpayment? Why? If a borrower has a bad credit history, as about one in four people do, then their loans are known as subprime. Ask them why a bank would make a subprime loan? (Answer: the interest rate the bank receives is higher, to compensate for the higher chance that a borrower will default.)

Historically, banks that loaned money to home buyers kept those loans, and bore the risk of default. Thus, banks had an incentive to make sure borrowers repaid them. This is one reason why banks required a downpayment. It also is why they charged subprime borrowers higher rates.

Over time, banks began bundling mortgage loans together into pools known as residential mortgage backed securities (RMBS). Large institutional investors, such as pension funds, bought these RMBS. Because the RMBS included a diverse pool of mortgage loans, they were deemed to be safe investments. The credit rating agencies gave these RMBS their highest ratings of "AAA." Now, investors – not the lending banks – bore the risk of default.

Next, banks began bundling these RMBS together in a second kind of pool known as a collateralized debt obliga-

tions (CDO). The banks and rating agencies used complex computer models to determine what portion of a CDO could be labeled AAA. The rating agencies then gave AAA ratings to large portions of CDOs, even though the mortgage loans backing the CDOs were subprime. Subprime-backed CDOs

were popular, because they had high credit ratings and paid high returns.

Finally, as the number of CDOs grew, it became harder to find enough new subprime loans to back new CDOs. The credit default swap (CDS) was a tool to enable banks and investors to bet on subprime RMBS and CDOs, without actually owning anything. Instead, CDSs were side bets on whether home borrowers would default. CDSs are one of a type of financial instrument known as derivatives, because their value is "derived" from the value of the underlying asset (in this case, home mortgage loans). Financial institutions used CDSs to place trillions of dollars of bets.

For some students, this story will seem difficult to understand – at first. One of the remarkably valuable aspects of Inside Job is how clearly it explains and illuminates this daisy chain of risk. Still, a brief discussion of vocabulary before the movie will help your students understand some of the details.



## **After Viewing the Film**

- **1.** Ask your students how angry they are about the events depicted in the film. What in the film made them angry? Which person depicted in the film offended them the most?
- **2.** Ask for views about who is most to blame for the events depicted in the film. Republicans or Democrats? Government or financial services companies? Regulators who stuck by their free market beliefs or investors who carelessly took on too much risk? When a student mentions a person

or institution they blame, ask what they should have done differently.

3. Go back through the terms you discussed before viewing the film, to make sure your students understand them. Remind them of the discussion you had about how subprime mortgage loans were "pooled." Do they think events would have unfolded differently if the fi-

nancial institutions that made subprime loans had kept them instead of selling them?

**4.** Ask students if they think someone should go to jail for the behavior depicted in the film. Who? Inside Job dis-



cusses evidence that senior bankers on Wall Street used prostitutes and illegal drugs, sometimes paying with company credit cards. If bringing a criminal fraud case related to subprime loans and CDOs would be too difficult, should prosecutors go after this other behavior?

5. Discuss whether your educational institution should have a policy regarding conflicts of interest. Ask what the students thought of the professors from Columbia and Harvard. What if Sony Pictures Classics paid you (the instructor) money to show the film in class? Would that be ok? Should you have to disclose all of the money you



make from outside activities? (Disclosure: Sony Pictures

Classics paid me to write this teacher's guide, though only a small fraction of what the professors in the film made for their Iceland reports.)

**6.** If your class has covered the 1920s-30s, compare the events depicted in Inside Job to the roaring '20s, the Great Crash of 1929, and the Depression that followed. What is different about today? What is similar?



- **7.** Choose one or more of the activities and accompanying handouts in this lesson plan to connect the film to specific topics, including topics you might be covering in your class. For each of the four activities, I have included both (1) a teacher's lesson plan page with some advice and information about teaching the topic, and (2) a student handout page that you can distribute to students. For each activity, you might want to look at (2) before you look at (1), to give the advice some context.
- **8.** Refer your students to the resources at www.sonyclassics.com/insidejob.

## TEACHER'S NOTES - Activity 1 "It's Utterly Mad"



Replay the clip of Allan Sloan, senior editor of Fortune magazine, describing the Goldman Sachs deal in which home buyers borrowed 99.3% of the price of their houses, and yet two-thirds of the deal backed by those loans was rated AAA, as safe as government securities. (The clip is available here http://www.youtube.com/watch?v=kzhWodFE7E0.)

Sloan concludes, "It's utterly mad." Activity 1 explores how something so "mad" could have happened. The basic question for students is this: how is it possible for risky subprime mortgages to be pooled together and then, miraculously, to become AAA-rated CDO investments?

Don't worry: students don't need to understand the details of the complicated mathematical models in order to get the basic point. The key insight is that the banks and rating agencies vastly underestimated the correlation of subprime mortgage defaults. Even students who hate math might see an incentive to learn a bit about correlation (they also might be enticed by the idea of a career in finance, or just the desire to avoid losing money on their own future investments).

Ask students what they think of David Li (see Activity 1 handout), particularly given the criticism of academic researchers in Inside Job. Many of the mathematicians who built CDO models for banks and rating agencies understood the risks of pooling subprime loans, and explained them to others. In fact, Li warned numerous people that using his model

could be treacherous. After you have discussed David Li, ask students what they think of this statement he made to the Wall Street Journal in 2005, as subprime mortgage lending was skyrocketing: "The most dangerous part is when people believe everything coming out of it."

Here is one "hands-on" activity you might try in class. Ask the students to take a piece of paper and cut or tear it into 10 equally sized strips. Imagine that each of these strips represents a subprime mortgage loan. Now suppose that your statistical model tells you that, on average, just 1 of those loans will default, and that the chances of 2 or 3 defaulting are extremely small. Separate the loans into two groups, one with 7 strips (put that group at the top) and one with 3 strips (put those at the bottom). Those two groups represent two "tranches" of investments in a CDO. If the group of 3 strips bears the first losses, how safe is the group with 7 strips? (Do a couple of examples: tell them there has been 1 default, so they should remove 1 strip from the bottom group, and ask who loses?) But what if your model was wrong, and when housing prices decline all 10 of the loans will default? How safe is the group with 7 strips now?

You might describe defaults as being like a flood, and the strips as being like floors of a building. As long as there are only a few defaults, the lower level floors will be the only ones flooded and the top floors will be safe. But if there are numerous defaults, even the top floors will be flooded.

Here is a link to the article by Allan Sloan: Allan Sloan, Junk Mortgages
Under the Microscope, Fortune Magazine, Oct. 16, 2007,
http://money.cnn.com/2007/10/15/markets/junk\_mortgages.fortune/index.htm

## TEACHER'S NOTES - Activity 2 "It Was Clear He Was Stuck With His Ideology"



Alan Greenspan appears throughout Inside Job. The film describes how Greenspan, as Federal Reserve chairman, led the deregulation and consolidation of the financial sector, beginning in the 1980s. One of the questions the film raises is about Greenspan's ideology, and this is the focus of Activity 2. In the film, Robert Gnaizda, former director of the Greenlining Institute, discusses a series of meetings in which Greenspan recognized the complexity of subprime mortgages but refused to change his mind about regulating them. Gnaizda concluded, "It was clear he was stuck with his ideology."

Ask your students what they think of Greenspan's ideology. What are the

# benefits of free markets? To what extent was Greenspan right? How was he wrong?

In addition to discussing the substance of Greenspan's views, you can use his ideology as a launching point for questions about the students' beliefs. What are their views about the role of government in the markets? How have those views changed over time? What might lead them to change in the future? Do your students think they will become "set in their ways" as they grow older? Why or why not? You might even expand this discussion beyond markets and regulation to other more general beliefs.



## TEACHER'S NOTES - Activity 3 "Sure, I'd Make That Bet"



Nothing motivates students to talk like money. Ask them what they would be willing to do for \$10 million a year. Would they make secret bets that might lead their firms to collapse? What if they worked at a bank in 2005 or 2006, and genuinely believed the chances of a housing price decline were zero – would they be willing to bet billions of dollars of the bank's money on subprime mortgages if it would lead to an eight-figure bonus? What did they think of the mansions and yachts in Inside Job?

More generally, why is Wall Street compensation so high? Is it because Wall Street banks are creating so much value? It certainly is true that financial markets are important and

valuable. It is good for companies to be able to borrow money easily and at low cost, just as it is good for us to be able to invest our money instead of stuffing it under our mattresses (although in recent years the mattress would have performed better than bank stocks). But, as the film shows, there is a downside to Wall Street's actions as well. Overall, how much are Wall Street bankers worth?

You might ask who else makes this kind of money in our society. Should professional athletes, popular actors, and rock stars be paid made more or less than Wall Street bankers?

Ask students what they expect to happen to bonuses in the future. In 2009, Wall Street firms had revenue of approximately \$433 billion, and paid record compensation of \$139 billion. The numbers for 2010 were about the same.

Consider focusing on Citigroup as one example. Citigroup had more than 300,000 employees in 2008, and

much of the \$32 billion of total compensation the bank paid was for salaries paid to lower-level employees. But, as the chart in the handout shows, Citigroup paid \$5.3 billion of bonuses in 2008. A total of 738 people at Citigroup received bonuses of \$1 million or more. 44 people received more than \$5 million. The "Senior Leadership Committee" got \$126 million. And Citigroup paid these bonuses even though it lost more than \$27 billion that year and had to be supported by the federal government with \$45 billion of TARP funds. What grade would your students give the Compensation Committee of Citigroup's board of directors, which set the pay policies for the bank?

Remind students that these bonuses were extra payments, in addition to salaries. How might the prospect of such large bonuses affect the behavior of employees? In theory, people have an incentive to perform well if they make more money when their contribution to their bank's profits is greater. But what happens to the employees

when the bank loses money or collapses? If the banks still pay bonuses, and employees know losses will be borne by investors and taxpayers, will they take on too much risk?

Even after the financial crisis, employees got to keep their bonuses. (Some of the bonus amounts were paid in stock instead of cash. Employees who held stock through 2008 lost money. But bonuses for 2008 that were paid in stock appreciated substantially during the following year.)



## TEACHER'S NOTES - Activity 4 "It's a Wall Street Government"



In Inside Job, Robert Gnaizda calls President Barack Obama's administration "a Wall Street government." This activity asks students to describe the key players in the administration and to list the positions they held before and after the 2008 election. Once your students have filled in the positions, you can discuss whether Gnaizda's statement was fair.

A "cheat sheet" for you is below. You also might encourage students to do research on these people, to describe their backgrounds and positions in greater depth. For example, you might break students into groups and assign each group one person to research for a few days. Alternatively, you might give students the Activity 4 handout before you show Inside Job and ask them to fill out the list as they watch the film.

Ben Bernanke: Chair of the Federal Reserve, was chair of the Federal Reserve under President George W. Bush

William C. Dudley: President of New York Federal Reserve, was Chief Economist of Goldman Sachs

Rahm Emanuel: Chief of Staff, was on the Board of Directors of Freddie Mac

Timothy Geithner: Treasury Secretary, was President of New York Federal Reserve

Gary Gensler: Head of the Commodity Futures Trading Commission, was a Goldman Sachs Executive

Mary Schapiro: Head of the Securities and Exchange Commission, was the CEO of FINRA, the Investment Banking Industry's Self-Regulation Organization

Larry Summers: Chief Economic Advisor, was Treasury Secretary

Inside Job also mentions some other players not listed on the handout, such as **Mark Patterson** (William Dudley's chief of staff, who was a lobbyist for Goldman Sachs), **Louis Sachs** (a senior advisor to the NY Federal Reserve, who was with Tricadia, a hedge fund

that allegedly bet against CDOs), and Laura Tyson and Martin Feldstein (both of whom worked in previous administrations and were appointed to President Obama's Economic Recovery Advisory Board). You might mention these people as well.

## HANDOUT - Activity 1 "It's Utterly Mad"



For centuries, scientists have searched for ways to mix different materials to create gold. In 1995, David Li, a thirty-something math whiz from rural China, was doing something similar with loans. Li was trying to figure out how to mix risky loans together to get risk-free ones.

Surprisingly, his great insight came from death. Li knew about the "broken heart" problem, in which people die more quickly after their spouses die. Li saw an analogy to loan defaults. When one borrower defaulted, others were

more likely to default. Not everyone defaulted at the same time, but the defaults were correlated – they moved together to some degree.

Li used the same math that statisticians used to model how people reacted when their spouses died to model how different loans reacted when one of them "died," or defaulted. Li told the Wall Street Journal, "Suddenly I thought that the prob-

lem I was trying to solve was exactly like the problem these guys were trying to solve. Default is like the death of a company, so we should model this the same way we model human life."

According to the math, huge amounts of risk disappeared when you pooled risky assets together in a CDO. The key assumption was that although some loans might default at the same time, not all of them would default simultaneously. For example, if you assumed the chances of two-thirds of the loans defaulting at the same time were close to zero, you could split the CDO into a risky

piece (which would bear the first losses when loans in the pool defaulted) and a safer piece (which would not lose any money unless more than one-third of the loans defaulted). Then, the safer piece would be rated AAA.

The CDO that Allan Sloan describes in Inside Job was based on exactly this assumption. The banks and rating agencies assumed that, although some of the mortgage loans in the pool might default at the same time, the likelihood of more than one-third defaulting together was basically zero. In other words, they assumed the correlation was low.

Historically, this correlation had been low, especially as

housing prices rose. But what would happen if the nature of the loans changed (they were made to borrowers with bad credit who put virtually no money down), and then housing prices fell? Even a slight decline in housing prices would pull borrowers underwater, meaning the amount they had borrowed was more than the value of their houses. Then, the correlation would be high.

Everyone would default.

The experts who put together subprime CDOs vastly underestimated the correlation of defaults. Why might they have done this? Was it an innocent mistake, which surprised the banks and rating agencies as much as it surprised most investors? Or was it an intentional ruse, which generated phantom profits and bonuses, even as it sowed the seeds of financial destruction?

## How, exactly, was it "mad"?

## HANDOUT - Activity 2 "It Was Clear He Was Stuck With His Ideology"



"Regulation of derivative transactions that are privately negotiated by professionals is unnecessary."

-Congressional Testimony of Alan Greenspan, July 1998

Until recently, Alan Greenspan was one of the most admired government officials in the world. He was appointed and reappointed to high-level positions, and served as chairman of the Federal Reserve for nearly two decades. Before the financial crisis, the dominant view was that Greenspan was a kind of mystic savior – like the diminutive Yoda of Star Wars fame – who could foretell the future and understood the forces that would lead to prosperity and peace.

Fewer people admire Greenspan today. Much of the criticism of him is that he formed an ideology about markets and refused to budge from his views, even when overwhelming evidence showed that these views were wrong. Greenspan's ideology was an extreme version of a widely held view about the benefits of markets. He developed these views in his 20s, when he

joined the free-market Objectivist movement, dominated by writer Ayn Rand, and he solidified his ideology as a political advisor to President Richard Nixon's presidential campaign in 1967. By the time he became chair of the Federal Reserve in the 1980s, his views of the markets were fixed.

Greenspan especially opposed regulation of derivatives, the side bets that were at the core of the financial crisis. The basis of this

ideology was challenged in 1994, when the Federal Reserve's decision to raise interest rates sent shock waves through the financial system. The culprit was hidden derivative side bets on interest rates placed by hundreds of companies. Three years later, Long Term Capital Management, a hedge fund, collapsed under the weight of \$1.25 trillion of bad derivatives bets. Throughout the 1990s, there were repeated examples of fraud in the private derivatives market. Yet Greenspan continued to lobby for deregulation of derivatives.

Many people believe that unregulated markets are frequently preferable to government involvement. But Greenspan's ideology was that markets are always preferable to government. For example, consider Greenspan's view of fraud. He told one senior regulator that rules prohibiting fraud were unnecessary, because participants in the markets inevitably would discover fraud. He said,

"We will never agree on the issue of fraud, because I don't think there is a need for laws against fraud." What are your own views and beliefs about the facts presented in Inside Job? Do you have an ideology in this area? Make a list of the basic principles of "right and wrong" that you believe to be true about markets. What might lead you to change your views?

"Well, remember that what an ideology is, is a conceptual framework with the way people deal with reality. Everyone has one. You have to -- to exist, you need an ideology. The question is whether it is accurate or not. And what I'm saying to you is, yes, I found a flaw."

-Congressional Testimony of Alan Greenspan, October 2008.

## HANDOUT - Activity 3 "Sure, I'd Make That Bet"



"You're going to make an extra \$2 million a year – or \$10 million a year – for putting your financial institution at risk. Someone else pays the bill. You don't pay the bill. Would you make that bet? Most people who worked on Wall Street said, 'Sure, I'd make that bet.'" - Frank Partnoy, Inside Job

Inside Job criticizes several Wall Street executives who made tens of millions – or hundreds of millions – of dollars, even as their firms collapsed. For example, Joseph Cassano, an officer of AIG's Financial Products division, received \$315 million from 1987 until he retired in March 2008, six

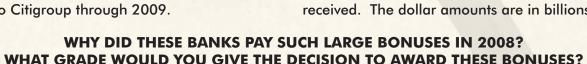
months before AIG was rescued by the federal government. Robert Rubin, the former Treasury Secretary and head of Goldman Sachs, made \$126 million during eight years as a board member and advisor to Citigroup through 2009.

Companies often award annual bonuses to employees after a good year. But 2008 was hardly a good year for Wall Street. Profits were down, stock prices plummeted, and many banks nearly collapsed. In 2008, the federal government implemented the

"Troubled Asset Relief Program," known as TARP, to support the banks. Some argued TARP was unnecessary; others said major banks would have been forced into bankruptcy without it.

Below is a table of the net income (or losses) for 2008 for several of the major financial institutions mentioned in the film,

along with the total amount of bonuses those firms paid that year, the number of employees who received more than \$1 million or \$10 million in bonuses, and the amount of TARP support each firm received. The dollar amounts are in billions.



Bank	Net Income	Bonuses	\$1 Million Bonuses	\$10 Million Bonuses	TARP
Bank of America	\$4.0	\$3.3	172	4	\$45
Citigroup	-\$27.7	\$5.3	738	3	\$45
Goldman Sachs	\$2.3	\$4.8	953	6	\$10
JPMorgan Chase	\$5.6	\$8.7	1,626	10	\$25
Merrill Lynch	-\$27.6	\$3.6	696	14	\$10
Morgan Stanley	\$1.7	\$4.5	428	10	\$10

"I would give them about a B."

-Scott Talbott, Financial Services Roundtable, grading the compensation decisions of Wall Street banks in Inside Job

"It is hard for us, without being flippant, to see a scenario within any kind of realm or reason that would see us losing one dollar in any of those transactions."

-Joseph Cassano, conference call with AIG investors, July 2007

## HANDOUT - Activity 4 "It's a Wall Street Government"



Inside Job is critical of the major players in the administration of President George W. Bush, including Hank Paulson, the former head of Goldman Sachs, who was Secretary of the Treasury as the financial crisis unfolded in 2007 and 2008. But the film is bi-

partisan — it is just as critical of the major players in the administration of President Barack Obama. Below is a list of seven of those players. For each person, write down what their previous position was, as well as their position under President Obama.

Ben Bernanke	
William C. Dudley	
Timothy Geithner	
Gary Gensler	
Larry Summers	

Why do you think President Obama appointed these people to these positions?

How would you balance the need for experience and expertise against the benefits of having a fresh perspective?

Who would you have appointed?

Are these appointments like hiring a head sports coach? Would you rather have an experienced coach with a losing record or an inexperienced coach with no record at all?

"When the financial crisis struck just before the 2008 election, Barack Obama pointed to Wall Street greed and regulatory failures as examples of the need for change in America."

-From Inside Job