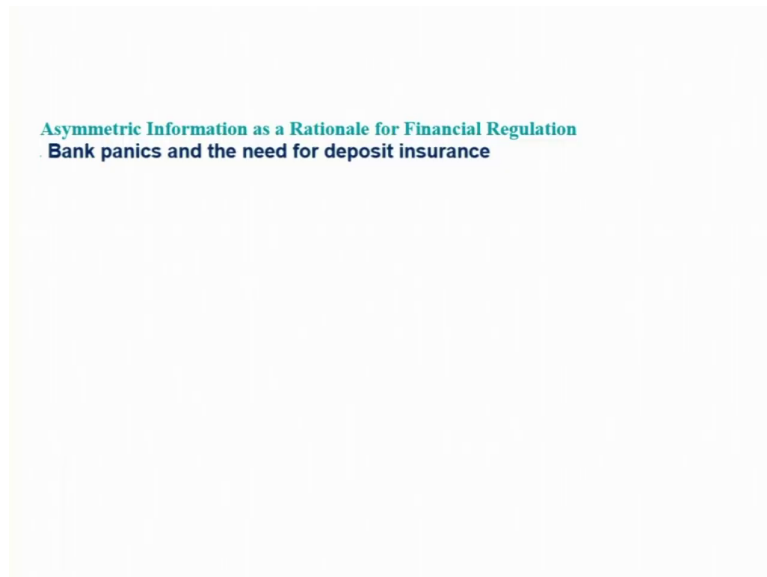


**Economics of Banking and Finance Markets**  
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**Lecture - 30**  
**Rationale for regulation - II**

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Hello everyone, welcome to this session. We will discuss how bank panics lead to the need for deposit insurance and how government across the globe responded to that. And then what are the further likely effects of deposit insurance, that is a government safety net, on the health of or the working of a financial system.

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The image shows a screenshot of the FDIC website. At the top, there is a navigation bar with the FDIC logo and links for ABOUT, RESOURCES, ANALYSIS, and NEWS. Below this is a large image of the FDIC seal, which features an eagle with its wings spread, perched on a shield. The seal is surrounded by the words 'FIDELITY', 'BRAVERY', and 'INTEGRITY'. Below the seal, there is a section titled 'About' with a sub-header 'About' and a paragraph of text. To the right of the seal, there is a section titled 'FDIC: 1934' with a red checkmark and the year '1929' written in red above it. Below this, there is a section titled 'Who is the FDIC?' with a sub-header 'A summary of the mission, vision, and purpose of the FDIC. Learn more'. Below this, there is a section titled 'Birth of the FDIC' with a sub-header 'Listen to President Franklin D. Roosevelt speak to the nation regarding the banking crisis on March 12, 1933.' and two links: 'Link to audio' and 'Transcript'. There is also a small image of President Franklin D. Roosevelt speaking. At the bottom of the page, there is a Pearson logo and a copyright notice: 'Copyright © 2016, 2013, 2010 Pearson Education, Inc. All Rights Reserved.'

So, one of the responses was the Federal Deposit Insurance Corporation, set up in the US in 1934. This was as a response to the bank failure that happened in the US and other countries. So, you know that the 1929 great depression that started in the US and spread to other countries became a global recession and depression. One of the characteristics of this global depression was the bank failure.

Several banks failed that was the one of the starting points of the great depression; several banks failed during this period. So, this is called bank failure and you know that if there was no government policy intervention or no government safety net when this bank panics and contagion effect happened in the US and other developed countries. And the bank failure led to the collapse of the financial system, and subsequently it led to the economic depression in the developed world.

So, as a response, federal deposit insurance corporation was set up in 1934. They insure the deposit of the depositors. That means, if there is a bank failure, no issue as the federal deposit insurance corporation will be refunding your deposit.

If the bank fails, you will be getting back your deposit through FDCI. And to get the coverage a small premium will be collected from the deposit and that money will be used to make the payoff.

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**2 primary methods to handle a failed bank.**

**1) The payoff method** ✓

the FDIC allows the bank to fail and pays off depositors up to the insurance limit ✓

**2: Purchase and assumption method** (typically more costly for FDIC) ✓

the FDIC reorganizes the bank, typically by finding a willing merger partner who assumes (takes over) all the failed bank's liabilities so that no depositor or other creditor loses a penny. ✓

The FDIC often sweetens the pot for the merger partner by providing it with subsidized loans or by buying some of the failed bank's weaker loans. ✓

Typically, more costly (real and monetary terms) for the FDIC than the payoff method ✓

*Bank panic ↓*

So, two primary methods have been used to handle a failed bank, one is called the payoff method.

In the case of the payoff method what the FDIC would do? The FDIC allows the banks to fail bank and payoff depositors up to the insurance limit.

And second method is called purchase and assumptions method, and these are more costly for FDIC.

So, theoretically, what the FDIC is supposed to do; that means, when the bank fails then pays off the depositors up to the insurance limit that is the conventional function of FDIC. But actually you know that by going through the importance of banking system; that means, not letting a bank to fail that is more important. If one bank fails and because of contagion effect other banks also fail, and practical sense, we know that it is not the best strategy, it is better to avoid the bank failure.

So, that if there is Federal Deposit Insurance Corporation, all the depositors are assured that if the bank fail immediately, in the Federal Deposit Insurance Corporation will be paying back their deposit. Then because of that you can say that the bank panic will be reduced.

Even if one bank fails, people would not be running to the bank, because they are now covered with a government safety net; that means, the deposit insurance. So, then this one, this promise is already there, that the payoff promise. Because of that one can expect that the

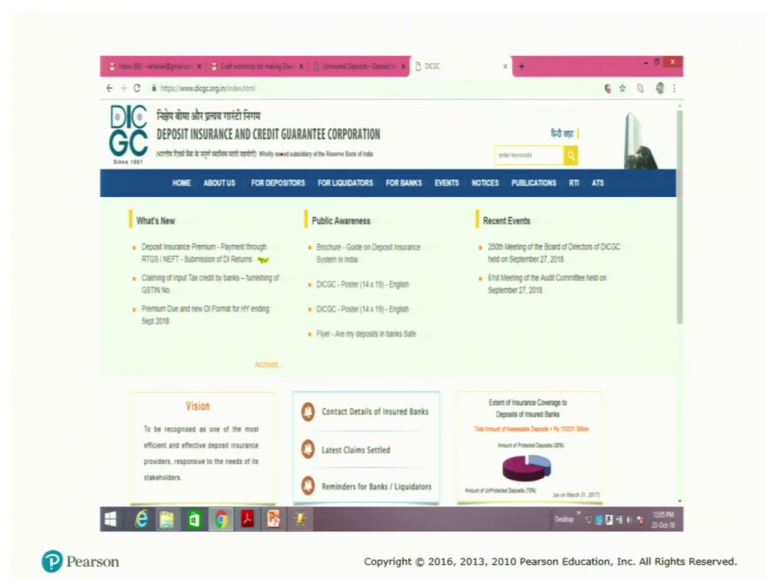
magnitude of the bank panic will be reduced, and the contagion effect will be reduced if a bank is in trouble.

So, the FDCI, practically they use the second method that is purchase and assumption methods. So, suppose if one bank is about to fail then the FDCI reorganizes the bank typically by finding a willing merger partner who takes over all the liabilities of the failed bank or going to be the failed bank.

However, this is typically a more costly for FDCI, you know why? Because to ensure that some other banks acquire this failed bank. Then actually FDCI has to sweetens the pot for the merger partner by providing with subsidized loan or by buying some of the failed banks weaker loans. That is typically more costly in real and monetary terms for the FDCI than the payoff method.

However, you know that more practical sense the second method is most preferred method, because it is better not to allow a bank to completely fail. And instead, when the FDCI understand that one bank is almost about to fail; that means, its net worth has become very weak then it encourages the purchase and assumption method.

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In India, we have Deposit Insurance and Credit Guarantee Corporation, I would suggest you visit the website to get all the relevant information, and understand the functions of Deposit Insurance and Credit Guarantee Corporations.

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**Deposit insurance scheme: India**

- Bank failure in India: Laxmi bank (1960) and the Palai central bank (1960)
- Deposit Insurance Act, 1961 came into force on Jan 1, 1962.
- 1978: Deposit Insurance and Credit Guarantee Corporation (DICGC) under RBI
- DICGC insures all bank deposits, such as saving, fixed, current, recurring deposits for up to the limit of Rs. 500,000 of each deposits in a bank
- Banks pay premium to DICGC (10 paise/Rs 100)

Then about this institution, the Deposited Insurance Scheme in India, the act was passed in 1961 and came into force on January 1st, 1962. So, this was prompted by the bank failure that the Laxmi bank and Palai central bank in 1960, and throughout in 1960 throughout India many banks have been facing crisis, banking crisis. Then out of these two banks already failed, then government responded with the Deposit Insurance Act in 1961 and then finally, the scheme came into effect in 1962. And 1976 Deposit Insurance and Credit Guarantee Cooperation was set up under RBI. So, what DICGC do? DICGC insures all banks deposits such as savings, fixed, current and recurring deposit up to the limit of this much 500000s of each deposit in a bank.

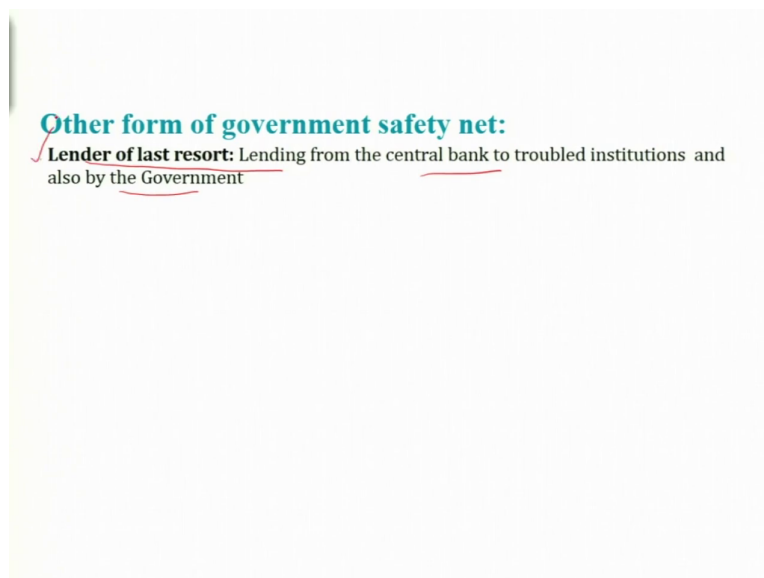
So, banks pay premium to the Deposit Insurance and Credit Guarantee Corporations. So, when we deposit our money in the bank, we are not aware that a premium has been paid because the banks will be paying the premium from our fund. That means, it will be already included or deducted from our interest income that the bank will be giving to us.

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This is again, I would suggest you visit Reserve Bank of India website to get the history of deposit insurance in India. How the scheme evolved and what are the activities, how it intervened in over time in the market to minimize or avert possible bank failures.

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This is what we have seen, one kind of government safety net, it was a response of government in the form of deposit insurance scheme. In the US, in India, and in most countries they are having deposit insurance scheme.

Then another kind of intervention by government is to act as lender of the last resort.

Even without deposit insurance, government will be giving additional support to the troubled institutions.

So, simply, deposit insurance is not the only form of government safety net. In other countries, governments have often stood ready to provide support to domestic banks facing crisis even in the absence of explicit deposit insurance. Furthermore, banks are not the only financial intermediaries that can pose a systemic threat to the financial system. So, when financial institutions are very large or highly interconnected with other financial institutions or markets, their failure has the potential to bring down the end their financial system.

So, one way in which government provides support is through lending from the central bank to the troubled institution. This form of support is often referred to as the lender of last resort. So, what would happen that when the government is there or the central bank and government is there to support the failed banks, we are going to see that it is going to have some negative impact in the financial system.

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**Drawbacks of Government Safety Net**

- 1: **Moral Hazard**
  - Govt safety net: A mixed blessing
  - Depositors do not impose discipline of marketplace
  - Financial institutions have an incentive to take on greater risk
  - "Heads I win, tails the tax payer loss"
- 2: **Adverse Selection**
  - A) Risk-lovers find banking industry attractive
  - B) Depositors have little reason to monitor financial institutions

So, there are some drawbacks of this government safety net, let us discuss this one by one. So, one of the drawbacks of government safety net is it will further encourage the moral hazard problem and it will also encourage the problem of adverse selection. So, we have seen

that because of asymmetric information, the moral hazard and adverse selection issues come up.

And because of that the government intervention is required to minimize information asymmetry. And, for example, to reduce, for example, the bank panic government intervention is required in the form of government safety net, that is deposit insurance plus we also seen that governments steadily stand for the financial institution in the form of lender of the last resort.

It is all came up to reduce moral hazard and adverse selection issues, but what we are going to see that it also aggravates. There are some other channels mechanism through which we can see that the government safety nets, which is supposed to be a blessing, but is going to be a curse and is going to adversely affect the working of the financial market.

So, the most serious drawback of government safety net stems from moral hazard that the incentive of one party in a transaction to engage in activities are detrimental to the other party. So, because of the existence of deposit insurance, what is going to happen, because here with a safety net deposit, they will not suffer losses if a bank fails. The customers do not impose the discipline of the marketplace on banks by withdrawing deposit when they suspect that the bank is taking on too much risk.

So, important point is that because of the government safety net since all our deposits are insured by government, that is the deposit insurance corporations, the depositors began to take everything granted, they do not impose any discipline in marketplace. That means, if they see that one bank is keep on investing in risky assets or they are making risky investment, then the depositors do not take it seriously because they think that it does not matter, they will be getting back their money anyway because government will be repaying it back.

So, similarly, not only individual depositors, even institutional depositors who could do the monitoring they also would not do the monitoring here because they are also assured that government will be paying back their deposits.

So, similarly financial institutions have an incentive to take on greater risk, why? Because you can see that banks with a government safety net have an incentive to take on a greater risk than they otherwise would. Because since the government, the deposit insurance



corporation will be paying back the depositors money. So, this makes an incentive and aggravate the moral hazard problem among the bankers.

Financial institution with a government safety net has an incentive to take on greater risk than they otherwise would. Because taxpayers will pay the bill if bank fails. So, here you can see that if anything goes wrong, finally, this is that the heads I win, tails the taxpayer if I loss. This is the bet here, if they make a risky investment and if their loss does not matter; finally, the taxpayers are going to compensate, they are going to make the final payment to the depositors.

Then the second problem we can see that it also aggravates the adverse selection problems. We have already seen that is an ex-ante problem; that means, the risk lovers will be making risky investments.

So, because of government safety net, risk lovers find that banking industries attractive. So, they want to start a business, they, the risk lovers, would prefer the banking business. Because the risk loving entrepreneurs might find the financial industry, particularly banking system attractive one. That means, they know they will be able to engage in highly risky activities, the government will protect the depositors.

So, little reason to monitor the financial institutions activities; that means, now the depositors and creditors, they have little reason to monitor financial institutions. And as a result, you can see that there is going to be more and more adverse selection. That means, without government intervention, outright crooks, might also find finance an attractive industry for their activities, because it is easy for them to get away with the fraud and embezzlement.

So, that means, overall, because of the government safety net in the form of deposit insurance corporation, we can see that it will be in one way or directly or indirectly promoting or aggravating the adverse selection problem as well. So, to summarize this point, we can see that it will be aggravating the moral hazard problem and adverse selection problem as well.

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**3: "Too Big to Fail"**

- Government provides guarantees of repayment to large uninsured creditors of the largest financial institutions even when they are not entitled to this guarantee.
- Popularized by US Congressman Stewart McKinney in 1984, 'too big to fail' is a **concept used** for banks or financial institutions that are **so big** and interconnected that if they **fail**, the economy is at the risk of substantial damage.
- The **term** gained more popularity during the 2007-08 financial crash
- What if SBI fails? → N W ↓
- Increases moral hazard incentives for big banks
- Main street Vs Wall Street

Not only this we can also see that it will further make the 'too big to fail' as a serious issue. So, the moral hazard created by a government safety net and the desire to prevent financial institution fail is presented with a particular issue that is called 'too big to fail' problem. The regulators are reluctant to close large financial institutions and impose losses on institutions, depositors and creditors because doing so might precipitate the financial crisis.

So, that means, government would not allow large financial institution to fail; that means, government provides guarantees of repayment to large uninsured creditors of the largest financial institution even when they are not entitled to this guarantee. And this term 'too big to fail' was popularized by US congressman in 1984. The 'too big to fail' is a concept used for banks or financial institution that are so big and interconnected that if they fail the economy is at the risk of substantial damage.

That means it would eventually lead to a financial crisis and the financial crisis would further lead to economic crisis; that means, economic recession. So, normally in general there is a perception among the public and financial institution that large financial institution, even because of their own activity if they engage in lots of adverse selection and moral hazard behaviour, government will not allow them to fail, because if they fail, the entire economy entire finance system is going to collapse.

It is going to lead to economic recession, that is nothing but increase in unemployment, decline in GDP, decline in government revenue. So, because of that, government would not allow this one, and this term gained more popularity during the 2007-8 crisis.

So, before discussing more about this one, you just think what if a large bank in India, suppose SBI fails. You know that it is one of the largest commercial banks in India with several branches. And accepting deposits from millions of households and institutional investors, and lending money to the different sectors of the economy and investing in government bonds.

If SBI fails; obviously, you know that it is going to make adverse impact on the entire financial system and subsequently only in the economy as well. So, in this case we can see that from SBI perspective, they may be making lots of that risky investment. Even if they fail, what they might be thinking that even the government would not allow them to fail even if their net worth become negative.

Suppose the net worth decline and becomes negative, even then they will think that since they are too big to fail, government would not allow them to fail. This 'too big to fail' policy increases the moral hazard incentives for banking institutions.

So, knowing that the financial institution will be bailed out creditors have little incentive to monitor institutions and pull their money out when the institution is taking excessive risk. So, as a result what we can see that large or interconnected financial institutions are more likely to engage in highly risky activities making a financial crisis more likely.

So, at the end of the 2007-8 financial crisis, we know that in the US Congress, there was a lot of discussion about the bailout package, initially it was declined and later you know that a bailout package was passed. We can see that the financial crisis of 2007-8 was a manmade crisis, mainly because the financial institution, especially greedy investors, greedy financial institutions created 2007-8 crisis, as per several analysis and reports.

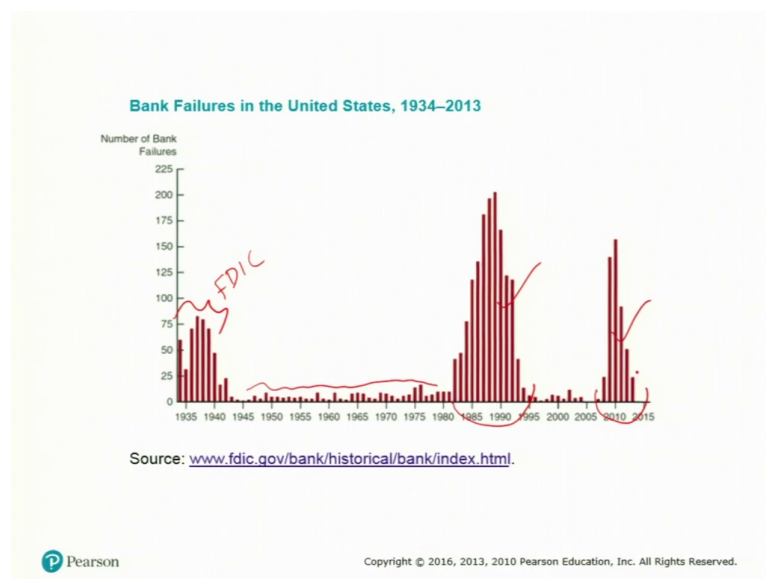
Finally, who had to pay the bailout package? Finally, it was passed, and the billions of dollars were spent for the bailing out of the financial sector in 2007-8. Finally, it was the tax pays money, let us call it Main Street, and the Wall Street means the financial sector. And finally, because of the greed of Wall Street that 2007-8 crisis happened; finally, the all the loss has been compensated by the Main Street; that means, the public, that is, the taxpayers money.

And why it happened, because we cannot allow the big financial institution to fail, we need them. Because if they fail, then entire financial system will collapse; because we need a financial system, strong financial market ensures the smooth flow of fund from those who save and to the sector where it can be make more efficient use of capital.

And without financial system this movement would not happen, that the smooth flow of fund from one sector to another sector, would not happen. And the economic activity that the investment productive activities will come down, that the economic activities will come down, and economy will fall to an economic recession.

So, that means, at the end, you know that the it will be the tax payers money will be used to bail out the big financial institutions.

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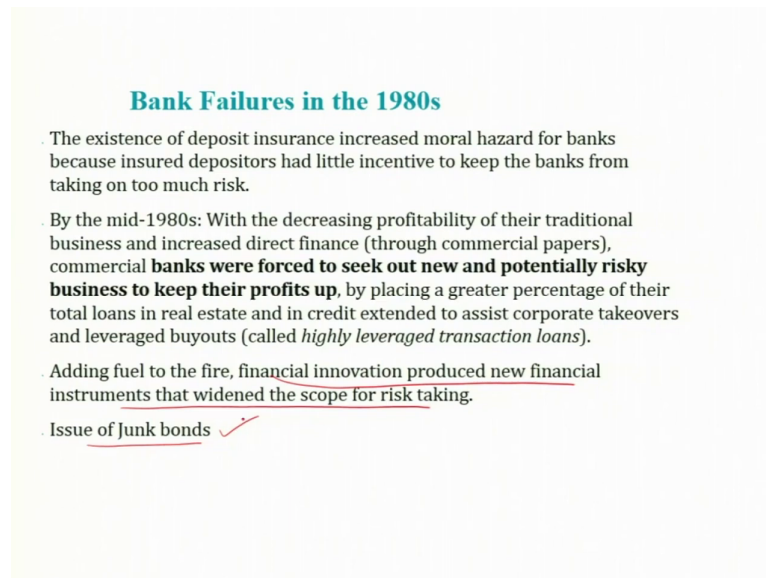


And you can see that the bank failure, it also happened in 1980s, maybe one of the reasons is the FDIC.

But in 1980's, after 1982 to 1990-92, you can see there several many banks failed number of banks failed. And several analyses suggest that the reason for the bank failure in the 1980's to 1990's is mainly because the is one of the consequences of government safety net that the deposit insurance corporation plus government standing or central bank standing as the lender of the last resort that also contributed to the fail bank failure in the 1980's.

And again, the again you can see that several banks failed. And here also, we have seen that the two big to fail problem, we have seen here, and you know that again it may be many analysis suggest that it also because of one of the adverse effect of government safety net.

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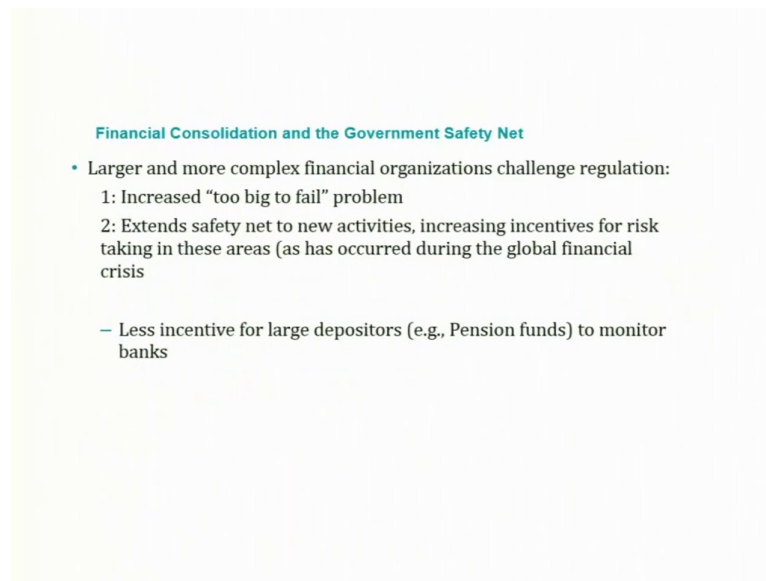


**Bank Failures in the 1980s**

- . The existence of deposit insurance increased moral hazard for banks because insured depositors had little incentive to keep the banks from taking on too much risk.
- . By the mid-1980s: With the decreasing profitability of their traditional business and increased direct finance (through commercial papers), commercial **banks were forced to seek out new and potentially risky business to keep their profits up**, by placing a greater percentage of their total loans in real estate and in credit extended to assist corporate takeovers and leveraged buyouts (called *highly leveraged transaction loans*).
- . Adding fuel to the fire, financial innovation produced new financial instruments that widened the scope for risk taking.
- . Issue of Junk bonds ✓

So, the mainly the bank failures in the 1980's, it was mainly because of the existence of government safety net. In addition, the financial innovations also produced new instruments that widen the scope of risk taking, and several banks issued junk bonds as part of their financial innovations. And issue of junk bonds, they issued again it on the back backdrop that if something goes wrong, if their investment goes wrong, the government will be bailing them out.

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**Financial Consolidation and the Government Safety Net**

- Larger and more complex financial organizations challenge regulation:
  - 1: Increased “too big to fail” problem
  - 2: Extends safety net to new activities, increasing incentives for risk taking in these areas (as has occurred during the global financial crisis)
- Less incentive for large depositors (e.g., Pension funds) to monitor banks

In addition, we can see that financial consolidation and the government safety net also contributed to the bank failure. Let us conclude this session now and let us continue this discussion in the next session.

Thank you.

**Keywords:** government safety net, deposit insurance, lender of the last resort, payoff method, purchase and assumptions method, bank failure, moral hazard, too big to fail, adverse selection