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Doubling Down on Failure: Subsidizing More One-Way Bets
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EUROPE'S ZOMBIE MEGABANKS AND THE DEFERENTIAL REGULATORY ARRANGEMENTS THAT KEEP THEM IN PLAY

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TALKING POINTS

1. Financial crises are the last stages of games of Chicken initiated by megabankers. They **know or ought to know** they can benefit **personally** from aggressively risking the ruin of their firms and the financial industry as a whole in ways that harm taxpayers and the national economy.
2. To change individual-banker incentives, it makes sense to identify and punish **crimes of reckless banking** in more or less the same ways we punish reckless driving.
3. What is New: My research provides comprehensive statistical evidence consistent with this chicken-game model of endogenous financial crises. It supports the model by offering a new way of measuring the particular subsidies that flow through bond markets. The method tracks and compares the changes in bond yields for megabanks with changes in their short-term and long-term probabilities of default. Unlike credit spreads for nonfinancial firms, Megabank credit spreads respond hardly at all to surges in their probability of default.

HOW ZOMBIE MEGABANKERS PLAY CHICKEN WITH CRISIS MANAGERS

Around the world, megabankers have learned that capturing regulators politically allows them to **hold the macroeconomy hostage** in crises to extract subsidies from the safety net. Zombie banks are kept alive by guarantees their managers extract and expand <u>via</u> repeated games of chicken.

Zombie managers cosmetically misrepresent their economic condition and pursue profit-making opportunities that exploit counterparties' and regulators' informational disadvantage.

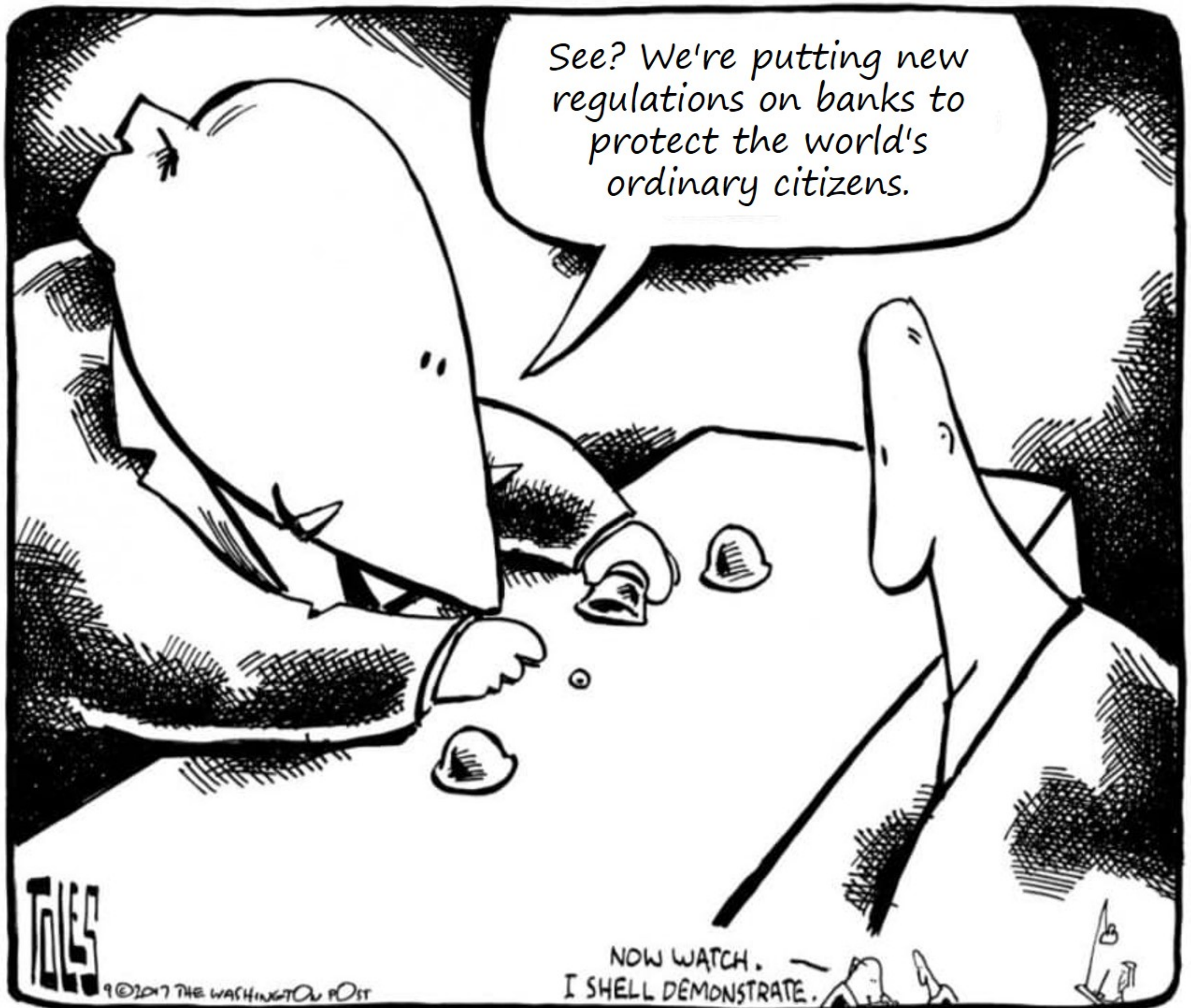
The Fed's demonstrated **propensity for rescuing foreign banks** makes US taxpayers serve as the world's *de facto* guarantors of last resort.

As in the last crisis, the Fed (i.e., the US taxpayer) is the final and by far the **sturdiest element** of the global financial safety net and deserves to be better protected.

Continuing Fed post-crisis support (which includes **currency swaps** and **interest on foreign-bank deposits** at the Fed) allows country regulators to give zombie institutions the benefit of the doubt and back them up by implicitly by expanding connections between their own safety nets and the US Fed.

POSTCRISIS ARRANGEMENTS FOR RESOLVING BANKS IN CRISES SOUND GOOD, BUT ARE LARGELY A BLUFF

1. **Mandatory Bail-In Framework for EU countries(Loophole-Ridden)**
2. Restrictions on the Fed's ability to lend selectively to *individual* distressed institutions.
3. Expanded Deposit Insurance Coverage and Reserves
4. Living Wills and enhanced resolution authority
5. EU and Fed assurances of supervision and liquidity support for central counterparties (i.e., securities and swaps exchanges)
6. **Coco Bonds: von Furstenberg estimates $460B issued worldwide (my guess is 60% in Europe) between 2009 and yearend 2016.**
7. Fed cross-border currency swaps that informally back up foreign banks and central banks


See? We're putting new regulations on banks to protect the world's ordinary citizens.
TOLES
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NOW WATCH.
I SHELL DEMONSTRATE.

PROBLEM IS THAT, NO MATTER HOW MUCH SUPERVISORY AND RESOLUTION AUTHORITY EXPANDS, THE UNSPOKEN NORMS (*LES NON-DITS*) THAT GOVERN THE EXERCISE OF THIS AUTHORITY REMAIN MUCH THE SAME

1. Central-bank commitment to protecting and expanding agency and clientele turf
2. Industry-Centered norms of client service, protection, and partial acceptance of blame when crises occur.
3. Loss-concealment norms (e.g., efforts to understate their tolerance of nonperforming loans)
4. Mercy and benefit-of-the-doubt norms that delay resolution of insolvency
5. Norms of individual career management
    a. Blame-avoidance norms (rocking the boat or challenging higher-ups is seen as career suicide)
    b. An understanding that is ok to nurture one's post-government employment and speaking opportunities.

THESE NORMS LEAD TO WHAT I CALL THE CULTURE-DRIVEN MEGABANK-BAILOUT MODEL OF CENTRAL-BANK BEHAVIOR. THIS MODEL IS ROOTED IN: (1) TOP-MANAGER INCENTIVES TO PURSUE TAILS RISKS AT MEGABANKS; (2) THE DURABILITY OF CONCEALMENT AND BENEFIT-OF-THE-DOUBT NORMS AT REGULATORS AND CENTRAL BANKS; AND (3) THE HIGH CORRELATION OF STAND-ALONE DEFAULT PROBABILITIES ACROSS MAJOR BANKS IN US AND EU

Bank Pair	Correlation Coefficient in KRIS data
BAC and C	.95
BAC and JPM	.92
BAC and GS	.94
BAC and MS	.94
BAC and DBK	.74
BAC and BBVA	.85
BAC and UBS	.78
BAC and CSGN	.83

KRIS posted these figures on 10-10-17. These high correlations destroy the credibility of strict bail-in promises. They tell us that, when one of these banks is in Distress, the others are more apt to need help than to be able to assist them.

EVIDENCE OF BAILOUT EXPECTATIONS

The model of default probability used to generate the probabilities is Kamakura Risk Information Services version 6.0 Jarrow-Chava reduced form default probability model (abbreviated on the KRIS site as KDP-jc6)

- This model was developed for Don van Deventer. Don has generously made these data available to me.
- The model uses a sophisticated combination of financial ratios, stock price history, and macro-economic factors.

  The version 6.0 model was estimated over the period from 1990 to 2014, and includes the insights of the recent credit crisis. Kamakura default probabilities are based on 2.2 million observations and more than 2,700 defaults.

  A term structure of default over different horizons is constructed by using a related series of econometric relationships estimated on this data base. KRIS covers 35,000 firms in 61 countries, updated daily.

In this slide, we study the 11 weakest banks operating in the United States (regardless of headquarters location) that were subject to the Federal Reserve's CCAR stress testing in 2016. Banks are ranked in this table by the size of their three-year cumulative default probabilities on 3-9-17 :

Ticker	Company	Country	S&P Rating	1 yr	3 yr	10 yr	10 yr (10-7-17)
DBK	DEUTSCHE BANK AG	DEU	BBB+	2.06	6.49	22.90	18.37
SAN	BANCO SANTANDER SA	ESP	A-	0.86	4.11	20.83	21.11
BBVA	BBVA	ESP	BBB+	1.01	4.05	19.75	20.35
8306	MITSUBISHI UFJ FINANCIAL GRP	JPN	A	0.49	3.43	19.79	21.18
ALLY	ALLY FINANCIAL INC	USA	BB+	0.63	3.17	19.35	17.73
601988	BANK OF CHINA LTD	CHN	A	0.82	2.83	15.28	17.26
HSBA	HSBC HLDGS PLC	GBR	A	0.22	2.34	17.69	13.79
RF	REGIONS FINANCIAL CORP	USA	BBB	0.14	1.71	14.61	14.86
HBAN	HUNTINGTON BANCSHARES	USA	BBB	0.14	1.63	14.13	15.31
TPB	BNP PARIBAS	FRA	A	0.11	1.57	15.27	14.79

How a Firm's Credit Spread Moves in Distress Depends on How Fully Its Creditors **Feel** They are Covered by the Safety Net

- The next few slides will use graphs to illustrate default-swap or credit-spread behavior in and out of crisis for: GE (as a baseline) and several US and European megabanks.
- Blue dots: **Credit spread**, based on actual trades and calculated using matched-maturity Treasury (different from the convention which uses the nearest **shorter** US Treasury on-the-run yield)
- Light Blue lines show **volume** of trading in the selected bond
- Orange line: **1 year** Kamakura Risk Information Services reduced-form default probability (KDP), version 6.0
- Green line: **10 year** (unless otherwise noted) KRIS reduced form default probability, version 6.0

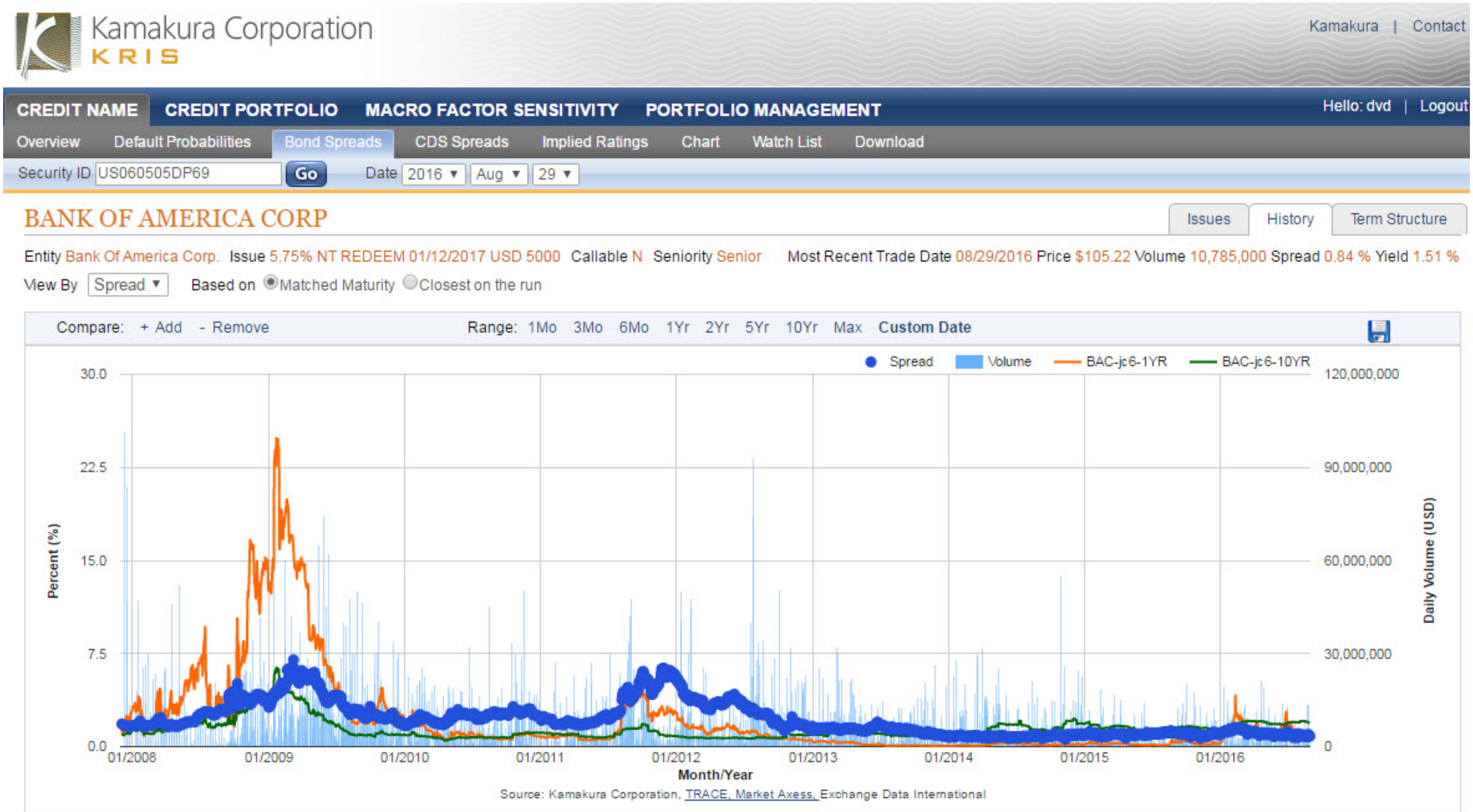
- Finance is only a small part of GE operations.
- Blue dots move sharply with surges in orange line and stay high even after 1 year KDP bottoms out slowly as problems are worked out.
- Problems slowly resolved. Matures 12-6-17.

citigroup

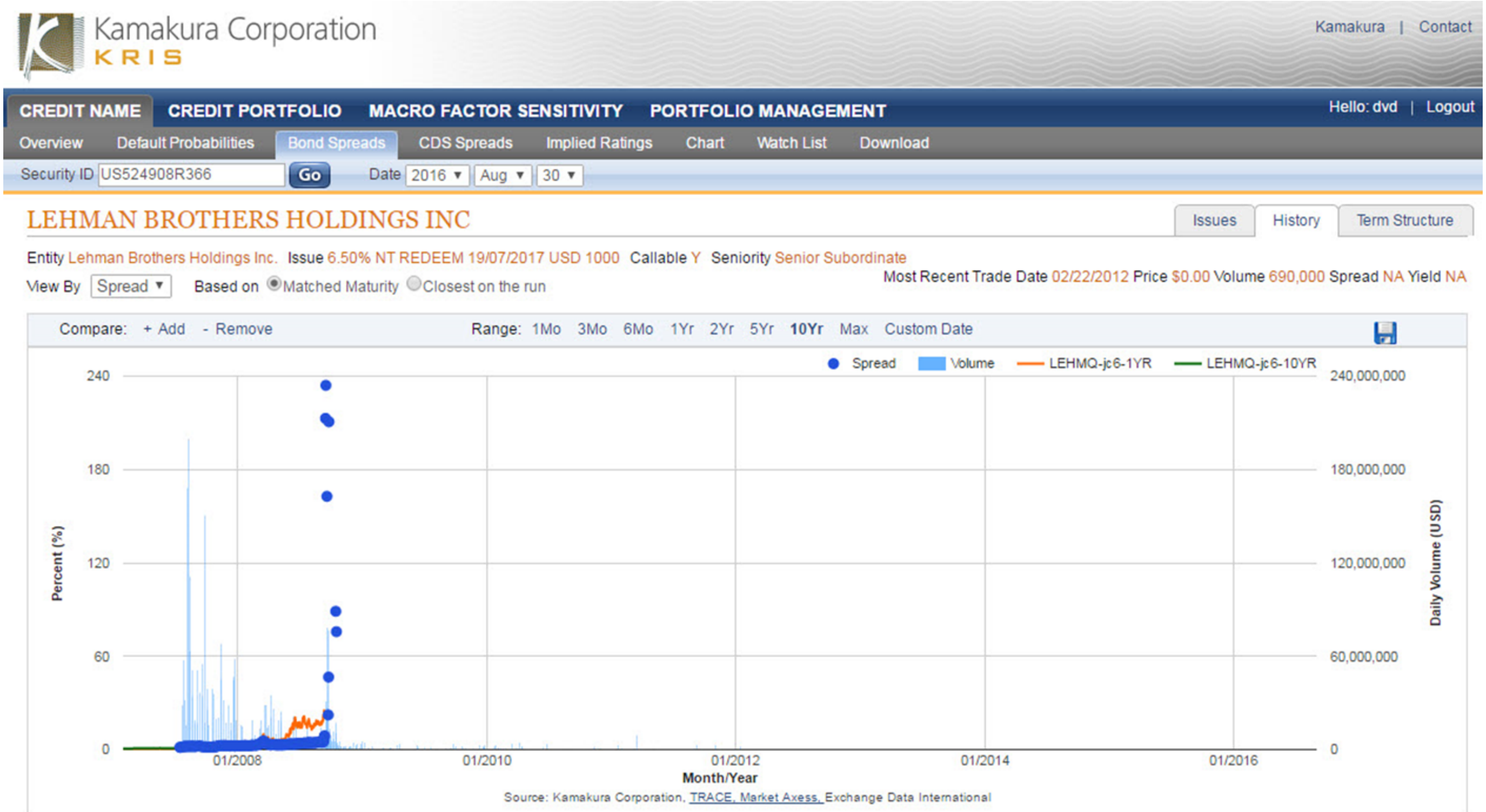
- Matures 8-17.

FAILURE TO PRICE SURGES IN KRIS DEFAULT PROBABILITIES INDICATES THAT UNACKNOWLEDGED IMPLICIT GUARANTEES DELAY THE WRITE-OFF OF WAVES OF NONPERFORMING LOANS

- Nonstandard **behavior in distress of credit spreads** on “unguaranteed” megabank bonds backs up my rejection of official assessments of European Bank resilience. Yields on debt securities of distressed megabanks act **as if estimated surges in their default probabilities are largely irrelevant**.



- Matures 12-1-17.



Evidence that expectations of federal rescue existed and were let down.
Debt price crashed. We see this for Banco Popular as well during its last week.

Using US crisis experience as a touchstone, I will summarize evidence (presented in my conference paper) that indicates that several major European Megabanks were also TBTF during the Great Financial Crisis.

Most of the largest banks in Europe showed this pattern. Some failed, others merely limped along during the aftermath, and appear to be moving toward becoming as fragile as they were during the GFC.

- Surge in Orange preceded GFC. Credit spread moved much less than surges in other lines. Evidence of TBTF, but some uncertainty.
- Bond studied here matures 9-1-17.

DEUTSCHE BANK AG

Entity Deutsche Bank AG London Issue 3.70% NT REDEEM 30/05/2024 USD 1000 - Reg S Callable N Seniority Senior

Most Recent Trade Date 10/06/2017 Price $101.97 Volume 131,000 Spread 1.21 % Yield 3.37 %

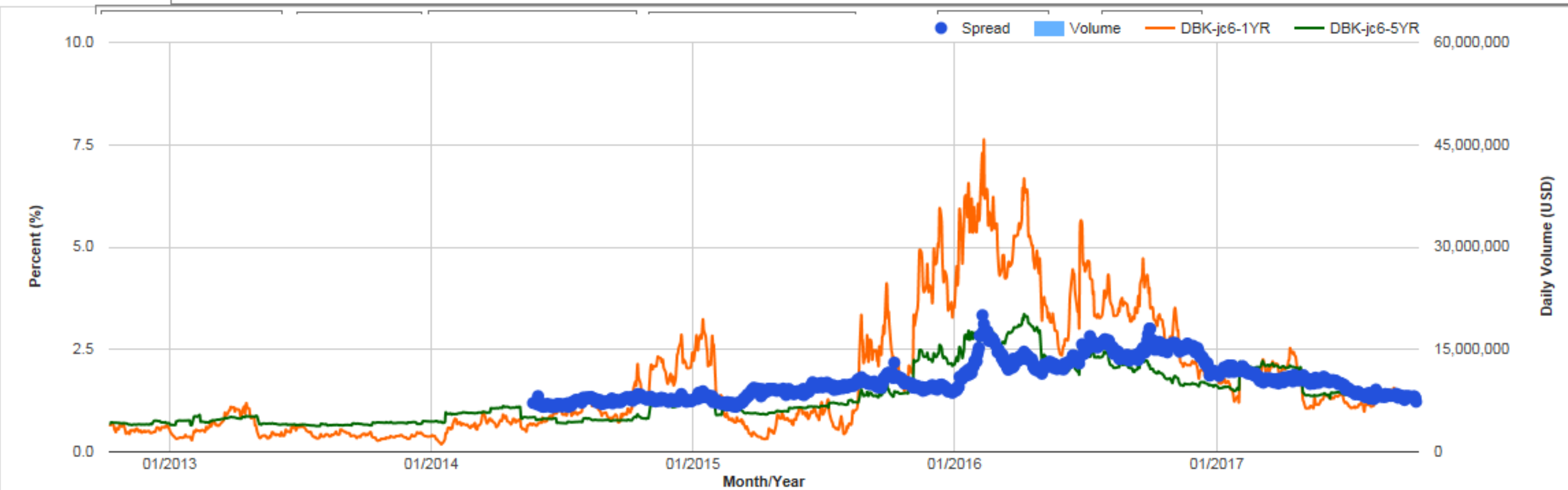
View By Spread Based on Matched Maturity Closest on the run **Volume weighted spread based on actual trades**

Compare: + Add - Remove Range: 1Mo 3Mo 6Mo 1Yr 2Yr **5Yr** 10Yr Max Custom Date

DBK-jc6-1YR

DBK-jc6-5YR

Remove



Source: Kamakura Corporation, TRACE, Market Axess, Exchange Data International

BANCO SANTANDER SA

Entity Banco Santander S.A. Issue 4.25% NT REDEEM 11/04/2027 USD 200000 Callable N Seniority Senior

Most Recent Trade Date 10/10/2017 Price $104.07 Volume 2,200,000 Spread 1.42 % Yield 3.74 %

View By Spread Based on Matched Maturity Closest on the run **Volume weighted spread based on actual trades**

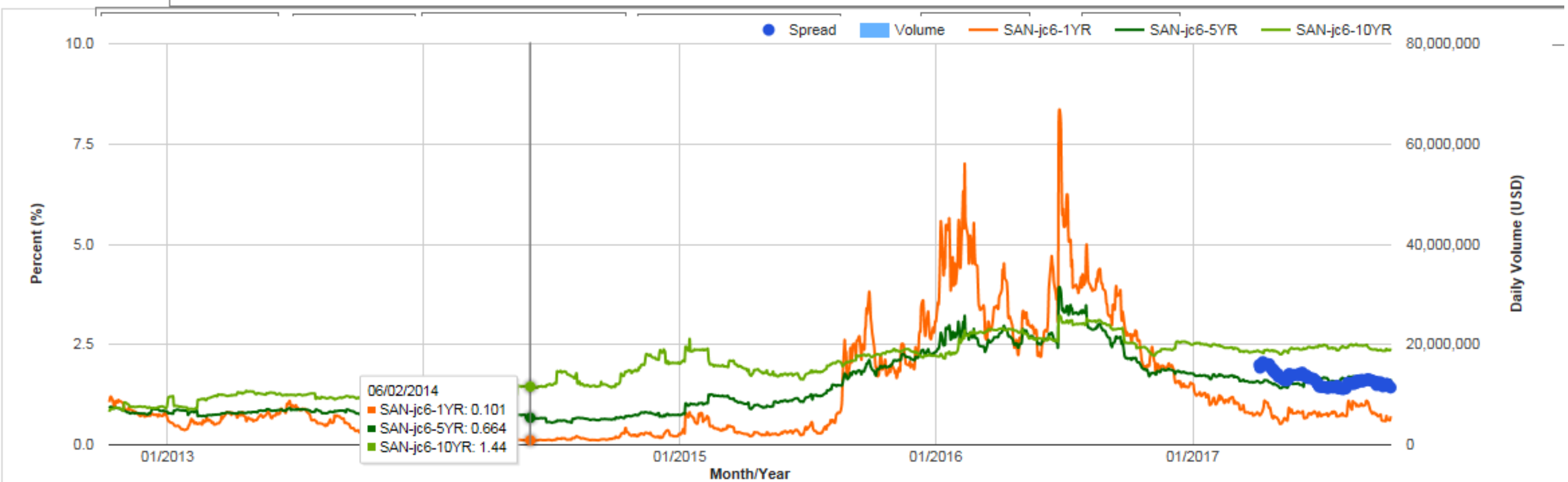
Compare: + Add - Remove Range: 1Mo 3Mo 6Mo **1Yr** 2Yr 5Yr 10Yr Max Custom Date

SAN-jc6-1YR

SAN-jc6-5YR

SAN-jc6-10YR

Remove

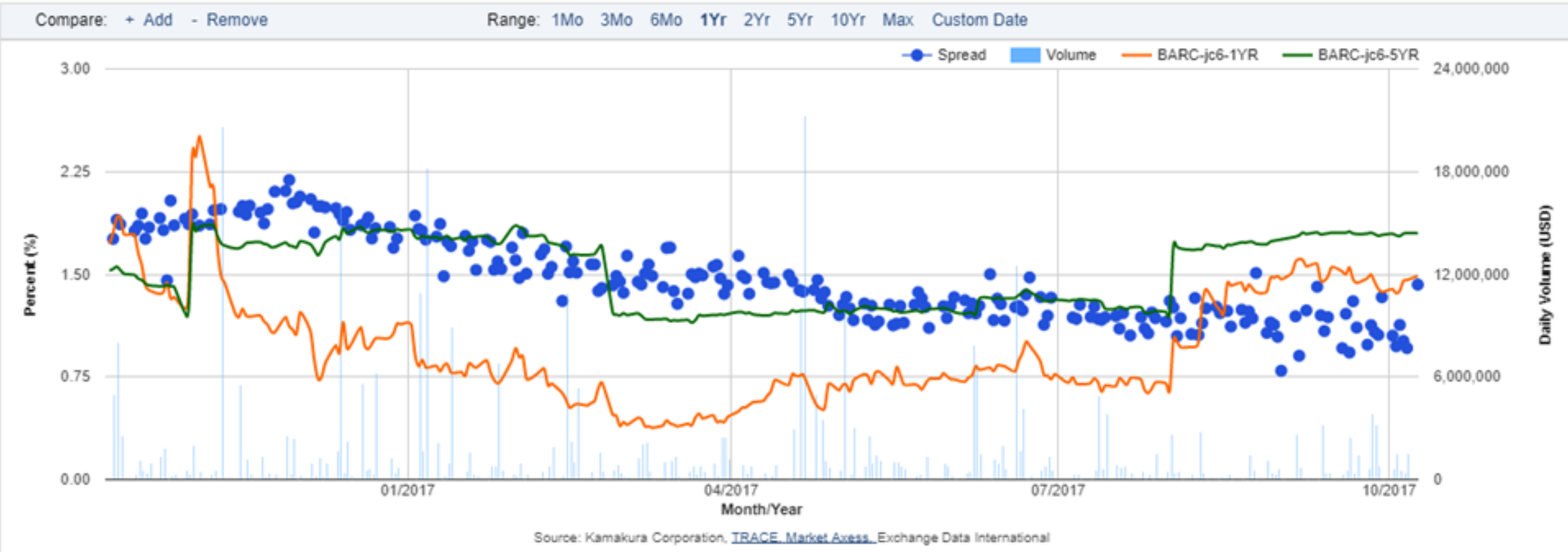


Source: Kamakura Corporation, TRACE, Market Axess, Exchange Data International

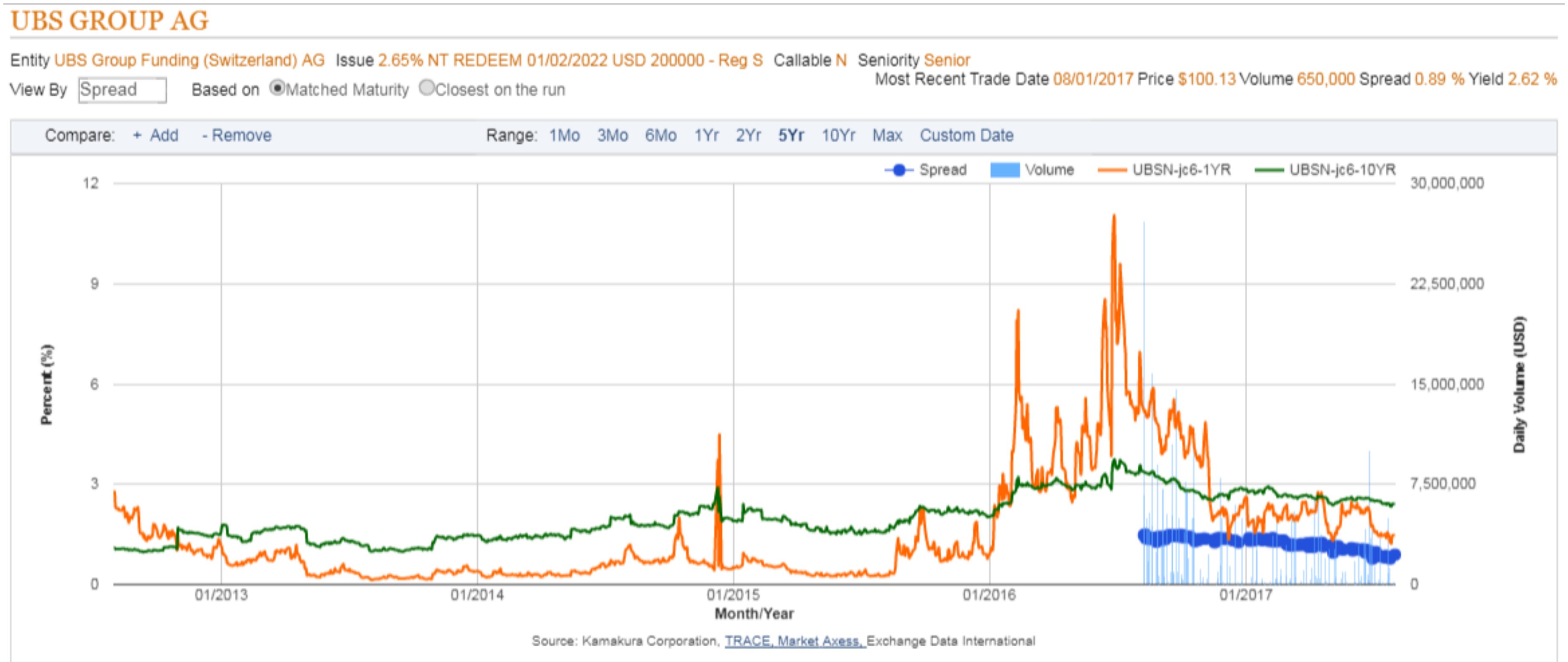
Entity Barclays Bank PLC Issue 5.14% NT REDEEM 14/10/2020 USD 100000 Callable N Seniority Senior Subordinate

Most Recent Trade Date 10/09/2017 Price $105.86 Volume 18,000 Spread 1.42 % Yield 3.09 %

View By Spread Based on Matched Maturity Closest on the run **Volume weighted spread based on actual trades**



UBS AND BAC SHOW A SIMILAR PATTERN IN RECENT YEARS



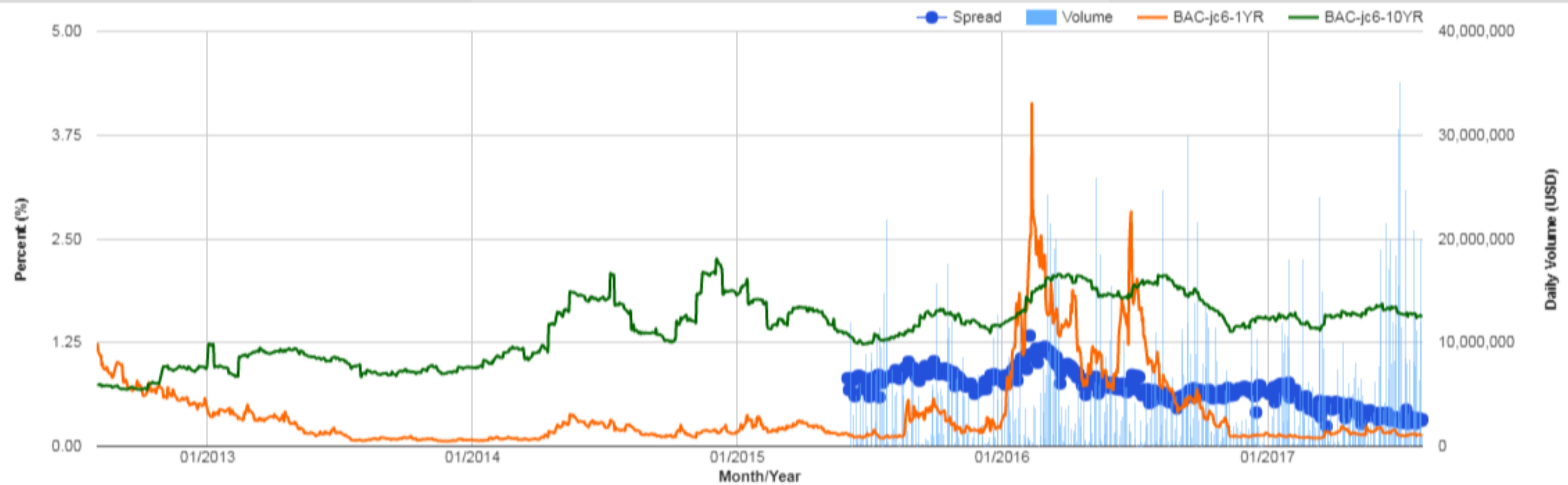
BANK OF AMERICA CORP

Entity Bank of America National Association Charlotte N C Issue 1.75% NT REDEEM 05/06/2018 USD 250000 Callable N Seniority Senior

View By Spread Based on ◉Matched Maturity ○Closest on the run

Most Recent Trade Date 08/02/2017 Price $100.18 Volume 25,500,000 Spread 0.32 % Yield 1.54 %

Compare: + Add - Remove Range: 1Mo 3Mo 6Mo 1Yr 2Yr **5Yr** 10Yr Max Custom Date



Source: Kamakura Corporation, TRACE, Market Axess, Exchange Data International

TWO RECENT GAMES OF CHICKEN: DEFERENTIAL TREATMENT OF DISTRESS AT DBK AND AT SANTANDER AND BANCO POPULAR (BPM)

My paper presents evidence that:

1. Major DBK creditors appear to have received *credible* TBTF back-door assurances last September
2. Banco Popular was fifth or sixth largest in Spain. Its resolution is, at best, a bungled run-induced partial bail-in: While BPM stockholders, COCOS and some nonsenior creditors were eventually wiped out, affected creditors were granted time to get out or collateralize their positions as the government burned through almost $4B in "Emergency Liquidity Assistance" in the bank's final days. Positions of depositors and senior creditors were assumed by the now regulator-approved and monopoly-strengthened zombie Santander Bank. Resolution strategy resembles FSLIC's squandering taxpayer value by merging several smaller zombie S&Ls into larger zombie institutions to keep from paying the full costs of resolving their insolvency in timely fashion.

What "news" did DB release on its stock price's turnaround date? - from The Brief – 9.27.16

posted by [Michael Reif](#) and [Robins Kaplan LLP](#)

Deutsche Bank officials are *denying reports* accusing the banking giant of asking Germany to provide it with aid to help it face the DOJ's [opening] $14 billion settlement offer—a figure more than $8 billion above DB's alleged legal reserves – NYTimes

The Times story included this excerpt:

"A Deutsche Bank spokesman said on Monday that John Cryan, its chief executive, had "at no point" asked Chancellor Angela Merkel to intervene in the issue with the Justice Department. [does not exclude other paths for requesting bailouts]

The spokesman said that a government bailout was "not on our agenda" [might be on someone else's agenda though] and added, "Deutsche Bank is determined to meet the challenges on its own." Despite the denial, speculation abounds that Deutsche Bank will once again be forced to ask investors for more cash at a moment of extreme weakness."

Note: The DOJ eventually reduced its fine to $7.2 billion and eased its terms. DBK launched a $8.6 billion rights issue that shored up its net worth and diluted existing stockholders.

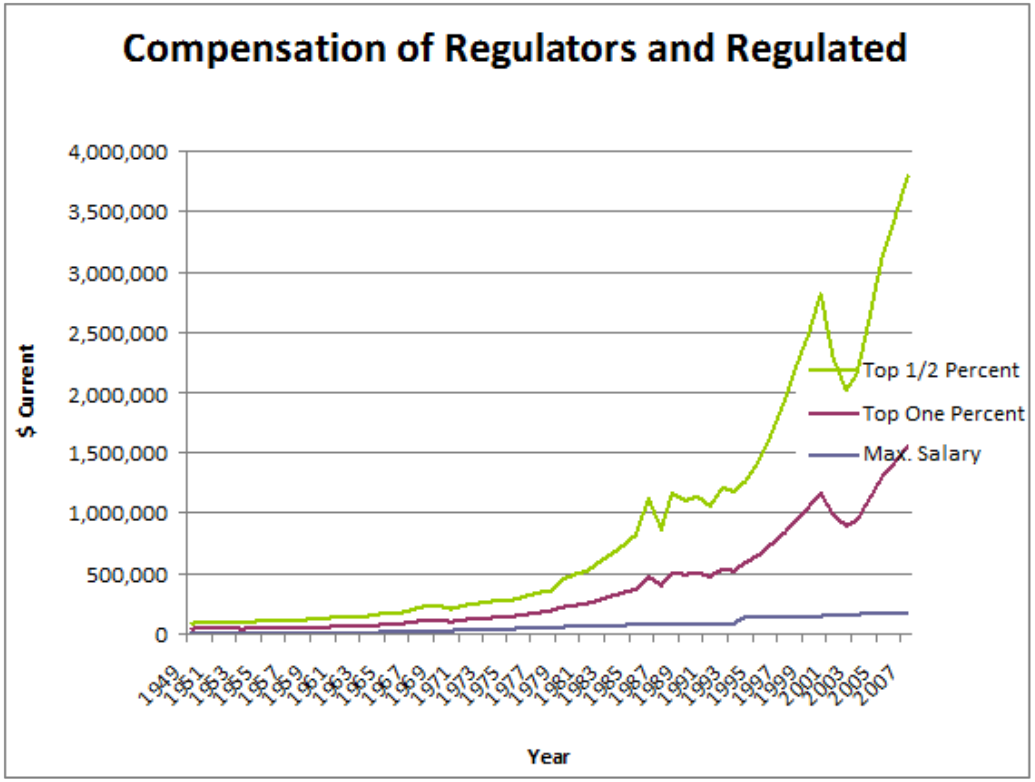
THESE QUOTES ILLUSTRATE HOW BANKS AND GOVERNMENTS USE SLIPPERY DENIALS AND HIDDEN TRANSFERS OF LOSSES AND LOSS EXPOSURES TO SUPPRESS CREDITOR RUNS

- INCOMPLETE FRAMING OF ISSUES AND ACTIONS AT STAKE
- DIVERSION (OFFER A SERIES OF HALF TRUTHS)
- DEFLECTION (ATTACK CRITICS RATHER THAN ISSUES)
- TRIAL BALLOONS (SEE WHAT LINES OF HALF-TRUTH MIGHT PROVE EFFECTIVE)

WELL-KNOWN EFFECTS ON A FIRM'S STOCK PRICE OF RECEIVING AN EXPLICIT OR IMPLICIT GUARANTEE SUGGEST THAT MAJOR DBK COUNTERPARTIES RECEIVED ASSURANCES LAST FALL

- In accepting an outside guarantee, a bank enters *two* contracts:
  1) A *put option* that allows **losses** beyond its shareholder equity to become the responsibility of the guarantor.
  2) A *call option* on its **assets** that allows the guarantor to **stop losses** and take over the **upside** of the firm at a specified level of near-insolvency.
- For Too-Big-to-Fail banks, Mercy and Client-Protection motives, a propensity of managers and regulators to mischaracterize bank loss exposure, and authorities' "propensity not to exercise their call," increase firm stock price when its tail risk is high. Increased confidence in the negation of the call transfers value from taxpayers to stockholders and managers of TBTF banks across all stages of the financial cycle.

Why the Revolving Door Does So Much Business: Salaries of Top Regulators Compared with Incomes Earned by Top Managers in the Private Sector Over Time



Source: Ferguson and Johnson, "When Wolves Cry Wolf,'"
INET Paper, King's College, Cambridge University, 2010
https://www.ineteconomics.org/uploads/papers/INET-C@K-Paper-Session-8-Ferguson-Rob-Johnson.pdf