

Financial Sector Reform after the Crisis: Has Anything Happened?

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Event Study Analysis

- 1 Motivation
- 2 Related Literature
- 3 Hypotheses
- 4 Event Study Methodology
- 5 Findings
- 6 Conclusion

1. Motivation

Motivation

- 1 Motivation
- 2 Preliminary Work & Literature
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1. Motivation

Aim of this Paper

- Have announcements of structural reforms been registered by the markets?
- How have equity prices and cds spreads changed?
- Do these reactions differ across different types of banks?

Findings:

- Financial markets reacted to national reforms
- Increase in cds spreads and (slight) decrease in stock returns
- Stronger results for investment and systemic banks (in particular U.S. and U.K.)

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2. Preliminary Work & Literature

Related Literature

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2. Preliminary Work and Literature

Related Literature

- Impact of the Announcement of being Too-Big-Too-Fail
 - O'Hara & Shaw (1990)
- Effect of the Paulson Plan on banks relative to non-financial firms
 - Veronesi & Zingales (2010)
- Public guarantees as TBTF subsidies on debt
 - Ueda & Weder di Mauro (2013)
- The Value of Being Systemically Important Financial Institutions
 - Bongini, Nieri, and Pelagatti (2013)

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3. Hypotheses

Hypotheses

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3. Hypotheses

Expected Effects of Regulatory Reforms

1 Motivation

2 Preliminary Work & Literature

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4 Event Study Methodology

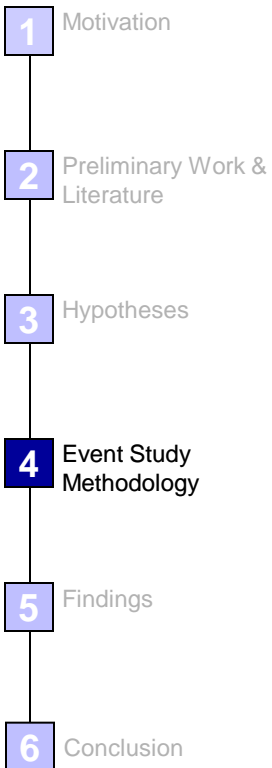
5 Findings

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Reform	Country	Major elements	Expected effect on equity returns	Stronger effect on ...		Expected effect on CDS spreads	Stronger effect on ...	
				investment banks	systemic banks		investment banks	systemic banks
Dodd-Frank Act	United States	Prohibition of activities, enhanced regulation of systemic institutions, resolution procedures	↓	yes	yes	↑	yes	yes
Vickers Report	United Kingdom	Ring-fencing approach, resolution procedures	↓	yes	yes	↑	yes	yes
Restructuring Law	Germany	Resolution procedures, bank tax	↓		yes	↑		yes
TBTF Regulation	Switzerland	Enhanced capital requirements for systemic banks	↓		yes	↑		yes

4. Event Study Methodology

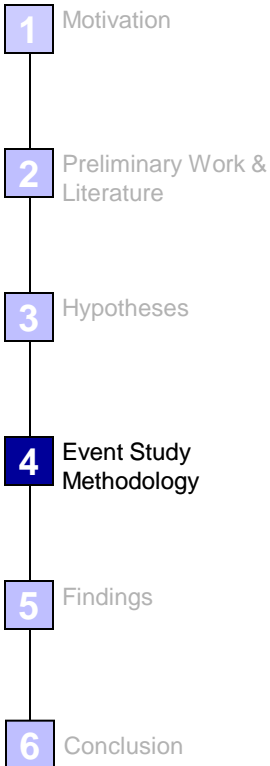
Event Study Methodology



4. Event Study Methodology

Identification of Events

- Reforms take place in several steps
- Initial announcement, sign of intention, outcome of meetings
- Identification of sub-events (Lamdin 2001)
- Investigating all front pages of a reputable national newspaper within a broadly defined period
 - US: FT | US Edition
 - UK: FT | UK Edition
 - Germany: FTD, Börsenzeitung
 - Switzerland: Neue Zürcher Zeitung



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Identification of Events

John Gapper on the new Glass-Steagall, Page 3 Gillian Tett on pitchforks in Washington, Page 24
Crackdown on Wall Street Pages 2&3

FINANCIAL TIMES

USA Friday, January 22, 2009 USA \$2.50 Canada C\$3.0

World Business Newspaper

News Briefing
Google chief hints at staying in China
 Google's chief yesterday gave the first indication that the group would seek to stay in China even if it was forced to close its local search service over its refusal to cooperate to how to monitorship. **Page 9**

Rural set to price IPO
 The group's UK Rural subsidiary group was set to price its landmark initial public offering of a 10 per cent stake in the middle of the expected range at 100p a share, giving the company a market value of 1.5 billion. **Page 4**

Hotel aid hits obstacles
 The aid has been a mix of help from the state and a lack of electricity, communications and other services. **Page 4**

China inflation concern
 There are signs that the massive monetary expansion of the past year is now sparking inflation in China. **Page 7**

Nigeria unrest spreads
 Nigeria turned to shed and thousands of refugees sought shelter after the latest eruption of violence between Christians and Muslims. **Page 4**

Eurozone rally paused
 The eurozone's economic recovery slowed this month as data came back on the pace of regional growth. **Page 8**

Crisis set to linger
 The World Bank warned the effects of the financial crisis would linger for years. **Page 9**

Dubai plans overhaul
 The government of Dubai is to overhaul its debt-ridden economy. **Page 7**

Trading ban Strict curbs aim to limit risk taking | **Big banks tumble Sharp falls for top financial groups** | **Volcker's reform Former Fed chief drives overhaul**

Obama hammers the banks

By Tom Ichniowski in Washington and Francisco Garmes in New York

The global banking industry was thrown into turmoil yesterday after president Barack Obama, responding to public rage over the financial crisis, proposed the case for reaching overhaul of Wall Street since the crisis.

In a reference that could force the restructuring of some of the big game players in US finance - including JP Morgan Chase and Goldman Sachs - Mr Obama promised that "never again will the American taxpayer be held hostage by a bank that is too big to fail".

Flanked by Paul Volcker, the former Federal Reserve chairman, who has advocated the move for months, Mr Obama called for banks to be banned from running their own trading desks and "opening, inventory or or sponsoring hedge funds and private equity groups."

Tim Geithner, the Treasury secretary, who has come under attack from Democrats on Capitol Hill, backed the plan, but also said, even though his own regulatory proposals have stopped well short of the sweeping Volcker reform.

Republicans requested credit, but did not reject the proposals out of bank. Richard Shelby, senior Republican on the Senate banking committee, called for more details and more hearings.

Obama accused the White House of adopting a populist message to divert attention away from the slow delivery by the Democratic deficit to the

Goldman shrinks its bonus pool

Goldman Sachs sought to counter the public furore over its pay package by cutting the size of its bonus pool in the fourth quarter but it still rewarded its employees with a 65 per cent increase in compensation during 2009, while FT reported.

As the year progressed, Goldman's bonus pool remained to cover compensation costs. In the final quarter of last year, Goldman withdrew money from the pool, while directing bonus money intended for senior bankers to charity.

The drop in compensation costs backed in the final quarter helped lift Goldman's profit above analysts' expectations in spite of a slowdown in the final weeks of 2009. For the year, Goldman earned a record \$2.3bn.

What was expected to do was to be fair to our people but to show investors," said David Viner, chief financial officer.

It remains unclear whether Goldman's definition of revenue matches that of President Barack Obama, who last week said "reports of massive profits and obscene bonuses" on Wall Street had spurred him to introduce a \$200bn bank levy to recapitalise

Paul Volcker, whose idea Barack Obama has adopted for his crackdown, stands behind the president as the plan is unveiled

'Never again will the American taxpayer be held hostage by a bank that is too big to fail'

Barack Obama US president

Goldman Sachs Share price \$ (closing 10/01/09)

Date	Share price \$ (closing)
10 Jan 2008	138.62
21 Jan 2009	138.48

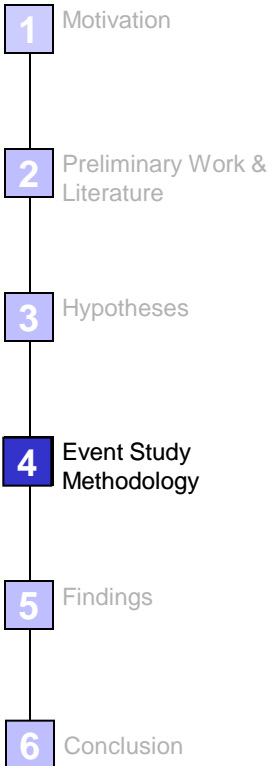
\$16.2bn
Total compensation at Goldman Sachs

\$498,000
Average pay per employee

4. Event Study Methodology

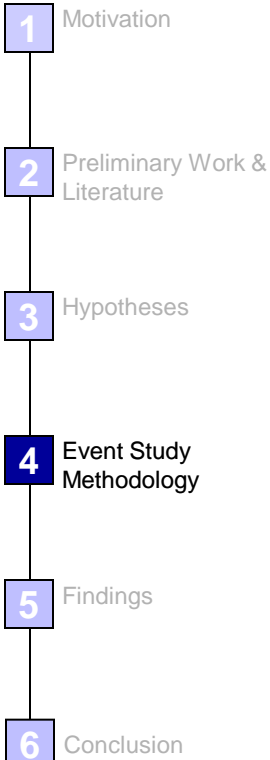
The Data

- 10 biggest banks (market capitalization) of US, UK, Germany and Switzerland
- Equity: Daily returns of stocks and benchmark indices, based on closing auction
- CDS: Differences in mid-prices of 5-year senior credit default swap spreads, end of day
- Sources: Datastream (Thomson Reuters), Bankscope



4. Event Study Methodology

Regression Analysis



- Use of dummy variables for one-step estimation, Karafiath (1988)
- Seemingly unrelated regressions procedure (SUR), Zellner (1962)

$$R_{1t} = \alpha_1 + \beta_1 R_{Mt} + \sum_{n=T-1}^{T+1} \tau_{1n} D_{1nt} + \epsilon_{1t}$$

...

$$R_{jt} = \alpha_j + \beta_j R_{Mt} + \sum_{n=T-1}^{T+1} \tau_{jn} D_{jnt} + \epsilon_{jt}$$

...

$$R_{Jt} = \alpha_J + \beta_J R_{Mt} + \sum_{n=T-1}^{T+1} \tau_{Jn} D_{Jnt} + \epsilon_{Jt}$$

- Best way to deal with clustering of events across banks

5. Findings

Findings

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United States

The Dodd-Frank Act

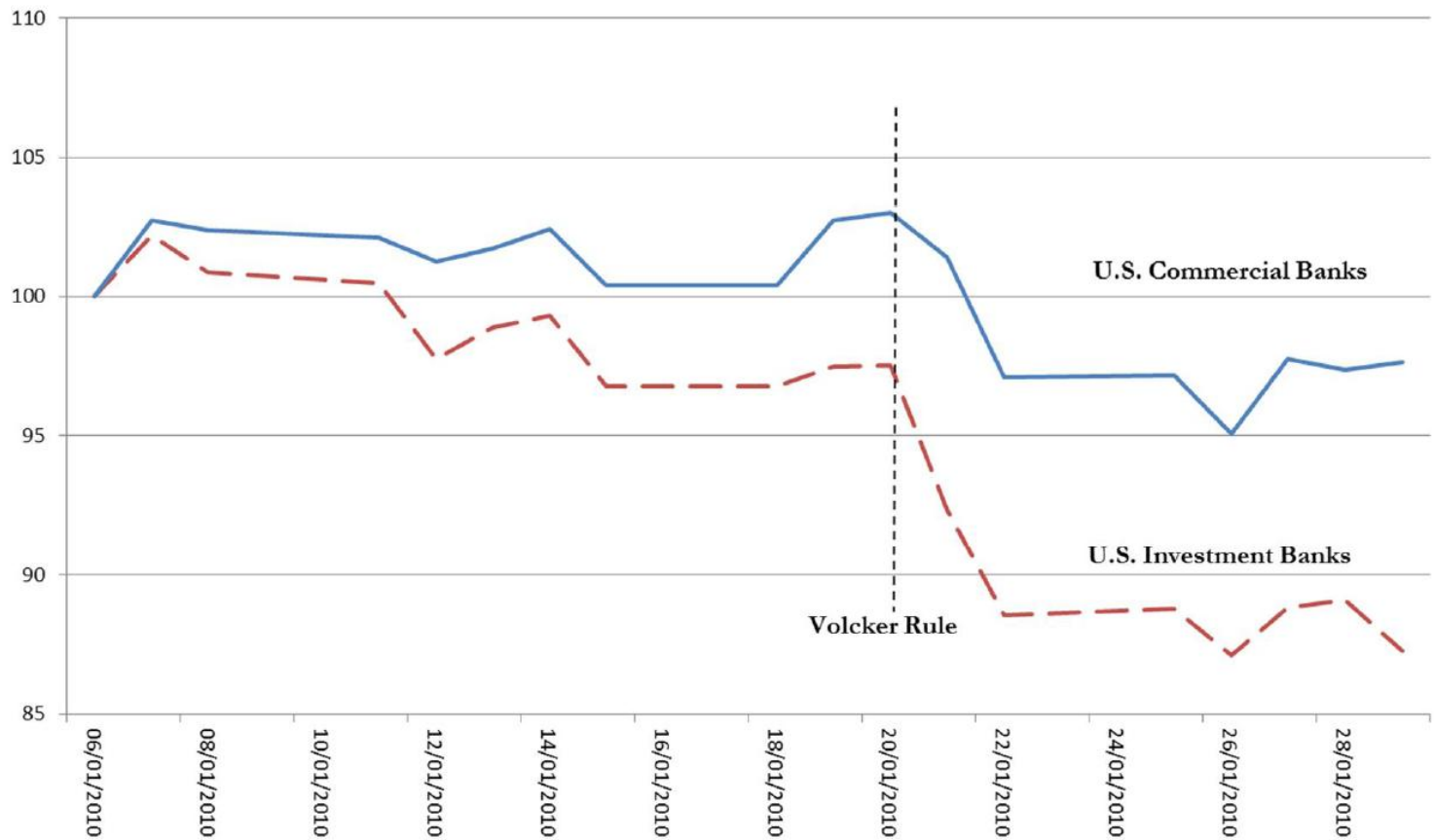
5. Findings

Dodd Frank Act | Equity

		Estimation Window		80	140	80	80	
			Average	Average	Average	Investment	Systemic vs.	
			Return	Abnormal	Abnormal	vs.	Non-	
		Dodd-Frank Act	Date	Return	Return	Commercial	Systemic	
1	Motivation	Obama set to target banks with new fees	12-Jan-10	-1.624	-0.536	-0.661	-1.551*	-2.525**
				[0.673]	[0.617]	[0.056]	[0.012]	
2	Preliminary Work & Literature	Obama urges banks to take part in crisis costs	15-Jan-10	-2.187	-0.386	-0.517	-0.481	-0.837
				[0.761]	[0.695]	[0.554]	[0.407]	
3	Hypotheses	Announcement of the Volcker Rule	21-Jan-10	-3.060	-0.074	-0.177	-3.357***	-2.944***
				[0.953]	[0.982]	[0.000]	[0.004]	
4	Event Study Methodology	- Enlarged event window [0-1]		-7.223	-2.012	-2.161	-3.875***	-0.916
				[0.261]	[0.250]	[0.001]	[0.530]	
		Obama promoted reform plans in New York City	22-Apr-10	0.259	0.466	0.762	-0.136	0.216
				[0.669]	[0.520]	[0.874]	[0.764]	
5	Findings	- Enlarged event window [0-1]		0.141	-0.333	-0.064	-0.377	-1.428
				[0.829]	[0.969]	[0.767]	[0.163]	
		Democrats are willing to dilute rules for swap desks	16-May-10	-0.206	0.371	0.653	0.206	-0.800
				[0.736]	[0.590]	[0.825]	[0.328]	
6	Conclusion	Reform bill passes the senate	20-May-10	-4.432	-1.188	-0.691	0.317	-0.135
				[0.293]	[0.578]	[0.742]	[0.874]	
		US Banks set to lose lobby fight on swaps	13-Jun-10	-0.121	-2.208**	-2.186*	-0.330	-0.825
				[0.037]	[0.064]	[0.719]	[0.345]	
		Consensuns between parties - the dilution -	25-Jun-10	2.825	2.74***	2.796**	0.890	-0.105
				[0.009]	[0.014]	[0.325]	[0.895]	
		Summation		-12.825	-3.552	-2.832	-5.201	-7.572

5. Findings

Figure 3. The Volcker Rule | U.S. Stocks of Investment and Commercial Banks



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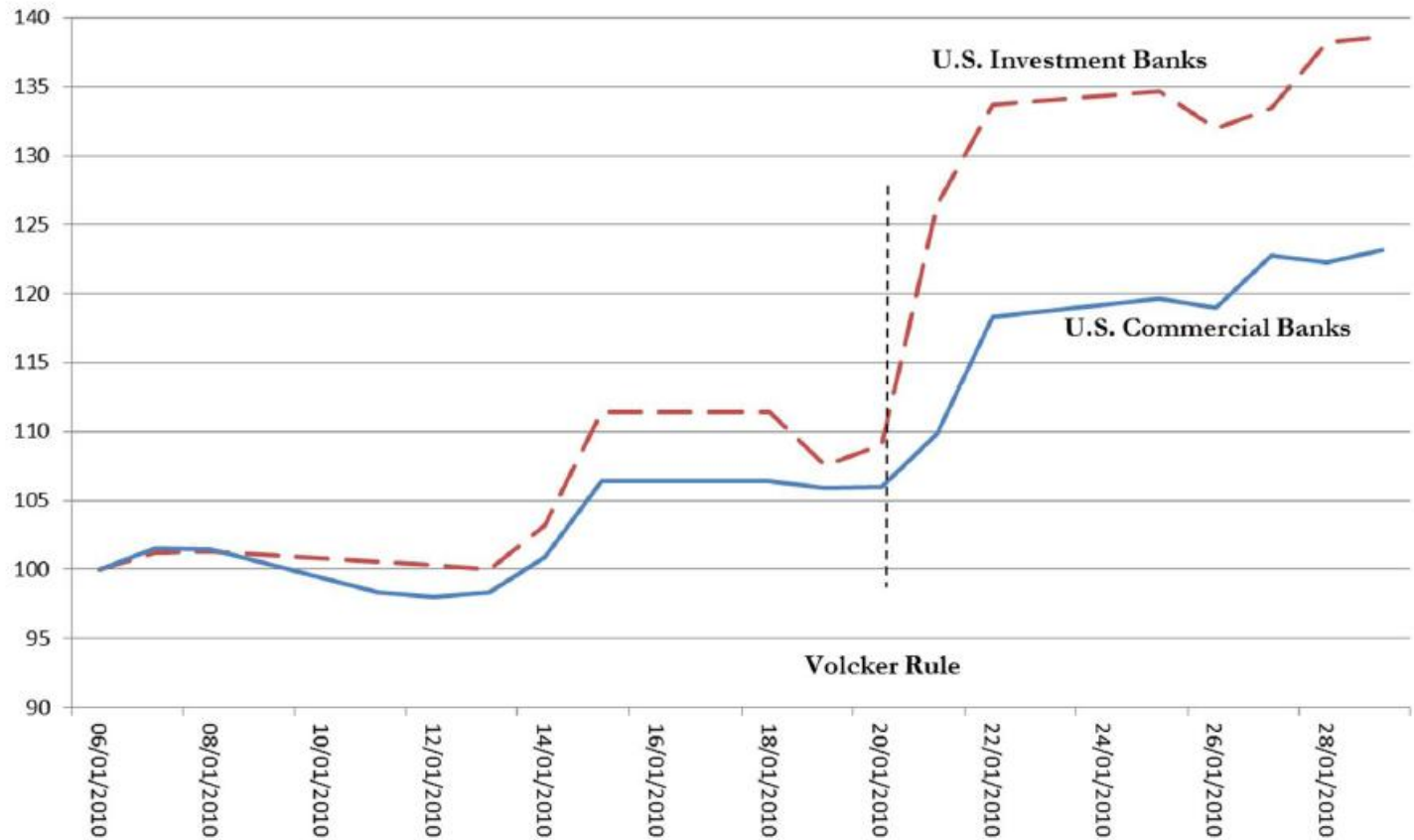
Dodd Frank Act | CDS Spreads

		Estimation Window		80	140	80	80	
			Average	Average	Average	Investment	Systemic vs.	
		Dodd-Frank Act	Date	Return	Abnormal	Abnormal	vs. Commercial	Non-Systemic
1	Motivation							
2	Preliminary Work & Literature							
3	Hypotheses	Obama set to target banks with new fees	12-Jan-10	-0.285	0.170 [0.967]	0.666 [0.904]	0.068 [0.981]	-0.074 [0.984]
		Obama urges banks to take part in crisis costs	15-Jan-10	3.725	7.131* [0.080]	7.660 [0.163]	-1.306 [0.651]	1.249 [0.736]
		Announcement of the Volcker Rule	21-Jan-10	7.773	8.242** [0.036]	8.754 [0.107]	7.863*** [0.006]	7.82** [0.033]
4	Event Study Methodology	- Enlarged event window [0-1]		15.970	16.908*** [0.003]	17.932** [0.020]	5.289 [0.169]	4.022 [0.496]
		Obama promoted reform plans in New York City	22-Apr-10	5.103	5.421 [0.115]	5.526 [0.168]	-0.676 [0.749]	0.275 [0.930]
5	Findings	- Enlarged event window [0-1]		3.866	8.368* [0.087]	8.578 [0.131]	2.727 [0.413]	3.526 [0.426]
		Democrats are willing to dilute rules for swap desks	16-May-10	4.436	0.624 [0.913]	0.573 [0.910]	-5.83** [0.021]	-5.155 [0.154]
6	Conclusion	Reform bill passes the senate	20-May-10	10.353	10.382** [0.067]	10.394** [0.037]	1.962 [0.491]	3.109 [0.429]
		US Banks set to lose lobby fight on swaps	13-Jun-10	-8.985	-5.797 [0.362]	-5.607 [0.299]	0.805 [0.771]	3.534 [0.312]
		Consensuns between parties - the dilution -	25-Jun-10	-4.307	-4.514 [0.489]	-4.532 [0.404]	-2.674 [0.714]	-2.628 [0.571]
		Summation		24.772	38.694	35.664	1.041	7.582

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Figure 5. The Volcker Rule | U.S. CDS Spreads of Investment and Commercial Banks



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Overview

Remaining Countries

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Stock Returns

Stock Returns					
Estimation window	80	140	80	80	
Summation of coefficients	Average Return	Average Abnormal Return	Average Abnormal Return	Investment vs. Commercial	Systemic vs. Non-Systemic
Dodd-Frank (US)	-12.825	-3.552	-2.832	-5.201	-7.572
Vickers Reform (UK)	-5.007	-1.211	-3.167	-2.84	-2.038
Restructuring Law (DE)	-0.100	-0.102	-0.253	-	-1.476
TBTF Regulation (CH)	-0.112	-1.769	-2.281	-	-8.371

5. Findings

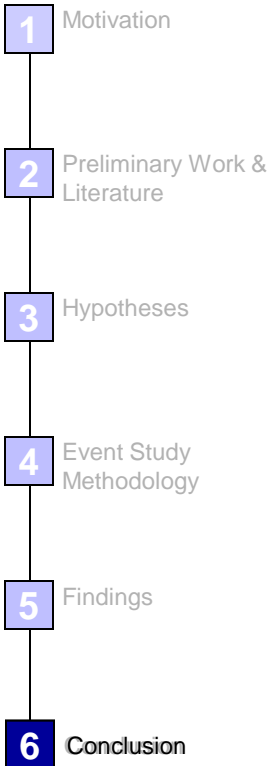
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CDS Spreads

CDS Spreads					
Estimation window	80	140	80	80	
Summation of coefficients	Average Return	Average Abnormal Return	Average Abnormal Return	Investment vs. Commercial	Systemic vs. Non-Systemic
Dodd-Frank (US)	24.772	38.694	35.664	1.041	7.582
Vickers Reform (UK)	19.892	15.82	18.40	6.36	18.330
Restructuring Law (DE)	2.350	2.309	2.462	-	4.775
TBTF Regulation (CH)	14.548	20.146	20.535	-	-

6. Conclusion

Has Anything Happened?



- Yes!
- Significant reactions on equity and cds markets due to national reforms
- In all cases reforms seem to have lowered bail-out expectations
- Significant heterogeneity effects for investment and systemic banks as well as spill-over effects to other countries
- Effects on equity were partly diluted in subsequent negotiations

Has happened enough?

- We cannot really tell by this approach
- Evidence suggests: lower bail-out expectations lead to lower risk taking
- Comparing results with funding cost differentials (Ueda die Mauro 2013)
 - Against the background of a TBTF subsidy of 60 to 80 basis points, none of the reforms has been enough to fully eliminate the distortion

6. Conclusion

Has Anything Happened?

Are some reforms better than others?

- We cannot really tell by this approach either
- Our approach is silent on systemic effects
- Volcker Rule possibly amplified by signaling
- German resolution regime hampered by failure to deal with cross boarder issues



Many thanks for your attention!