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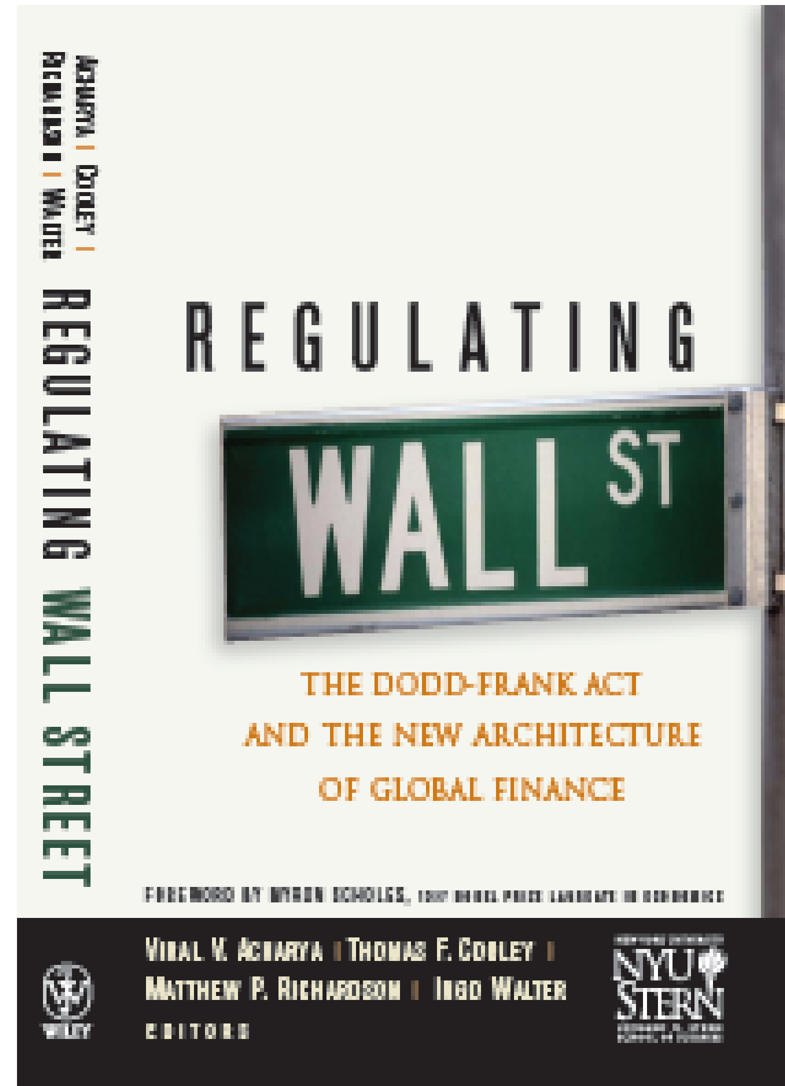
Regulating Wall Street:

The Dodd-Frank Act and the New Architecture of Global Finance

October 2010



Idea behind the book

- Joint effort of 40 faculty members and students at NYU Stern
- Edited by Viral V Acharya, Thomas Cooley, Matthew Richardson and Ingo Walter
  - Following up on NYU-Stern's earlier effort *"Restoring Financial Stability: How to Repair a Failed System"*, John Wiley & Sons, Mar 2009
- Four parts of the presentation
  - Encore: Causes of the financial crisis of 2007-09
  - **Assessment of the Dodd-Frank Act from first principles**
  - Comparative evaluation relative to financial reforms of the 1930's
  - What-if analysis for the Dodd-Frank Act during 2003-2008

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Causes of the Financial Crisis

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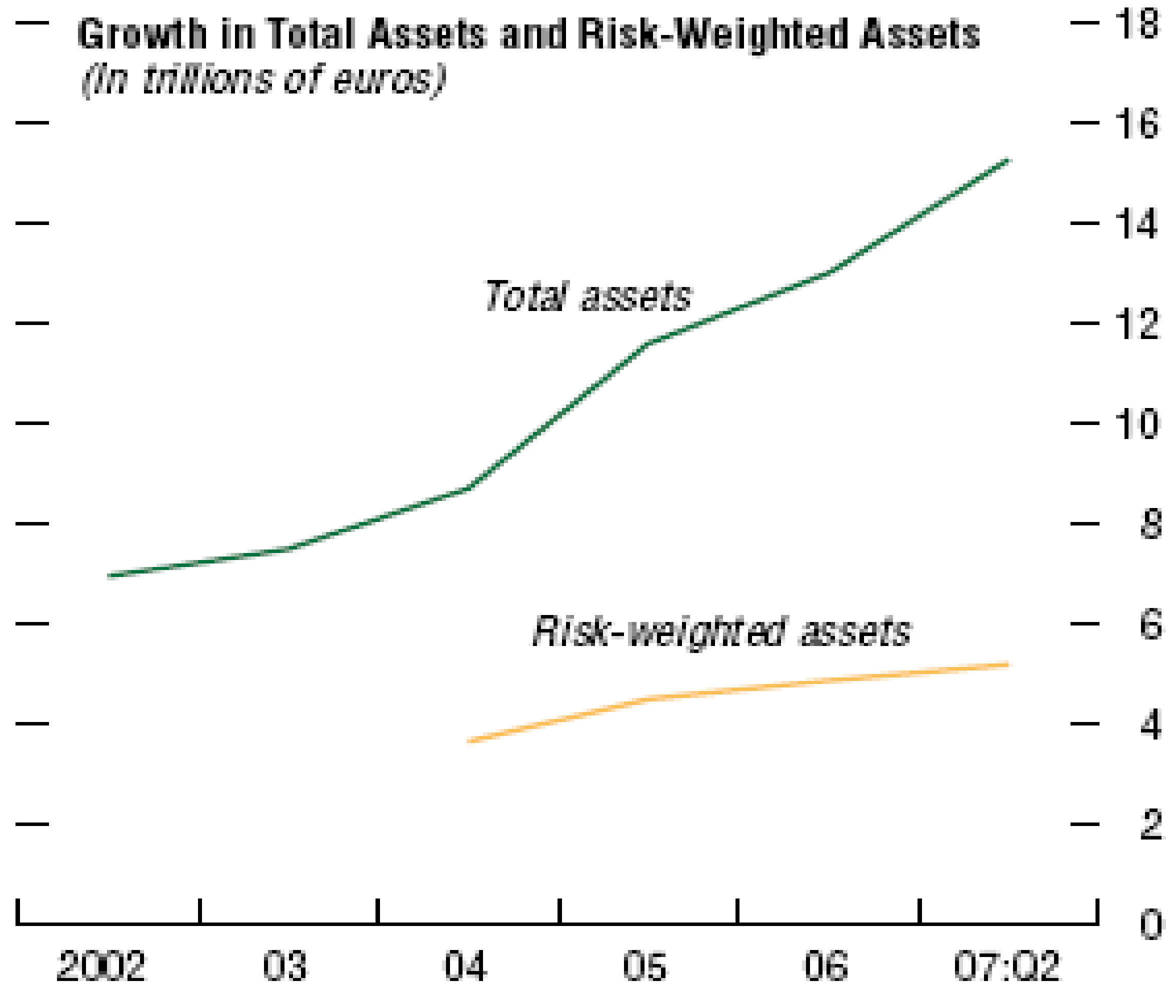
- Popular explanations for the <u>economic crisis</u>
  - Lot of bad loans were made: Design of subprime mortgages
  - Rating agencies rubber stamp of AAA-tranches of securitization
  - "Great Moderation", "Black Swan", once in a century shock to real estate…
  - Low interest rates due to expansionary monetary policy
  - Global imbalances

Causes of the Financial Crisis (cont'd)

- But financial sector <u>did not transfer credit risk</u> down the line
- It was <u>manufacturing tail risk</u>, i.e., synthesizing "carry trades" at lowest possible capitalization, often through regulatory arbitrage

1. ABCP conduits and SIV's
2. Changing economic role played by short-term debt and repos
3. AAA tranches of subprime mortgages
4. CDS protection and guarantees from AIG FP and monolines

Low Growth in Risk-Weighted Assets (Source: IMF GFSR April 2008)



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New banking model

"Manufacturing Tail Risks"

- Acharya, Cooley, Richardson, Walter (2009)

- Asset-side: term premium + risk premium
  - Long-term; mortgage-backed; if possible, sub-prime mortgage-backed
- Capitalization: low
  - AAA-rated tranche or OTM guarantee on the pool
- Liability-side: short-end of yield curve
  - Short-term overnight or weekly ABCP, repo or CP

- Carry in good times = 50/100bps on assets – 15/20 bps on debt
- Bad times = Blow up, but limited liability…

Why are tail risks attractive?

- Selling OTM options gives premium in good times but is a highly levered bet on the underlying
- Management: Boost short-term ROE
- Why don't shareholders contain such behavior?
  - Manufacturing tail risks may be in the interest of shareholders too
  - Creditors expect to be bailed out in systemic tail risk scenarios or do not take account of the "externality" in such states
  - Shareholders do not pay for the externality either

Four Principles for Future Regulation

1. Efficient pricing of government guarantees

   – Deposit insurance
   – Too Big To Fail guarantees,
   – Implicit (now explicit) guarantees of Government Sponsored Enterprises
   – Loan guarantees and liquidity facilities during a crisis

2. "Tax" for systemic risk

   – Market-based measures: Higher leverage, beta, size, illiquidity…
   – Stress tests
   – Countercyclical enforcement

Four Principles (cont'd)

3. State-contingent penalties for the hidden action problem

   - Contingent capital, claw backs, double liability
   - Resolution mechanisms for "shadow banking" markets (ABCP, repo, money markets)

OR Enforce or induce a new form of Glass-Steagall separation:

- No in-house hedge funds, i.e., privatize prop-trading

4. Transparency

   - Centralized clearing
   - Accounting of off-balance-sheet transactions/guarantees

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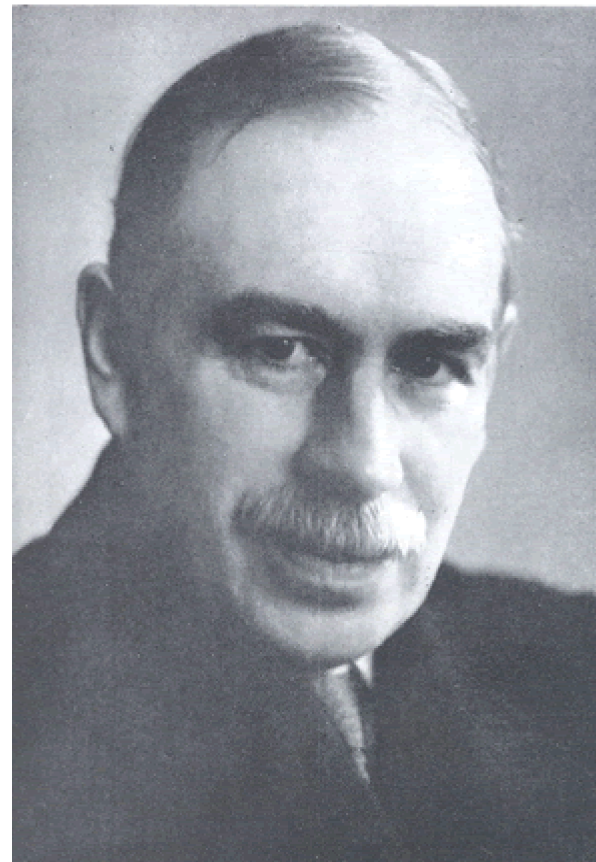
Assessment of the Dodd-Frank Act from First Principles

One-line assessment of Dodd-Frank

"The difficulty lies, not in the new ideas, but in escaping from the old ones…"

- John Maynard Keynes in *The General Theory of Employment, Interest and Money (1936)*



Highlights of the Dodd-Frank Act (see Appendix for details)

1. Identifying and regulating systemic risk

   - "Council" to deem institutions as systemically important financial institutions (SIFI's), regulate them and break them up as last resort
   - Office of Financial Research (OFR) to collect, analyze and disseminate relevant information for anticipating future crises

2. Proposing an end to too-big-to-fail

   - Funeral plans and orderly liquidation procedures for unwinding of SIFI's
   - Ruling out of taxpayer funding of wind-downs and instead requiring that
     - Management be fired
     - Wind down costs be borne by shareholders and creditors
     - If necessary, *ex post* levies be imposed on other (surviving) SIFI's

Highlights of the Dodd-Frank Act

3. Expanding the responsibility and authority of the Fed

- Authority over all SIFI's and responsibility for preserving financial stability
- Bureau of Consumer Financial Protection to write rules governing consumer financial services and products offered by banks and non-banks

4. Restricting discretionary regulatory interventions

- Allows for discount-window lender-of-last-resort (LOLR) for "banks"
- Prevents or limits 13(3) [emergency] federal assistance in the form of LOLR to individual institutions
- However, allows for market-wide LOLR (in some cases subject to prior consent from the Council)

Highlights of the Dodd-Frank Act

5. Reinstating a limited form of Glass-Steagall (the "Volcker rule")

- Limits bank holding companies to *de minimis* investments in prop trading activities (hedge funds, private equity) and prohibits their bail outs

6. Regulation and transparency of derivatives

- Central clearing of standardized derivatives
- Regulation of complex ones that can remain over-the-counter (OTC)
- Transparency of all positions (price/volume for public and position-level for regulators)
- Separation of non-vanilla (other than interest rate, foreign exchange and single-name credit derivatives) positions into well-capitalized subsidiaries
- All with exceptions for commercial hedging transactions

The Positives from the Act

- <u>It has its heart in the right place: systemic risk!</u>
  - Purpose of new legislation is (for the first time) explicitly to develop tools to contain systemic risk
  - Strives to give prudential regulators authority to deal with such risk
- <u>The Act makes an effort at resolving and demystifying SIFI's</u>
  - Funeral plans to unwind SIFI's could serve as a useful resolution aid and an implicit tax on complexity
  - Similarly, even the diluted Volcker rule should simplify organizational structure of SIFI's and reduce spillover from trading to payment systems

The Positives from the Act (cont'd)

- Perhaps the strongest aspect is the Derivatives reform
  - Focus on transparency and central-clearing should limit spillover costs of SIFI failures substantially (e.g., failures of Bear Stearns, Lehman, AIG)
  - Price-volume transparency to markets, and even some aggregated position disclosure, should improve pricing of counterparty risk even in bilateral OTC markets
- The Council may judge non-banks to also be SIFI's and subject them to greater scrutiny by the prudential regulators

Limitations of the Act

- A great degree of uncertainty and specificity remains on several aspects of the Act (in spite of its 2,300+ page script)
- A large amount of discretionary rule-making (over 225 new rules) left to prudential regulators (across 11 federal agencies)
- A significant chance to consolidate the fragmented regulation of the U.S. financial sector has been missed (barring in one case)
- However, leaving aside these issues of implementation, there appear to be <u>four critical weaknesses</u> in the Act, which the regulators may have to guard against in future

I. (Lack of) Pricing of guarantees

- Guarantees, if uncharged, distort capital budgeting of economy
  - Walter and Weinberg (1999): 45% of all ($8.4 trn) financial liabilities in the U.S. received some form of guarantee
  - Malysheva and Walter (2009): 58% of all ($25 trn) are under safety net
  - Government guarantees lower cost of debt, raise financial sector leverage, distort capital budgeting to riskier assets, increase financial fragility

1. GSEs, the largest – govt sponsored – "hedge fund", ignored in the Act
2. No proposal to reform FDIC insurance premium so that banks pay premiums in good times too
3. Insurance sector: tiny state guarantee funds, so too big to fail problem
4. Orderly Liquidation Authority (OLA) does not cover all systemic institutions nor rules out future guarantees with certainty

II. Flawed resolution principle

- Systemic risk of failures implies costs beyond firm's stakeholders
  - Simply wiping out management, shareholders, creditors ex post may not suffice to internalize the full costs of failure
  - But no attempt in the Act whatsoever to charge an upfront tax for those firms whose systemic risk contributions are greater
    - See "Measuring Systemic Risk" - Acharya, Pedersen, Philippon and Richardson (2010)
  - What is worse, the Act proposes a scheme that aggravates systemic risk

1. Charging the surviving SIFI's when other large banks fail is a poor design
    - Can exacerbate recession and credit crunch by weakening remaining banks
    - Hence, SIFI's unlikely to pay for systemic risk *ex post* or *ex ante*!
    - Banks may even find it better to herd and all fail together
2. The Act limits Fed LOLR to individual non-depositories but creates no ex-ante funds for resolving their failures

III. Regulation by form and not function

- The Act remains pre-occupied with depository institutions

  – Several bank-like non-banks in the financial system: investment banks, money-market funds, swap dealers, some insurance companies, etc.

  1. Giving access to federal assistance to banks but not to others creates the lack of level-playing field

  – Can create "race to the bottom" in risk between banks and non-banks

  – Also as non-banks approach distress, they will merge with banks

  2. The Act will lead to creation of central clearinghouses for derivatives

  – Mark Twain: "Put all eggs in a basket" but then "watch that basket"!

  – Ruling out Fed's LOLR to clearinghouses while they get recapitalized can create disorderly liquidations and uncertainty

IV. Systemically important markets?

- <u>While the Act deals with OTC derivatives reasonably well, it remains agnostic about systemic risk in other markets</u>
  - Collection of small institutions and economic agents and transactions can be systemic if it is central to plumbing of the financial sector
  - Examples: Payment and settlement systems, Wholesale financing markets (Repos, money market funds), Reserve currency (currently, mainly USD) market

1. Sale and repurchase agreements ("Repos"): Estimated $5-$10 trn
   - Contain a "fire sale" externality, akin to runs on banks by demandable deposits
   - No resolution proposed: Cannot simply pass losses to end financiers all at once
   - Emergency repo bank (LOLR) or Repo resolution authority (like FDIC) needed
2. Money market funds: Estimated $7 trn
   - Uninsured deposits, subject to same risk of runs as in the pre-FDIC era
   - Again, no resolution proposed under the Dodd-Frank Act

Conclusion

Adam Smith on bank regulation (“The Wealth of Nations”)

“To restrain private people, it may be said, from receiving in payment the promissory notes of a banker for any sum, whether great or small, when they themselves are willing to receive them; or, to restrain a banker from issuing such notes, when all his neighbors are willing to accept of them, is a manifest violation of that natural liberty, which it is the proper business of law not to infringe, but to support. Such regulations may, no doubt, be considered as in some respects a violation of natural liberty.

But those exertions of the natural liberty of a few individuals, which might endanger the security of the whole society, are, and ought to be, restrained by the laws of all governments; of the most free, as well as of the most despotical. The obligation of building party walls, in order to prevent the communication of fire, is a violation of natural liberty, exactly of the same kind with the regulations of the banking trade which are here proposed.”

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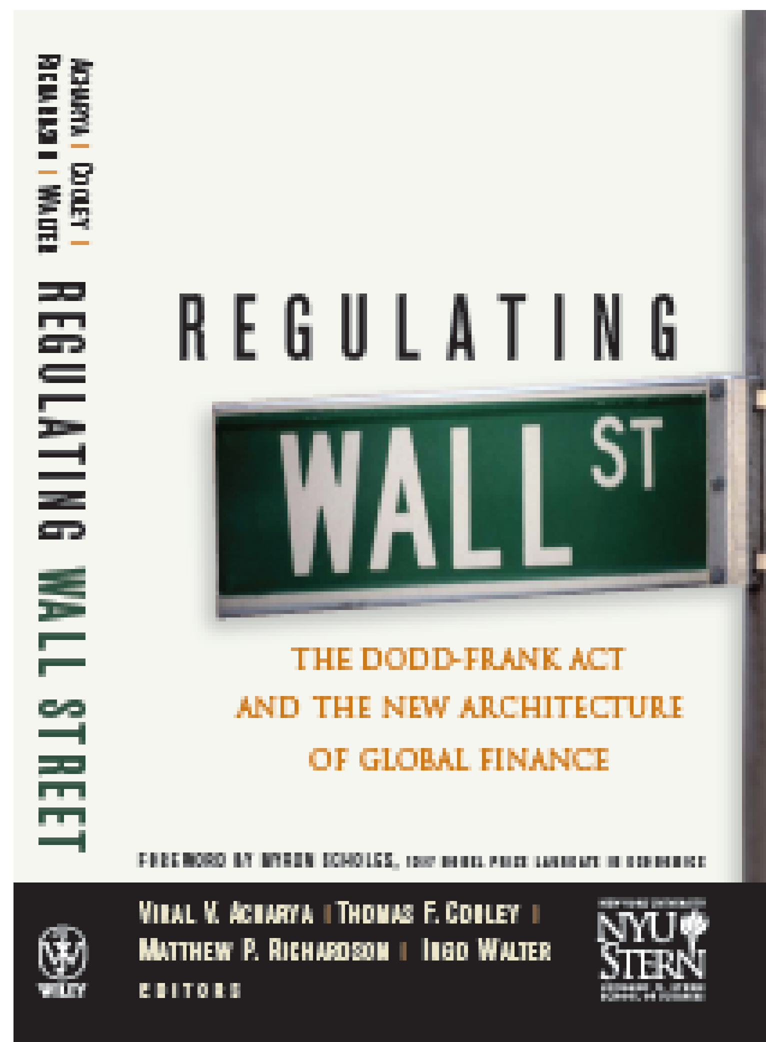
The Dodd-Frank Act and “party walls”

- Right in requiring party walls of depository institutions (the Volcker rule), but what about shadow banks?
- Right in requiring orderly resolution when fires break out, but why put brakes on emergency services (the Fed)?
- Right in putting an end to taxpayers footing the bill of putting out fires, but why charge neighbors (surviving SIFI’s)?
- Right in trying to contain systemic risk and too-big-to-fail but not if government is setting its own fires without any party walls (Fannie Mae and Freddie Mac)?
- The Act is a good, commendable effort by many, but appears incomplete and with a good share of holes that regulators must attempt to fill

How to address these limitations?

READ THE BOOK!



Book outline

I. Financial Architecture

1. The Architecture of Financial Regulation
2. Central Bank Independence and the Role of the Fed
3. Consumer Financial Protection Agency

II. Systemic Risk

4. Measuring Systemic Risk
5. Taxing Systemic Risk
6. Capital, Contingent Capital and Liquidity Requirements
7. Large Banks and the Volcker Rule
8. Resolution Authority
9. Systemic Risk and the Regulation of Insurance Companies

III. Shadow Banking

10. Money Market Funds
11. The Repurchase Agreement (Repo) Market
12. Hedge Funds, Mutual Funds and ETFs
13. Regulating OTC Derivatives

IV. Credit Markets

14. The GSEs
15. Regulation of Rating Agencies
16. Securitization Reform

V. Corporate Control

17. Compensation
18. Accounting Issues