ECONOMICS OF DEPOSIT INSURANCE
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ECONOMICS OF DEPOSIT INSURANCE

Why and What is Deposit Insurance?

•**Motivation behind DI schemes**:

- Strengthen banking & financial system stability
- Prevent bank runs and panic
- Protect bank retail depositors from incurring large losses in the event of bank failures.
- Promote banking & financial sector development

•**Deposit Insurance**: protects depositors against the loss of their deposits in the event an insured institution of the deposit insurer is unable to meet its obligations to depositors

•**Financial safety net**: a financial stability mechanism that usually comprises the deposit insurance function, prudential regulation and supervision, and the lender-of-last-resort function.

•Introduction of explicit DI typically generates moral hazard and adverse selection

Deposit Insurance Basics

•**Moral hazard**: incentive for additional risk taking, often present in insurance contracts and arises from the fact that parties to the contract are protected against loss.

•**Adverse selection**: tendency for higher-risk banks to opt for deposit insurance and lower-risk banks to opt-out of deposit insurance when membership in a deposit insurance system is voluntary and costly.

•Risks that are large and systemic are difficult for a private institution to insure. Pooling them does not eliminate systemic risk that can bankrupt a private insurer.

•Role of Government: government may insure systemic risks, but political constraints may limit its ability to charge systemic risk premia, leading to a subsidy of systemic risk and worsening of business cycles and financial risk

•US introduced DI in 1933. Prior to 1933, banks feared deposit withdrawals and held 99 % of all commercial paper to meet deposit outflows.

•Kane (1989) identifies the U.S. financial safety net, and notably fixed-rate deposit insurance and belated bank closures, as the single most important factor in explaining the Savings and Loan crisis of the 1980s.

•Demirgüç-Kunt and Detragiache (1998, 2002) find international evidence that the existence of an explicit deposit insurance scheme has contributed to banking system fragility.

Common Remedies

•**Co-insurance**: depositors contractually required to share in bank losses.

•**Insurance coverage**: most countries specify an upper limit to amount of deposits refunded in case of insolvency and typically exclude foreign currency and inter-bank deposits.

•**Source of funding and fund management**: Many explicit deposit insurance schemes establish insurance funds, and most of the payments into the fund come from banks, or jointly from banks and the government. There is also wide dispersion in the deposit insurance premium that banks have to pay into the fund.

•**Risk based premia**. Making deposit insurance premiums risk-based is a sensible way to try to reduce bank risk taking.

• **Mandatory Membership**: most countries have mandatory membership of banks in the insurance fund

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Deposit Insurance Basics: Definitions I

Bank run: A rapid loss of deposits precipitated by widespread fear that a bank may fail and depositors may suffer losses.

Blanket Guarantee: A declaration by the government that all deposits and perhaps other financial instruments will be protected.

Compulsory System: A deposit insurance system in which all targeted institutions must be member according to law or agreement.

Coinsurance: An arrangement whereby depositors are insured for a pre-specified portion, less than 100 percent of their deposits.

Depositor priority: the granting of preferential treatment to depositors such that their claims must be paid in full before remaining creditors can collect on their claims.

Ex-ante funding: the accumulation of a fund to cover deposit insurance claims in anticipation of the failure of a insured bank.

Ex-post funding: an assessment levied after the failure of a insured bank to provide funds to cover deposit insurance claims.

Forbearance: to grant an extension of time to certain distressed banks from minimum regulatory requirements.

Lender-of-last-resort function: the provision of liquidity to the financial system by a central bank.

Limited-coverage deposit insurance: a guarantee that the principal and the interest accrued on protected deposit accounts will be paid up to a specified limit.

Deposit Insurance Basics: Definitions II

Set-off: Refers to situations where the claim of a creditor in an insolvent bank (for example, a deposit) is deducted from a claim of the bank against the creditor (for example, a loan).

Systemic risk: A risk that has implications for the general health of the financial system and can have serious adverse implications for financial stability and overall economic conditions.

Coverage Ratio (by value): Ratio of insured deposits divided by total insurable deposits.

Covered Item: Accounts and financial products which are at insured institutions and covered by the deposit insurer.

Risk-Adjusted Premium: A levy on a bank assessed on the basis of its risk profile.

Flat - Rate Premium: A premium assessed at a uniform rate across all insured institutions.

Hybrid Funding: A funding method used by the deposit insurers by combining both the ex-ante and ex-post funding mechanisms.

Insured Deposits: Types of deposits that are covered by a deposit insurance system.

Limited-Coverage Deposit Insurance: A guarantee that the principal and/or the interest accrued on protected deposit accounts will be paid up to a specified limit.

Too Big to Fail: The practice of protecting uninsured depositors, creditors, and others from loss when large banks fail in order to prevent from the occurrence of a systemic risk.

Voluntary System: A deposit insurance system that a targeted institution has the right to decide to participate in as a member.

(Source: IADI)

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Banking Crises and their consequences

•**Systemic bank crises and resulting insolvencies involve large costs:**

- •Bank failures typically leads to the destruction of a bank's information capital & reputation
- •Increase in investor risk aversion and "flight to safety", leading to contagion effects and disrupting financial markets
- •Real effects: disruption of bank lending, the credit system and of the payments system, leading to a reduction in investment and other economic activity.
- •Bank depositors and shareholder potentially lose heavily because of bank failures

Remarks:

•DI cannot deal with crises of itself and does not prevent the occurrence of crises; it may lower the costs of the crises to depositors

•The insurance schemes co-exist with the central bank lender of last resort function so they provide an additional protection and perform an additional check on the banks' balance sheet.

27 Things you may not have known about banking crises

Systemic Banking Crises: A New Database, IMF Working Paper, Nov 2008

1. In 55 per cent of cases, the banking crisis coincides with a currency crisis.

2. Bank runs feature in 62 per cent of the crises.

3. Banking crises are often preceded by credit booms, in 30 per cent of the cases.

4. Non-performing loans average about 25 per cent of loans at the onset of the crisis.

5. Macroeconomic conditions are often weak prior to a banking crisis.

6. Extensive liquidity support is used in 71 per cent of crises.

7. Peak liquidity support tends to be sizeable and averages about 28 per cent of total deposits.

8. Blanket guarantees are used in 29 per cent of crises, often introduced to restore confidence even when previous explicit deposit insurance arrangements are already in place, lasting for an average of 53 months.

9. Prolonged regulatory forbearance - where banks, for example, are allowed to overstate their equity capital in order to avoid the costs of contractions in loan supply - occurs in 67 per cent of crises.

10. In 35 per cent of cases, forbearance takes the form of banks not being intervened despite being technically insolvent, and in 73 per cent of cases prudential regulations are suspended or not fully applied. Existing literature on forbearance shows it is counterproductive, with banks taking on additional risks at the future expense of the government. In 86 per cent of cases, government intervention takes place in the form of bank closures, nationalizations, or assisted mergers.

12. 51 per cent of crisis episodes have experienced sales of banks to foreigners.

13. The more bank closures there are, the higher the fiscal costs.

14. A blanket guarantee, however, reduces the instances of bank closures.

15. Bank restructuring agencies are set up in 48 per cent of crises.

16. Asset management companies are set up in 60 per cent of cases to manage distressed assets.

17. In 76 per cent of episodes, banks were recapitalised by the government, mostly with cash, government bonds or subordinated debt.

18. Recapitalisation programs are usually accompanied with some conditionality.

19. To the extent that debt relief schemes are discretionary, they run the risk of moral hazard as debtors stop trying to repay in the hope of being added to the list of scheme beneficiaries.

20. Average net recapitalisation costs to the government amounts to 6 per cent of GDP.

21.On the bright side, recapitalisations tend to be associated with lower output losses.

22. Monetary policy tends to be neutral during crisis episodes, while fiscal policy tends to be expansive.

23. Average fiscal costs, net of recoveries, associated with crisis management average 13.3 per cent of GDP.

24. The average recovery rate is just 18 per cent of gross fiscal costs.

25. Real GDP losses average 20 per cent relative to trend during the first four years of the crisis.

26. There is a negative correlation between output losses and fiscal costs: the higher the fiscal costs, the smaller the loss of output

27. Inflation and currency devaluation help reduce the budgetary burden and thus have been a feature of the resolution of many crises in the past.

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Deposit Insurance Systems World Wide

1. Albania
2. Algeria
3. Argentina
4. Armenia
5. Austria
6. Azerbaijan
7. Bahamas
8. Bahrain
9. Bangladesh
10. Barbados
11. Belarus
12. Belgium
13. Bosnia and Herzegovina
14. Brazil
15. Bulgaria
16. Canada and Quebec
17. Chile
18. Colombia
19. Croatia
20. Cyprus
21. Czech Republic
22. Denmark
23. Dominican Republic
24. Ecuador
25. El Salvador
26. Estonia
27. Finland
28. France
29. Germany
30. Gibraltar
31. Greece
32. Guatemala
33. Honduras
34. Hong Kong
35. Hungary
36. Iceland
37. India
38. Indonesia
39. Ireland
40. Isle of Man
41. Italy
42. Jamaica
43. Japan
44. Jordan
45. Kazakhstan
46. Kenya
47. Korea
48. Lao PDR
49. Latvia
50. Lebanon
51. Liechtenstein
52. Lithuania
53. Luxembourg
54. Macedonia
55. Malta
56. Marshal Islands
57. Mexico
58. Micronesia
59. Malaysia
60. Moldova
61. Montenegro
62. Morocco
63. Netherlands
64. Nicaragua
65. Nigeria
66. Norway
67. Oman
68. Paraguay
69. Peru
70. Philippines
71. Poland
72. Portugal
73. Puerto Rico
74. Romania
75. Russian Federation
76. Serbia
77. Singapore
78. Slovakia
79. Slovenia
80. Spain
81. Sri Lanka
82. Sudan
83. Sweden
84. Switzerland
85. Taiwan
86. Tajikistan
87. Tanzania
88. Trinidad and Tobago
89. Turkey
90. Uganda
91. Ukraine
92. United Kingdom
93. United States
94. Uruguay
95. Uzbekistan
96. Venezuela
97. Vietnam
98. Zimbabwe

Source: IADI Web Site

Box 1. Selected policy measures related to guarantees of bank deposits

(between September and early December 2008)

United States

United States Treasury establishes two-year guarantee program for money market fund investors, effective as of 29 September 2008, to cover fund levels as of 19 September 2008.

- The new legislation also temporarily allows the United States deposit insurance agency (FDIC) to borrow unlimited funds from the Treasury.
- On 3 October, the House of Representatives voted for the Emergency Economic Stabilization Act of 2008, which included the raising of the ceiling on the FDIC deposit insurance USD 100,000 to USD 250,000 per depositor per bank on a temporary basis until end 2009.
- In mid-October, the FDIC temporarily guaranteed senior unsecured debt of all FDIC-insured institutions and their holding companies (as long as issued on or before 30 June 2009; the guarantee being valid through 30 June 2012), as well as deposits in non-interest bearing deposit transaction accounts.
- On 23 November, the US government injects USD 20 billion of cash into Citigroup in exchange for a USD 27 billion preferred equity stake, and agrees to guarantee loans and securities on that company's books worth USD 306 billion.

Europe

- On 30 September, the Irish government temporarily guarantees all deposits, covered bonds, senior and dated subordinated debt held in the six biggest banks, with guarantee scheduled to terminate in September 2010.
- Several countries, including Belgium, Greece, Luxembourg, Netherlands, Portugal and Spain each raise deposit insurance to EUR 100,000.
- On 3 October, the Financial Stability Authority announced that (with effect from Tuesday 7 October) the deposit protection limit changes to GBP 50,000 from GBP 35,000 per person per authorised bank. The chancellor of the exchequer is reported by newspapers to have made statements suggesting that the government might be offering an implicit 100 per cent guarantee on all deposits in a failing bank, although he has not made a legally binding pledge.
- On 5 October 2008, the German government issued a guarantee on every private deposit account; "the state guarantees private deposits in Germany" according to its spokesman.
- On 6 October, the Governement of Iceland stated that a blanket guarantee has been extended covering all deposits in domestic commercial and savings banks and their branches in Iceland.
- On 20 October 2008, the Austrian National Council put forward a 100-billion-euro bank rescue package, which included temporarily providing unlimited deposit insurance to savers and undertaking legal guarantees on loans between banks. From 2010, insurance on deposit would have a limit of EUR 100,000.
- On 5 November, the Swiss government announced it was raising its bank deposit guarantee to 100,000 from 30,000 Swiss francs.

Box 1 (continued). Selected policy measures related to guarantees of bank deposits

(between September and early December 2008)

- On 8 December, the European Parliament's Economic and Monetary Affairs Committee endorsed a proposal for raising the deposit guarantee level to EUR 50 000, rather than the present EUR 20 000, from 30 June 2009 and harmonising the level at EUR 100 000 from 31 December 2011.

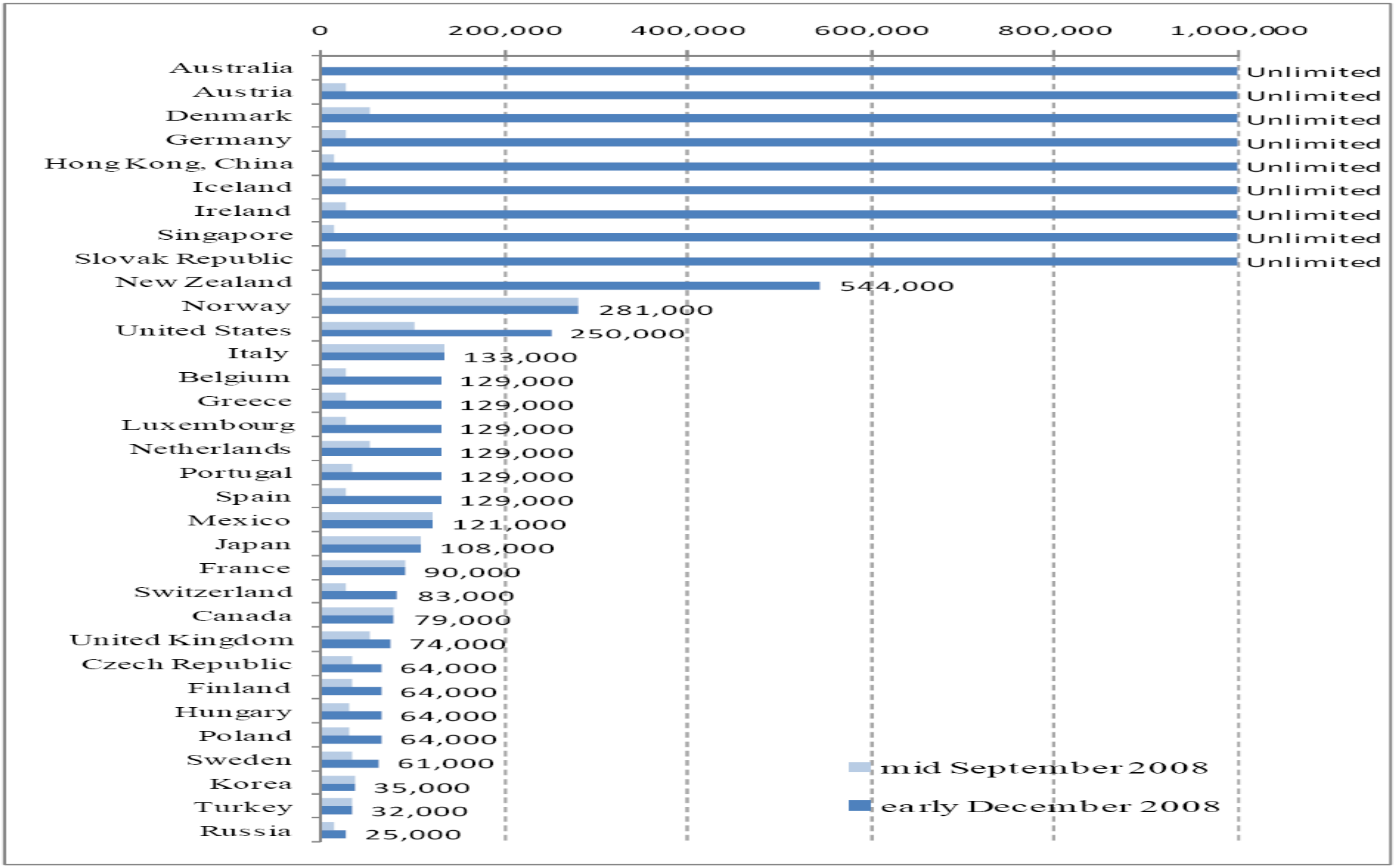
Asia

- On 12 October, the Australian government announced that it guarantees all deposits in the country's banks for the next three years, as well as term wholesale funding to local banks until further notice.
- On 12 October, the New Zealand government announces that it introduces an opt-in deposit guarantee scheme, covering deposits for banks and eligible non-bank deposit-takers.
- On 14 October, the Hong Kong Monetary Authority announced that all bank deposits would be fully guaranteed.
- On 16 October, the Singapore Government announced a guarantee of all Singapore Dollar and foreign currency deposits of individual and non-bank customers in banks, finance companies and merchant banks licensed by the Monetary Authority of Singapore, valid until 31 December 2010.

Source: OECD

Deposit Insurance Coverage Limits

USD equivalents, at current exchange rates, as of mid-September and early December 2008



Note: Preliminary OECD Secretariat estimates. For more detail see tables A.1 and A.2 in the appendix. Exchange rates as of 8 December 2008.

Deposit Insurance in MENA:

Countries with explicit DI:

•Algeria

•Bahrain

•Jordan

•Lebanon

•Morocco

•Oman

•Sudan

•Turkey

Pending or under study:

•Egypt

•Yemen (pending)

•UAE has issued a blanket guarantee of deposits, including inter-bank credits but has not issued details of the scheme

Deposit Insurance Issues

How does an explicit DI system affect? :

- Bank stability,
- Market discipline,
- Financial development
- Crisis management

Source: **Deposit Insurance Around the Globe: Where Does It Work?** Aslı Demirguc-Kunt and Edward J. Kane, *Journal of Economic Perspectives—Volume 16, Number 2—Spring 2002—Pages 175–195*

How Does Explicit DI Affect Bank Stability?

Issue: credible deposit insurance contributes to financial stability by making depositor runs less likely. On the other hand, unless capital positions and risk taking of insured institutions are supervised carefully, DI may lead to excess risk taking and undermine bank stability in the long run.

Explicit DI can **increase the likelihood that a country will experience a banking crisis**, particularly if its design embodies features that intensify moral hazard.

Is moral hazard introduced by DI mitigated if the country has a strong institutional environment (using indicators such as bureaucratic quality, bureaucratic delay, lack of corruption, the quality of contract enforcement and legal efficiency)? **Evidence supports hypothesis that the contribution of DI to bank fragility is significant in poor institutional settings,** but that this effect is offset in countries whose institutional and regulatory environment is strong. “Thus, where the contracting environment controls incentive conflicts, effective prudential regulation and supervision can offset the adverse incentives created by deposit insurance so that moral hazard need not be worrisome.

Another important implication of the study is that **there is no evidence that explicit systems truly “cap” implicit guarantees and reduce moral hazard**. “DI tends to reduce monitoring by private parties. The issue is how well the reduction in private monitoring is replaced by official regulatory and supervisory discipline.”

How Does DI Affect Market Discipline?

Issue: DI reduces the stake that depositors have in monitoring and policing bank capital and loss exposures and shifts responsibility for controlling bank risk taking to the regulatory system. If DI managers displace more discipline than they exert, bank performance is undermined (‘crowding out’ type effect).

Evidence: “Studies indicate that DI displaces market discipline everywhere, even in advanced countries. However, in countries with a sound regulatory structure, the loss of market discipline may be more than offset by strong regulation and supervision. Countries with poor contracting environments are likely to suffer adverse consequences from deposit insurance.”

How Does DI Affect Financial Development?

Issue: if DI bolsters depositors' faith he banking system, it may mobilize household savings for use by the financial system. Question: do the funds mobilized go on to support improved patterns of real investment and sustainably higher rates of aggregate economic growth?

Evidence: Explicit DI favorably impacts the level of financial activity and its volatility *only in the presence of strong institutional development.* On the other hand DI retards the evolution of nonbank financing mechanisms.

What Role Does DI Play in Managing Crises?

Issue: common practice to issue blanket deposit insurance guarantees to prevent or stop a banking crisis. It is clear that a policy of *credibly extending blanket guarantees can stop* depositor runs during a banking crisis. Credibility hinges on a government's fiscal capacity to deal with systemic insolvency (e.g. US intervention today).

Evidence: Honohan and Klingebiel (2000) analyze the impact that blanket deposit insurance guarantees and other crisis management strategies have on the ultimate fiscal cost of resolving distress in a banking system. Data covering 40 financial crises around the world indicate that unlimited depositor guarantees, open-ended liquidity support and regulatory forbearance significantly increase the ultimate fiscal cost of resolving a banking crisis.

Study also finds no trade-off between fiscal costs and the speed of economic recovery; that is, a bailout that costs more does not bring a faster recovery!

Blanket DI guarantees create an expectation of their repeated use in similar future circumstances. This expectation threatens to undermine market discipline in the long run and to destabilize the financial system over longer periods.

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Design of an Effective DI System

1. Clear understanding and statement of Public Policy Objectives
2. Undertake a comprehensive situational analysis of local conditions:
   I. Legal & Regulatory framework
   II. Enforcement of laws
3. Specify clear Mandate, Powers and Structure
   I. Transparency, Accountability & Predictability
   II. How does DI fit into the prudential regulatory and supervisory framework?

Design of DI to Minimize Hazards

•DI impacts financial fragility by **reducing the degree of private market discipline** that banks experience. Appropriate design features must be included to control and to offset these effects.

•Design of DI should include **enforceable coverage limits** to ensure that large depositors, subordinated debt-holders and other banks understand that their funds remain at risk.

•Monitoring however needs **reliable information, good disclosure and transparency standards, and sound accounting practices.**

•Providing strong **incentives for private parties to remain vigilant: pr**ivate monitoring must overcome potential weaknesses in official supervision. Coinsurance and related private loss-sharing arrangements, such as subordinated debt and extended stockholder liability, sharpen these incentives.

•*Source: Demirgüç-Kunt, A and Edward J. Kane, 2002.*

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- Explicit Deposit Insurance schemes are now offered by some 98 countries across the globe, though they differ in coverage, funding, co-insurance features, pricing of insurance premia and voluntary/mandatory membership.
- Many countries, both advance and emerging market economies have increased the scope and coverage limits of their DI in response to the financial crisis and in order to restore public confidence in their banks.
- DI is not prevalent in the GCC or the wider MENA region.
- DI can be an important element in strengthen banking & financial system stability , preventing bank runs and panic, protecting bank retail depositors from incurring large losses in the event of bank failures and in promoting banking & financial sector development.
- DI should be designed as an element of a Financial Safety Net: a financial stability mechanism that usually comprises the deposit insurance function, prudential regulation and supervision, and the lender-of-last-resort function
- DI should be designed to maintain market discipline and minimize incentives that induce an increase in risk taking by covered institutions (moral hasard and adverse selection issues) .

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Thank You!
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