Economics of Banking and Finance Markets
Prof. Sukumar Vellakkal
Department of Economic Sciences
Indian Institute of Technology, Kanpur

Lecture - 32
Types of Regulation-II

Hello everyone, welcome to this session. In the previous sessions, we have discussed various aspects of a Regulations. Specifically, what are the rationale for regulations in financial market.

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2) Prompt Corrective Actions (PCAs)

- Prompt corrective action provisions that require the FDIC/RBI to intervene earlier and more vigorously when a bank gets into trouble.
- Prompt Corrective Action or PCA is a framework under which banks with weak financial metrics are put under watch by the RBI.
- The PCA framework deems banks as risky if they slip below certain norms on three parameters:
- 1). capital ratios
- 2). asset quality
- 3). profitability

And then, we started discussing some of the types of a financial regulation. So, one of them was a capital requirement, and we discussed the capital requirements in the context of Basel framework. And we discussed Basel 1, 2 and more importantly Basel 3. In this session, we will discuss other types of regulations, the one is the prompt corrective action. Shortly, this is called PCAs.

So, in a nutshell, prompt corrective action means an early intervention by the central bank, when the central bank gets a signal that the commercial bank or the f concerned bank is going to get into trouble, or a kind of banking crisis is going to pop up.

So, based on that signal, the Central Bank, in the case of India the Reserve Bank of India, makes early interventions. So, the corrective action is a framework for early intervention by

the central bank in the working of the respective bank. So, prompt corrective action provisions that require in the case of US is FDIC, in India it is RBI, to intervene earlier and more vigorously when a bank gets into trouble.

So, the prompt corrective action or PCA is a framework under which banks with a weak financial metrics are put under the watch by the RBI. The PCA framework deems banks as risky if they slip below certain norms on three key parameters. One is capital ratios this you are already familiar, we discussed in the previous session as capital adequacy capital ratio. And second one is the asset quality, and the third one is the profitability. So, let us now see the Reserve Bank of India framework of PCA.

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Prompt Corrective Action (PCA) Framework of the RBI

https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/PCAFR060514_4.pdf

An essential element of RBI's financial stability framework. A structured early intervention and resolution by regulators for banks that become under-capitalised due to poor asset quality or vulnerable due to loss of profitability

So, the prompt corrective action framework of the RBI is an essential element of RBI's financial stability framework. I would suggest you visit RBI website, and you will get lots of information about the PCA framework.

So, this one, a structured early intervention and resolution by regulators for banks that become under-capitalized due to poor asset quality or vulnerable due to loss of profitability. This is, I am putting here, a screenshot of the PCA framework of the RBI. Here you can see that mainly there are three parameters. One is capital to risk weight ratio, nonperforming assets, and third one is return to assets.

So, the first one is, you know that this is the capital requirement, the first one CRAR. This one is the capital requirement and second one nonperforming asset. This is about the quality of assets and this one, the ROA, this is about the return on asset, this is about the profitability parameter.

So, coming to the first one, CRAR, if it is less than 9 percentage, but equal to more than 6 percentage, then bank needs to submit capital restoration plan restriction on RWA expansion entering new lines of business accessing or renewing costly deposits NCDs and making dividend payments.

It includes restriction on borrowing from interbank market, reduction of stakes in subsidiaries, reducing is exposure to sensitive sectors like capital market, real estate or investment in non statutory liquidity ratio, securities etcetera.

If the CRAR is less than 9 percentage, but equal or more than 6 percentage. There is restriction for if it is coming above 6 percentage, but below if it is below, there are other restrictions comes. It is means they are going to even tighten up their restrictions, it means the RBIs watchdog or RBI's regulation monitoring will become more and more stringent on the concerned banks.

Even look at for example, if CRAR less than 3 percentage. This time, the bank is under the strong PCA framework; that means, in addition to the actions hitting the first and second trigger points, which we mentioned in addition to all these, more close monitoring under the PCA will take place.

Steps to merge, amalgamate, liquidate the bank, or impose moratorium on the bank if its CRAR does not improve beyond 3 percentage within one year or within such extended period as agreed to. So, you can look at from here; that means, when the bank's Capital to Risk Weighted Asset Ratio, that is CRAR, if it is below 3 percentage, you know eventually RBI getting the signal that the bank is going to fail, may be a within a couple of months or within a year the bank is going to fail, that the probability of bank failure is very high. At that time, Reserve Bank, using the PCA framework will impose all these conditions so that bank failure can be prevented.

And the second one is about the nonperforming assets of the bank. So, if the nonperforming assets, that is, the loan quality is very poor, then the banks will be having a greater number of NPAs, if net NPAs over 10 percentage, but less than 15 percentage; that means, it is an indication that banks financial health is under risk.

Then RBI will, as per the PCA framework, carry out special drive to reduce NPAs and contain generation of fresh NPAs. So, one is to reduce the NPAS, and another is preventing the generation of fresh NPAs. So, one is to reduce those loans, another is not giving loans to those sectors or to those kinds of borrowers who is having high risk.

So, review loan policy and take steps to strengthen credit appraisal skills, follow up of advances and put in restrictions in entering new lines of business, making dividend payments, and increasing its stakes in subsidiaries. So, that means, restriction in all these lines, that is, new lines of business, dividend payments, and increasing its stakes in subsidiaries.

If net NPAs become more than 15 percentage and above, in addition to action hitting above, the concerned bank's board is called for discussion on corrective action plan by the RBI. So, similarly this is about the net NPAs part, if it is becoming more than 15 percentage of the total assets, then under the PCA framework, the bank's board is called for discussion on corrective action by the RBI.

If the return on assets is less than 0.25 percentage, then lots of restriction will be put on the concerned bank. It includes restriction on accessing or renewing costly deposits and CDs entering new lines of business and on banks borrowing from inter market. This kind of restriction will come up even including dividend payment, expanding its staff etcetera.

In the US, these are all the framework they use; that means, well capitalized, under-capitalized, they make a categorization they make a 5 PCA categories like that well capitalized, adequately capitalized, under-capitalized, significantly under-capitalized and critically under-capitalized. And you please visit this website this link, and you will get further information about the FDIC PCA framework.

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2) Prompt Corrective Actions (PCAs)

- Importance of Prompt corrective action in preventing bank failures: **By Dr Viral Acharya:** https://www.bis.org/review/r181012k.pdf
- https://www.business-standard.com/article/finance/banks-and-issue-of-stressed-assets-why-prompt-corrective-action-is-a-must-118102000644_1.html

To get more idea about the PCA framework in India, I would suggest the brilliant article, excellent article, written by Doctor Viral Acharya. This has been already freely available for download. Here, Doctor Viral Acharya, he clearly explained what this framework is all about, why is it important. Prior to Viral Acharya term in the RBI, I think this PCA framework not well received.

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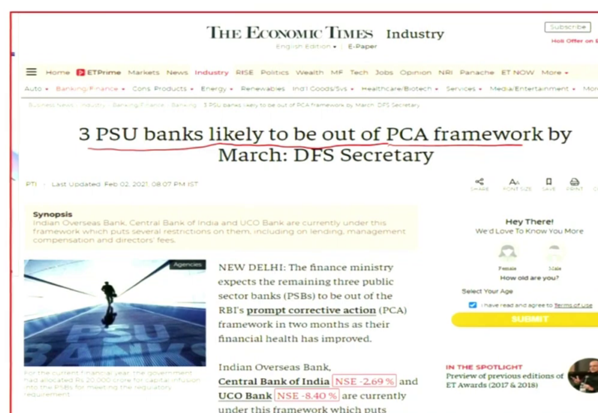

So, I would suggest you read this article and get more clear idea about the PCA framework in Indian context. So, I am just give also giving some screenshot, just to see that you can read,

the PCA framework related news in the financial dailies. For example, this one where three public sector banks are likely to be out of PCA framework by March; that means, once they meet the regulatory requirement or the three framework that we mentioned here, once they start performing well in these, they will be out of this PCA framework.

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So, let us now move to the second type of regulations, that is called Restrictions on Asset Holdings. So, here the banks regulations that restricts asset holdings are directed at minimizing the moral hazard problem; that means, because of government safety net, we know that government safety net encourages banks to take too much risk that is nothing but moral hazard problem.

So, bank regulation that restricts asset holdings are directed to minimize this kind of moral hazard problem, because we already seen that moral hazard problem is costing taxpayers dearly. So, one of the strong rationales for government regulation aimed at reducing risk taking on the part of financial institution. And therefore, even existed before the establishment of government safety nets like a federal deposit insurance; it necessitates a bank regulation because the to prevent this moral hazard problem.

So, here bank regulations promote diversification, it promotes diversification which reduces risk by limiting the amount of dollar in particular categories or to individual borrowers. The point that we discussed in the one of the previous sessions; that means, a risk reduction through diversification may be hedging or spreading the risk. In that way, central bank asks

the member banks to do the diversification; that means, promoting diversification becomes one of the components of restrictions on asset holding.

That means part of the regulation that is here restrictions and on asset holdings. And another thing is banks are restricted, prohibited of holding common stocks. They are not allowed to invest in equity, they are not allowed to invest in equity. So, instead mostly you can see that, if you look at a bank's balance sheet, most of their investment in addition to loan, will be on government bonds because they are not allowed to invest in the equity market.

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4) Financial Supervision: Chartering and Examination

- **Chartering** finance institution (screening of proposals to open new financial institutions) to prevent adverse selection (by preventing undesirable people owning them)
- **Examinations** (scheduled and unscheduled) to monitor capital requirements and restrictions on asset holding to prevent moral hazard
- CAMELS rating
  - Capital adequacy
  - Asset quality
  - Management
  - Earnings
  - Liquidity
  - Sensitivity to market risk
- Filing periodic 'call reports'

Fourth types of regulation are called financial supervision, which includes financial chartering, the chartering and examination. Chartering financial institutions is one method of preventing adverse selection problem. Because of government safety net, we have seen that financial institution can be used by the crooked or over ambitious entrepreneurs to engage in highly speculative activities.

So, we have seen this point; that means, more risk loving people and those who more likely to engage in moral hazard behavior are more likely to enter in the banking industry because of the government safety net. So, they find bank banking sector is one of the attractive business sectors for them.

So, in this case, central bank will do chartering of financial institution, that means, commercial banks obtain a charter either from the controller of the currency or from the state concerned banking authority in the respective jurisdiction.

So, to obtain a charter, people planning to start a bank must submit an application that shows how they plan to operate the bank. So, in evaluating the application, the regulatory authority looks at whether the bank is likely to be sound by examining the quality of the banks, intended management, the likely earnings of the bank, and the amount of the bank's initial capital.

So, that means, screening of proposal to open new financial institution to prevent adverse selection. So, more importantly, by preventing undesirable people owning them. The RBI will engage in chartering financial institution. So, the second component is examination to monitor capital requirements and restrictions on assets holdings to prevent moral hazard problem. This includes regular on-site examination which allow regulator to monitor whether the institution is complying with capital requirements and restrictions on asset holdings and function to limit moral hazards. So, bank examiners give banks a camel rating, and this acronym is based on the 6 areas. One is capital adequacy, this you are familiar already, then the asset quality.

Bank examiners will be monitoring it, then about the bank management, the quality of the bank management, liquidity of the bank, and sensitivity to market risk including interest rate risk and inflation risk. So, these are the camel framework through which the examination will be done, the assessing the bank examiners assessing the banking system and accordingly they will be getting the ratings, this is called CAMELS ratings.

So, in addition they will be asked to fill periodic call reports, so that the central bank can come to know and clearly monitor the performance of the banks' financial conditions.

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5) Assessment of Risk Management

- Greater emphasis on evaluating soundness of management processes for controlling risk
- Trading Activities Manual of 1994 for risk management rating based on:
  - Quality of oversight provided
  - Adequacy of policies and limits for all risky activities
  - Quality of the risk measurement and monitoring systems
  - Adequacy of internal controls
- Interest-rate risk limits:
  - Internal policies and procedures
  - Internal management and monitoring
  - Implementation of stress testing and Value-at risk (VAR)

Then another type of regulation is the assessment of risk management. And here a greater emphasis is on evaluating the soundness of management process for controlling risk. And you know, because of the financial innovations and a with the objective to earn more and more profits, banks will be entering to multiple activities in addition to their conventional activities of accepting deposit and lending loan.

So, we have seen that they will be entering into trading activities, many speculative activities. So, in this case, the risk management of the bank is important because this change in the financial environment resulted in a major shift in thinking about the prudential supervisory process throughout the world. So, bank examiners, for example, now place far greater emphasis on evaluating the soundness of a bank's management processes regarding controlling risk.

So, there are several elements assessing the risk management of the bank; one is the quality of oversight provided, and the other one is adequacy of policies and limits for all risky activities, then the third one is quality of risk measurement and monitoring systems. And the last one is adequacy of internal controls. So, these are the four elements of sound management that asses to arrive at the risk management ratings.

So, even quality of oversight provided by the board of directors and senior management also will be assessed, because mainly the question is about the management and about the second one adequacy policies and limits for all activities that present significant risk. Then the

adequacy of internal controls to prevent fraud or unauthorized activities on the part of employees. And this also measured in terms of the management plans.

So, what are the measures being taken by the bank banks management to reduce the interest rate risk will be assessed. The internal policies and procedures used laid down for assessing to address interest rate risk and internal management and monitoring also will be assessed. And similarly, one more thing is that, particularly important is, the implementation of stress test which you calculate potential losses and the need for more capital under fictional dire scenario.

That is implementation of stress testing for the banks. And the value at risk calculation, we can measure the size of the loss on trading portfolio in terms of the worst possible scenario of loss that the bank going to face, that also will be measured under this frame. This framework that the assessment of risk management.

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6) Disclosure Requirements

- Requirements to adhere to standard accounting principles and to disclose wide range of information
- The Basel 2 accord and the SEC put a particular emphasis on disclosure requirements
- The Sarbanes-Oxley Act of 2002 established the Public Company Accounting Oversight Board

Then talking about disclosure requirements, here requirements are to adhere to the standard accounting principles and to disclose wide range of information. So, you know that the Basel 2 is known more known more for the importance of disclosure requirements and supervision of the banking system. So, in US, that this act Sarbanes Oxley Act of 2002 established a Public Company Accounting Oversight Board. So, this is another kind of regulation.

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7) Consumer Protection

- Consumer Protection Act of 1969 (Truth-in-lending Act)
- Fair Credit Billing Act of 1974
- Equal Credit Opportunity Act of 1974, extended in 1976
- Community Reinvestment Act
- The subprime mortgage crisis illustrated the need for greater consumer protection.

Coming to the next one, this one is called Consumer Protection, Consumer Protection Act of 1969 in the US. There are series of legislation to protect the welfare of the industries that the Consumer Protection Act that is act of 1969, Fair Credit Billings of 74, Equal Credit Opportunity Act of 1974 and Community Reinvestment act. And all these are relevant, because the subprime mortgage crisis illustrated the need for greater consumer protection.

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8) Restrictions on Competition

- Justified as increased competition can also increase moral hazard incentives to take on more risk.
  - Branching restrictions (eliminated in 1994)
  - Glass-Steagall Act (repeated in 1999)
- Disadvantages:
  - Higher consumer charges
  - Decreased efficiency

Then coming to one more, the last one that is, the Restrictions on Competition. One of the reasons banks to enter new arena of business, new areas of business is because of the increase

in competition, that is increase in competition. So, because of high competition, the profit declines.

So, banks were looking for more and more new areas of businesses that make them more vulnerable to high risk. And that makes the bank crisis, and banking failure often. So, however, you know that sometimes this is controversial, as we know that increased competition, that when the sector financial sector is more and more competitive, is beneficial as well; most of all most of the economic theories is argue that competition promotes welfare; be it for the consumers, be it for the producers and for the entire society.

However, about banking sector sometime empirical evidence suggest that it is not always true. So, in that way, but not to promote monopoly or oligopoly market, just to minimize the competition if it is adversely affecting the banks profit, then it is just justified as increased competition also increased moral hazard incentive to take more risk.

So, there are some restrictions is called branching restrictions. There are some legislations also in this regard. So, then disadvantages; obviously, you know that if competition is reduced, when the market is becoming imperfect, that the competition is declining, then; obviously, consumer charges increase, welfare loss to different stakeholders happen, decreased efficiency also become a part of an outcome of it.

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Macroprudential Vs. Microprudential Supervision

- Before the global financial crisis, the regulatory authorities engaged in **microprudential supervision**, which is focused on the safety and soundness of **individual** financial institutions.
- The global financial crisis has made it clear that there is a need for **macroprudential supervision**, which focuses on the safety and soundness of the financial system **in the aggregate**.

We have seen various types of regulations. And one more thing, before I am summarizing this session, there are two types of supervision in the banking sector. Before the financial crisis 2002-08, the regulatory authorities engaged in micro prudential supervision which is focused on the safety and soundness of individual financial institutions.

But aftermath 2007-08, the global financial crisis has made it clear that there is a need for macro prudential supervision which focuses on the safety and soundness of the financial system in the aggregate. Overall, what we have seen here is that financial institutions in their search for profits have strong incentive to avoid existing regulations by loophole mining, which we have seen in the previous session that is through money market and sip account.

Financial institutions will always be searching for loophole mining. So, in that way, the regulation that we discussed here, all this regulation applies to a moving target because regulators are continually playing cat and mouse with the financial institutions. And financial institutions think of clever ways to avoid regulation, which then leads regulators to modify their regulation activities.

That means, the regulators continually face new challenges in dynamically changing financial system. And unless they can respond rapidly, they may not be able to keep financial institutions from taking excessive risk.

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Table 1 Major Financial Legislation in the United States

Federal Reserve Act (1913)
Created the Federal Reserve System
McFadden Act of 1927
Effectively prohibited banks from branching across state lines
Put national and state banks on equal footing regarding branching
Banking Acts of 1933 (Glass-Steagall) and 1935
Created the FDIC
Separated commercial banking from the securities industry
Prohibited interest on checkable deposits and restricted such deposits to commercial banks
Put interest-rate ceilings on other deposits
Securities Act of 1933 and Securities Exchange Act of 1934
Required that investors receive financial information on securities offered for public sale
Prohibited misrepresentations and fraud in the sale of securities
Created the Securities and Exchange Commission (SEC)

So, here I am showing you some of the major financial legislation in the United States over time, just to give you an overview.

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Table 1 Major Financial Legislation in the United States

Investment Company Act of 1940 and Investment Advisers Act of 1940
Regulated investment companies, including mutual funds
Regulated investment advisers
Bank Holding Company Act and Douglas Amendment (1956)
Clarified the status of bank holding companies (BHCs)
Gave the Federal Reserve regulatory responsibility for BHCs
Depository Institutions Deregulation and Monetary Control Act (DIDMCA) of 1980
Gave thrift institutions wider latitude in activities
Approved NOW and sweep accounts nationwide
Phased out interest-rate ceilings on deposits
Imposed uniform reserve requirements on depository institutions
Eliminated usury ceilings on loans
Increased deposit insurance to $100,000 per account

These are all the major legislations.

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Table 1 Major Financial Legislation in the United States

Depository Institutions Act of 1982 (Garn–St. Germain)
Gave the FDIC and the Federal Savings and Loan Insurance Corporation (FSLIC) emergency powers to merge banks and thrifts across state lines
Allowed depository institutions to offer money market deposit accounts (MMDAs)
Granted thrifts wider latitude in commercial and consumer lending
Competitive Equality in Banking Act (CEBA) of 1987
Provided $10.8 billion to shore up the FSLIC
Made provisions for regulatory forbearance in depressed areas
Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA) of 1989
Provided funds to resolve savings and loan (S&L) failures
Eliminated FSLIC and the Federal Home Loan Bank Board
Created the Office of Thrift Supervision to regulate thrifts
Created the Resolution Trust Corporation to resolve insolvent thrifts
Raised deposit insurance premiums
Reimposed restrictions on S&L activities

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Table 1 Major Financial Legislation in the United States

Sarbanes-Oxley Act of 2002
Created Public Company Accounting Oversight Board (PCAOB)
Prohibited certain conflicts of interest
Required certification by CEO and CFO of financial statements and independence of audit committee
Federal Deposit Insurance Reform Act of 2005
Merged the Bank Insurance Fund and the Savings Association Insurance Fund
Increased deposit insurance on individual retirement accounts to $250,000 per account
Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010
Created Consumer Financial Protection Bureau to regulate mortgages and other financial products
Required routine derivatives to be cleared through central clearinghouses and exchanges
Authorized government takeovers of financial holding companies
Created Financial Stability Oversight Council to regulate systemically important financial institutions
Banned banks from proprietary trading and from owning large percentages of hedge funds

So, this is after the 2007-08 crisis. So, many acts introduced in the US even after 2007-08 crisis. Also, you can see several legislations were passed over time, because when the financial institutions try to overcome find loopholes, then again, the regulators need to come up with a modification of the existing legislations, amendment of the existing legislations as well. So, let me stop here and see you in the next session.

Thank you.

Keywords: regulation, prompt corrective action, non-performing assets, restriction on asset holdings, monitoring, chartering and examinations, disclosure requirements, financial legislations