

Timeliness of Write-downs during the Crisis

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Background

- Financial institutions (FIs) had large exposures to real-estate backed assets (loans, MBSs, CDOs, CDSs)
- During the crisis, FIs had to recognize billions of dollars worth of losses (or write-downs)
 - ~ \$ 2 trillion globally (\$ 1.2 trillion US) from 2007-09
 - Losses were recognized through fair value adjustments, impairments, credit loss provisioning, and realized settlement losses

The FVA debate

- Critics claim: financial institutions (FIs) were taking write-downs based on benchmarks that reflected liquidity-related problems, rather than fundamental credit losses (*which in turn led to problems such as the spiral*)
- Others claimed that the FIs were *not* taking write-downs that reflected the contemporary devaluations of benchmarks such as the ABX and the CMBX indices.
E.g., crisis-related lawsuits

Questions

- Did the write-downs reflect the devaluations of external benchmarks (credit indices such as the ABX) at the time. I.e., were the write-downs “timely”?
 - Did the timeliness of write-downs vary predictably with firm characteristics?
 - Were “timely” write-downs considered to be informative by market participants?

Timeliness of Write-downs

- **Timeliness of accounting measurements is a topic of much broader interest**
- **Crisis provides us with a unique opportunity to use context-specific measures of news (exposure-specific indices: ABX, CMBX, TABX,**)

Credit Indices

The ABX

- launched by “Markit” in 2006
- constructed using CDS written on subprime MBS
- sub-indices reference different tranches (AAA, AA, A, BBB and BBB-)
- price level became the gauge for the health of subprime-backed assets (WSJ 2007)
- the only aggregated view on the subprime market (Gorton 2008)

Credit Indices

- Credit indices crashed

ABX.HE.BBB 6-1



Credit Indices

- ...leading to arguments that these indices reflected “fear and panic” rather than “true fundamental” credit losses (Fender and Schiecher 2008)
- Write-downs based on these indices alleged to be “excessive” (Bank of England 2008)
- Counter arguments (e.g., Laux and Leuz 2010)

Measurement of Timeliness of Write-downs

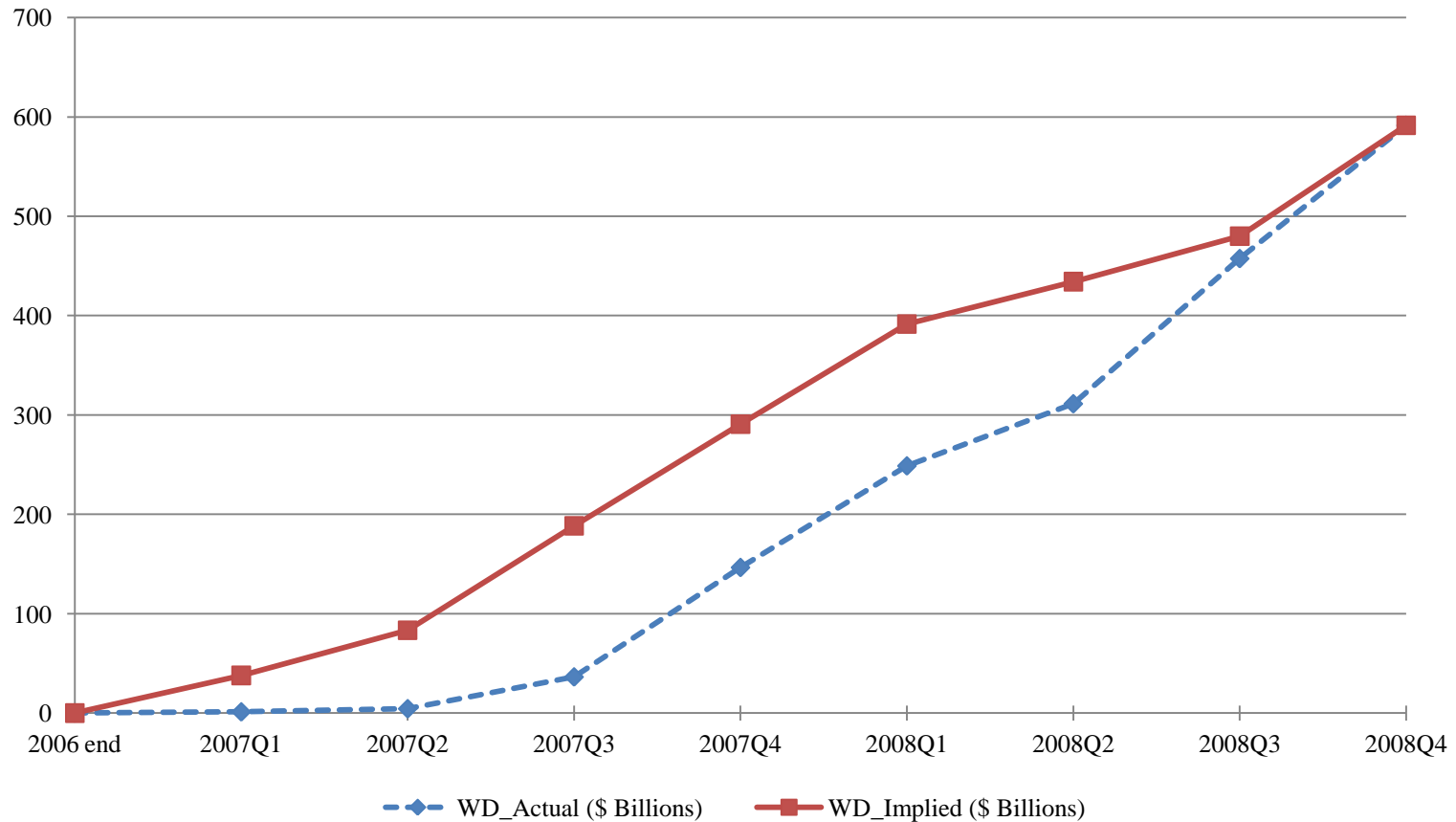
- Map write-downs to appropriate benchmarks
 - Res. Subprime → ABX
 - Commercial RE → CMBX
 - Mezz CDOs → TABX
 - Leveraged Loans → LCDX
 - Alt-A / Prime → BB Delinquency Indices
 - Monoline CVA → Avg. credit spreads

Measurement of Timeliness of Write-downs

$$\text{IPT_WD} = \text{cum. quarterly difference} = \frac{\text{Accounting W/D} - \text{INDEX-implied W/D}}{\text{Total W/D}}$$

Measurement scheme does not challenge the total W/D over 2007 and 2008, but examines how the W/D was divided over the eight quarters

Timeliness of Write-downs



Timeliness of Write-downs

- Empirical evidence suggests:
 - write-downs by firms with higher financial leverage, tighter regulatory constraints, and more complex exposures were less timely
 - less risky exposures, and exposures that were affected later during the financial crisis, were written down later
 - corporate governance and litigation pressure were positively related to the timeliness of write-downs
 - evidence supportive of the valuation uncertainty argument, but not the signaling explanation

Timeliness of Write-downs

<i>Dep. Var. = IPT_WD</i>	I.	II.	III.
<i>WD</i>	-0.023	-0.043	-0.061
<i>Log(TA)</i>	0.004	0.009	0.010
<i>LEV</i>	-0.383**	-0.404**	-0.403**
<i>ACL_PNC</i>	0.001*	0.001**	0.001**
<i>ACL_LIFE</i>	0.001	0.001	0.001
<i>TIER1</i>	0.063*	0.066*	0.066*
<i>COMPLEX</i>	-0.070	-0.111*	-0.084
<i>EX_COMP</i>	-0.064	-0.012	-0.046
<i>INDEX_CGQ</i>	0.001**	0.001**	0.001*
<i>SEC</i>	0.054	0.074	0.074
<i>SUIT</i>	0.042**	0.049**	0.049**
<i>LESS_RISKY</i>		-0.035***	-0.036***
<i>MONOLINE</i>			-0.459*

Timeliness of Stock-Market Adjustment

Empirical evidence suggests that the stock-market reflects exposure to risky assets on a timelier basis for firms with timelier write-downs

Timeliness of stock-market adjustment

$$BHAR_{i,\tau} = \alpha + \beta_1 WD_i + \beta_2 IPT_WD_{i,\tau} + \beta_3 WD_i \times IPT_WD_{i,\tau} + \beta_4 OIS_\tau + \beta_5 Log(TA)_i + \beta_6 INDEX_CGQ + \varepsilon_{i,\tau}$$

	2007 Q1	2007 Q2	2007 Q3	2007 Q4	2008 Q1	2008 Q2	2008 Q3	Pooled
<i>WD</i>	-0.739***	-0.932*	-1.514***	-1.669***	-1.341***	-0.959***	-1.395***	-1.142***
<i>IPT_WD</i>	-0.058	0.266	0.001	-0.257**	-0.338**	-0.474***	0.277	-0.166
<i>WD × IPT_WD</i>	-8.530***	-4.504*	-3.153***	-3.447**	-2.001*	0.712	-9.987*	-2.570***
<i>OIS</i>								-0.021***
<i>Log(TA)</i>	-0.001	-0.006	-0.002	-0.019	-0.024*	-0.028*	-0.037	-0.025**
<i>Index_CGQ</i>	0.001	-0.001	-0.001**	0.001	-0.001	-0.002	-0.005*	-0.002*

Conclusions

- On average, write-downs were not timely enough compared to the devaluations implied by credit indices such as the ABX
- Timeliness varied predictably with firm characteristics; timely write-downs were informative to the stock market
- Other issues/ future work: were the disclosures of crisis-related exposures adequate? How did disclosures interact with recognized losses to inform market participants?