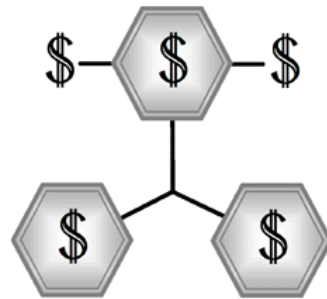


How to Cook Financial Meth



A Cautionary Tale in Three Acts

Act 1

Once Upon a Time ...

The average American worker made a deal with a bank: they would borrow a lot of money, enough to build or buy a house, and then pay it back to the bank over 30 years. This is called a **mortgage loan** and it's what allows people to own a home.

Every month, the worker sends in a check for a mortgage loan. Some of this money goes to pay back the money borrowed for the loan. This is called the **principal**. The rest of the money is used to pay **interest** on the loan. The bank needs to make some money to stay in business, and interest serves that purpose.

Over months and years, the worker pays off more and more of the loan, and gains what the bank calls **equity**. This is the difference between what a house is worth if it is sold, and how much principal is left to pay on the loan. Sometimes, people borrow more money against their equity to fix up their home or pay other bills: the bank calls this a **second mortgage**. As long as everyone keeps their promises, the loans get paid off and the bank can keep making loans.

This system of mortgage loans is built on **trust**. In order to make a loan, the bank has to trust a person to pay it back, a little bit every month. And the people who take out the loans have to trust the bank to only charge as much interest as they need to stay in business. We also have to trust the banks not

to give out loans to people who won't pay them back. If too many people don't pay back their loans, the banks can go out of business.

For many years, this system worked pretty well. The banks did their homework and made sure they did not lend out too much money to people who might not pay it back. And, most of the people who took out the loans kept their promises and paid the bank their **monthly payments**.

There are times when someone who takes out a mortgage can not pay it back. They **default** or fail to pay back the loan. Any mortgage is called a **secured loan** because the bank can take the house and sell it in order to get their money back.

When a bank takes a house and sells it to get their money back, it is called a **foreclosure**. It means the people who could not pay back the loan have to find somewhere else to live, and they lose all of the money they paid the bank. So long as a bank does not lend someone more money for a house than it is worth, the bank does not lose money.

Many years ago, a man named Frank Capra made a very famous movie called "It's a Wonderful Life." You can see it on TV every year around Christmas. There's a scene where George Bailey, who runs a bank for Mr. Potter, has to tell some scared people how his bank works ...

" . . . you're thinking of this place all wrong. As if I had the money back in a safe. The money's not here. Your money's in Joe's house . . . right next to yours. And in the Kennedy house, and Mrs. Macklin's house, and a hundred others. Why, you're lending them the money to build, and then, they're going to pay it back to you as best they can. Now what are you going to do? Foreclose on them?"

In the movie, the people decide to help each other to save their homes from a rich man who wants to own everything in town. It's an uplifting story, and we like to watch it every year to remind ourselves of the people we can be, when we listen to our better instincts and have faith in each other.

Act 2

Where Bubbles Come From

People like to think that things will always get better. We try to be **optimistic**. Our folk wisdom tells us to plan for the worst, while we hope for the best. But, it's pretty easy to get people to go from *hoping* for the best to *planning* for the best. When a lot of people do this, *bad things* usually happen.

When a house is sold, it is usually worth more than it was when someone bought it. This is called **appreciation** and it can be a little or a lot. That's because it's hard to say how much something is really worth – it all depends on what someone is willing to pay for it.

In some places, where people really want to live, houses can gain a lot of **value**. People can sell their homes for a lot more money than they borrowed to buy them, and then use the money to buy other houses. People will buy and sell houses to keep the **profit**, or the difference between what they paid for it and how much they get from selling it. This is called **flipping** a house. Sometimes it works out, and sometimes it doesn't.

Anytime people start making a lot of money in a short amount of time, everyone else wants to *get in on the action*. It's easy to forget that it's supposed to take time, or a lot of work, to make a lot of money. There's a phrase – *the madness of crowds* – that we use to describe how people can get a little crazy about the chance to make some *easy money*.

If a lot of people start to think something is worth more than it really is, and they try to buy it at any price, it creates what is called an **investment bubble**. We call it a bubble because it gets big really fast, it tends to be filled with hot air, and it can pop as soon as it touches anything solid.

It takes a lot of money to create a bubble. And that's where the banks come in. For a long time, it was hard to get a mortgage if you didn't make a lot of money. The banks had a lot of rules they had to follow. For example, they were supposed to check that someone made enough money to pay back a loan before they could give it to them.

Over the last thirty years or so, a lot of the banking rules were lifted: this is called **deregulation**. Banks could take more risks with their money. They could loan out money to more people, and charge them more money for it. A lot of these loans were called high risk, or **sub-prime loans**, and they came with a higher **interest rate**. For a while, the banks made a lot more money making these loans, but they knew it wouldn't last for very long.

To protect themselves, the banks found a way to **insure** their sub-prime loans. They would put a bunch of loans together into something called a **bond** that people could buy **shares** in. This spread the risk by letting anyone who bought shares in the bond to collect some of the interest if people made the payments on their sub-prime loans.

Then, the banks found people who would write an **insurance policy** on the bonds. The banks paid for this insurance, which paid them back if the bond lost money (for example, if too many people didn't make their mortgage payments).

These policies are called **derivatives**, and they are a special kind of agreement used to **hedge**, or protect a bank against risk. Think of it as a bet on whether or not people will continue to bet on a game they can't really watch. Confusing? Yes! Even the people who sell them don't really understand them.

When people started to think that the price of homes could only go up, the housing bubble got its start. Banks started handing out money to almost anyone who promised to use it for a house, making the bubble get even bigger. When the bubble got so big that it popped, a lot of people who didn't even play, or know about the game, were hurt.

A Mathematical Intermission

Before we go into the third act, let's look at some numbers. While the words tell part of story, another important part is told with facts and figures.

What does the budget for an average mortgage look like? At right, we've listed some basic figures to work with.

Mortgage Facts and Figures	
Loan:	\$140,000
Monthly Payment:	\$1,250
Principal:	\$125
Interest:	\$1,125

The loan is the total amount borrowed. The monthly payment is what the borrower sends in every month.

A small part of each payment goes to pay down the loan (the **principal**). The rest is used to pay **interest** to the bank.

Let's work these numbers to see what happens after six years. There are many jobs for people who can afford this kind of loan that last about that long. Remember, when the job ends, it may be time to sell the house and move to another city.

A Quick Multiplication Exercise		
Out of Pocket	Principal	Interest
\$1,250	\$125	\$1,125
x 72	x 72	x 72
<hr/>	<hr/>	<hr/>

The numbers add up pretty fast. On the left, there is the total payment amount, called the **out-of-pocket** expense. In the middle, we can identify the **principal** built up over six years. On the right, we can figure the **interest** paid to the bank.

The number in the middle is the most important one when you sell a house. You can subtract that number from the total amount of the loan to find out how much of the **balance** is left to pay: bankers call this the **pay-off** total.

There's one more important number in the equation. It's called **appreciation**. It refers to the **value** a house gains over time. When people sell a house, they can usually ask for more than they borrowed. Some reasons for this include:

Inflation: money is worth less today than it was yesterday

Improvement: the seller fixed or added something

Demand: more people want it and they'll pay extra for it

Appreciation can change a lot, and it can go up or down.

For our example, we'll figure the appreciation is **3% of the total** value of the house.

Multiply $140,000 \times .03$, and then take that number and add it to 140,000 to get a **fair market value**. This is the number people use to set the price when they sell a house.

OK, now we have some numbers to work with.

First, write down the fair market value:

Second, write down the principal:

Finally, the total interest and out of pocket expenses:

Look at these numbers. Think about what it means to the bank and the homeowner when it comes time to sell a house.

Act 3

Why We Can't Go To Disneyland

OK, now we're ready for the hard part. What all this means to someone who loses their job and can't pay their mortgage. Along the way, we'll find out why we probably can't go to Disneyland this year. Or next year, or the year after that.

First, there's the bad news. The job isn't there anymore, and your family can't afford to pay the mortgage and has to move to another city so your parents can find new jobs. And then the big *For Sale* sign goes up in the front yard, the house gets cleaned and painted, and people start to come by and look at it. Some of them like what they see and say they might *make an offer* to buy it. Everybody hopes for the best.

But not many of us plan for the worst. When the **market** was going up, and houses were selling for lots of money, the banks made a lot of loans. Instead of buying a modest home, a lot of people borrowed more money than they could pay back, and used it to buy homes they could not really afford. Try doubling the numbers in our math problems and you get a pretty good picture of what happened. The worst part: a lot of the homes weren't really worth as much as people thought they were.

Suddenly, a lot of people who bought new, expensive houses have to sell them. Most people can't afford them, and there's way too many of them. So what happens? The bank has to **foreclose** on the houses, and sell them for whatever they can get.

For the people who are looking for a new house, it's a pretty good time: *they* can buy a big new house for about half of what it cost a few years ago. However, if *you* are trying to sell an older, modest house, it's not such a good time.

Let's take a look at two houses put up for sale, and work through the numbers to see what might happen:

Older, Modest Home	Newer, Bigger Home
	
Loan: \$140,000	Loan: \$300,000
Sale Price: \$144,200	Sale Price: \$309,000
Interest: \$81,000	Interest: \$162,000
Break Even: \$59,000	Break Even: \$138,000

The **break even** price is what the banks care about. That's how much a bank needs to get from a foreclosure sale to avoid losing money. Most of the time, a bank can do better than the break even price, because it can afford to wait.

Here's a question to think about:

If you were looking for a house, and had about \$150,000 to spend, which house would you try to buy?

A bank will probably look at a \$150,000 offer for a \$300,000 house in foreclosure as a pretty good deal. The bank can get the loan "off their books" and still make about \$12,000.

Whoever buys the big house for \$150,000 gets a pretty good deal. The house should gain value over time, especially if the market **recovers** and the price of homes goes back up.

The modest home, however, will sit on the market for a long time. The person who took out the loan for it, like the person who took out the loan for the bigger home, won't get anything for their investment except for a big, fat failure on their **credit report**. This means it will be very hard for both of them to borrow money again.

So what does this all have to do with Disneyland? And what is financial meth, anyway?

A lot of Americans think of a trip to Disneyland as one of the better prizes in life. It's called the "happiest place on Earth" and it's one of the places Americans go when we can afford something extra. While nobody really needs to go there, they do a pretty good job of convincing us that we do.

When somebody has to move, and they can't sell their house, it means they probably won't have any extra money for a very long time. While they struggle to pay their rent, buy food for their families, pay for medical care and try to keep a car on the road, that **magical kingdom** just keeps getting farther away.

So, what is **financial meth**? It's a metaphor. You've probably seen or heard people talk about the "meth epidemic" in the news. Meth is a dangerous drug, and it's not too hard to make. For a little bit of money, someone can make a lot of it, and then sell it for a big pile of money. A lot of lives get hurt in the process, but some people just don't care. All they want is to get a piece of the American dream, such as it is.

The banks, and their financial wizards have become the new meth cooks, dreaming up new and toxic ways to make a buck from **human misery**. It's up to us to decide if we'll let them keep doing it.

What can you do about it? You may think you're just a kid, but you do have a voice, a pen, and some paper. Find out who your representatives in the **U. S. Congress** are. Then, write them a letter to remind them that part of their job is to make it possible for you to make an honest living, buy a home for your family, and maybe go to Disneyland some day.

Then, you can tell those congressmen that you need them to **do their job** in order for any of that to happen. They just might listen to you, instead of listening to the bankers who offer them money to keep the financial meth flowing.

We can still make democracy work, even if it seems pretty broken right now. Remember, it is up to us. We can look all of those bankers in the eye, and let them know we aren't going to play this losing game that lines their pockets without adding much to our shared culture.

Thanks for reading this, and for thinking about it, and please, don't let anyone burn you with an offer that's just too good to be true.

Study Questions

1. Look in your local newspaper for the foreclosure listings in the classified advertising section, or search for these listings online (enter the terms "foreclosure" and the name of your city in Yahoo or Google). Describe what you find: how many are listed, the prices and status, and any other details.

What can you say about the real estate market based on what you find?

2. Look at the ads for at least three houses for sale in your area. Note the sales prices. Identify how much someone would need to make in order to afford to buy each of them.

Assume a person could spend no more than 50% of their income on a mortgage and subtract 30% of their **gross** income for taxes. Figure \$1,000 a month in payments for each \$100,000 of the total cost of the home.

3. There are a variety of laws and regulations that protect the banks and their customers. Identify any of the current or proposed laws, regulations or **acts** that concern home mortgage loans and describe it in summary form.

<http://www.federalreserve.gov/bankinforeg/reglisting.htm>

4. Look up all of the **highlighted** terms in a dictionary. Write a paragraph about each word: what it means, how it's used in the news and on television, and whether it's used to convey an idea or hide an unpleasant truth.
5. Look for statistics about the number of foreclosures in a state or across the U.S. in the past five years. Assemble what you find in a report and try to create a graph to present the numbers.

For Extra Credit: Try to explain any part of the **derivatives** market and present your findings to the rest of the class.