1994

Flat Tailed Probability Distribution

Hyman P. Minsky Ph.D.

[Flat tailed probability distribution]

Changes in global financial markets

Speed - gains in technology.

Derivatives: Pricing + Hedging

Financial Markets more efficient

Financial Market Stability:

[Market Dynamics here ∂'s]

Strengthened

Limit Potential Crisis

Key: Maintain liquidity of underlying markets

Baring's PLC: NOT compromised underlying of spread
markets

Sound Risks: Liquidity

Capacity of Markets to Absorb Shocks

Concentration of

July 1993 - group of 30's

20 Recommendations
Measuring + Controlling risk

Risk management - Limits on risk taking

Limits of Statistical Models.

Value of risk: maximum Loss for position

Maximum Loss

Calculating Value at Risk:
term structure

Individual Instrument decomposed:

Correlation - How much of the past is relevant to
today
Normal.

Potential:

Counter-party at default —

Violating

Fat tailed distribution

[mathematical tractability]

bought
↔ (at a high price)

(Correlation among factors)

| Critical Importance of human judgement

Stress tests

[Critical part: [judging market liquidity]

Liquidity — stock
↘ flow

1994 - Large losses in

| How much
did the
Fed, BoE + BoJ
push in during
24-48 hrs after
actual Barings
Brokers

Clearance + Settlement
Processes (Default in
Settlement
System)

A☐☐ Same day Funds =

Federal Funds,

Fed Wire,

(Cross Border Settlements)
BIS, etc

National Security

Book entry accounting system

Transfer without actual Security

Payment (Delivery vs payment)

Certificates, physical delivery

Revise (8, 9? uniform commercial code)

Let no not quit the B B Game

Shocks   MACRO-PRUDENTIAL E

MACRO - ECONOMIC SHOCKS
MANAGING - MONETARY

15 MINUTES

Evraigon: Financial System is more vulnerable DAMAGE FROM LOW probability
events greater

Cntul: Single event

1 Cntuls problem
Cntrcts Structure Complexity
Intra company transactions

Derivatives too much credit
too much blame

mortgage instruments
a) new instruments
turns on countries

bisodes: potential
16% instruments in 8% market

leverage

Market Illiquidity

Solvent Risk
Doubling the "bet"

plumbing is a crucial issue
variable
a) Some pay-payment finality
b) gross
c)
d) Market Credit Risk

Industry vs Authorities
DERIVATIVES POLICY GROUP
1 Over the counter derivatives
2)
3 capital + capital at risk calculation
4) Counterparty relationships

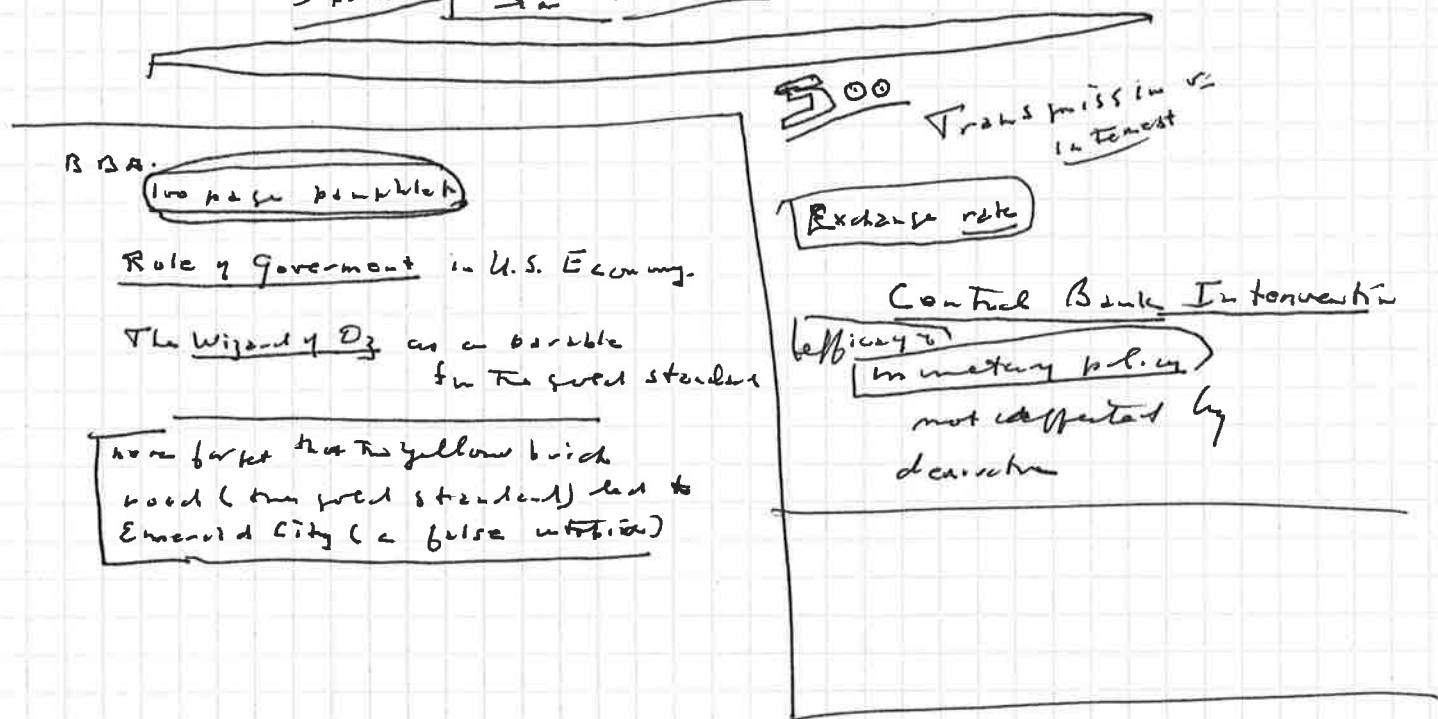(Costs are great y risk control)

Best practices + Disclosure

Transparency

Akira Nagashima = Liquidity is most central during shocks

globalization
financial innovation } ———— advancement of globalization

stable monetary
price level
goal
→ liquidity

Spuri..ti... growing use of derivatives
far on... ...

500

Transmission of interest

B BA.
Two page pamphlet

Role of Government in U.S. Economy.

The Wizard of Oz as a parable for the gold standard

... market that the yellow brick road (the gold standard) led to Emerald City (a false ambition)

Exchange rate

Central Bank Intervention

efficacy of monetary policy not affected by derivatives

Hudson: existence of derivatives → decrease in volatility

Liquidity + openness

... account traders

electronic market vs open market ...

Salesmen not congruent

Should Customers

Accurate

Singular + Solo

HARMONIZE.

Guardian

8:40 AM   New + Innovative Instrument – Derivative

(1)   Exchange Based Contracts.

(2)   Over the counter contracts

Innovative Products

Contract | Request for quote,

Negotiate

| Deal Struck |

Trader-bid on the counter
institutional sized block
credit guarantee ___
+ public outcry

Credit enhancement/ Credit Enhancement

Hanson
Cal. Pers. Emp. Pension
Modest User of Derivatives
Puts / Putts

Income
Shorten
Exotic
Instrument

glass

Clez
Substitution   Oct '87

7 billion Damages

Deferred Compensation
in S&P 500

Exposure, unmatched

Balanced Budget
Amendment
| Monetary History
| Since Civil
| WAR:
| HIGHLY
| STYLIZED

Balance Sheet
Liab | Asset
                Educational
                System

End User Wants What is credit

Demand

Prices

Simulation

Instruments as alternative to Stock + Bonds

Selling obtions:

Buyer PECS

Buy Security

→ converted into common stock

Systemic Risk:

RISK MANAGEMENT

Real effect

[MARKET] [ACCIDENT]

[SYSTEMIC RISK] → Self Regulation by Participants

Ludwig is [lawyer]   Ludwig Reading

OCC Conference
1. unexpected event → puts financial system at risk

2. Event → series of events → large scale declines

— [1929 / 33] Runs

— _____ Rare + highly localized

Independent risk management function

Stiglitz on Systemic Risk

3] reasons

systemic risk — $\boxed{\dfrac{d\,GNP}{d\,\pi} < 0}$

[significant] . Prior drop in GNP or π

[Information] Capital in Economy

1) Information Capital of the Economy

2) Information in one → information in another

Short Run effect

RISK aversion

Consumer Interest, Investor Confidence

2) Well functioning Capital Markets

Monitoring is a Public Good

Labeling Standards

DERIVATIVES in market is fixed

Hedging function is real benefit

@ same time

Enhance leverage enhance speculation

increased leverage $\Rightarrow \frac{d\sigma}{d\alpha}/_1$ is lower

Modigliani
Miller $\longrightarrow$ no effect on market value

hide information

Two stage profit

determination

① determination 1
Aggregate Π

② determination 1
distributing Π to
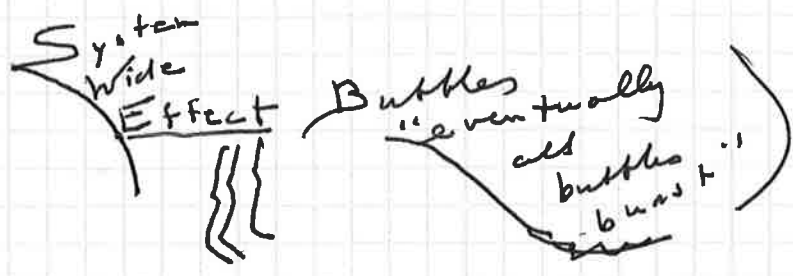various firms

Too big to fail

Systemic Risks

i) (SEC)
c) Transparency | TRANSPARENCY
b)

Single firm
System at large

System
Wide
Effect   Bubbles "eventually
          all
          bubbles
          burst"

Accounting Rules

Regulation
Wide Spread Insolvency
(S&L) o=n: Lack of Capital Regulators
         Capital Mandated is Reform

Rule of 3% capital.
         Regulatory Measurement of Capital

Regulatory   3 ways   ① : Book Value of Performing
   g&L   mortgages

                    Roth   ② Deferred Loan loss as asset

   conservative profit
   diversating   Roth   ③ Origination Income as
                                    income

         Creative Accounting

Prter for Systemic Risk

Financially fragile – Business
– Household
– Govt

Firms
Household
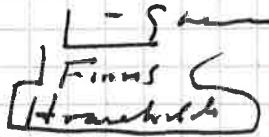
Measure of Financial Fragility

- Speed
- Difficulty of Observing
- Quick transmission

Investors in financial market →

~~transactor~~ taxpayer liability

bu { execution risk }

Cost to taxpayers

assessment

{ taxpayers stand behind }

private loss bearers

UNPERCEIVED DETERIORATION

Deteriorating Risk
emergence of fragility financial conflicts → Anticipate
administrator
gradual decline

out of a financial
product
structure

~~render~~
fail safe

explosive risk)
Bailing Out

[Exposure to deteriorate]