How does Low for Long Impact Credit Risk Premiums

By Antje Berndt and Jean Helwege

Discussion by Robin Greenwood

September 2018

Central Question

- Many people believe that the Fed's extended period of QE and low short rate have induced risk taking by financial market participants
- Can we detect this in the pricing of corporate credit?
- This paper
  - Persuasively shows that credit risk premia are not at disturbing levels compared to historical experience
    - Compares CDS spreads to measures of expected default to estimate premia
  - Shows that credit risk premia did not move much with QE announcements
- My comments today
  - Overall, I found the evidence on pricing to be persuasive, and it moved my priors on this topic
  - However, evidence on prices needs to be evaluated in conjunction with quantities
  - It still seems likely that we are sitting on a tinderbox
  - There is lots of great material in the paper, I will only touch on a few points

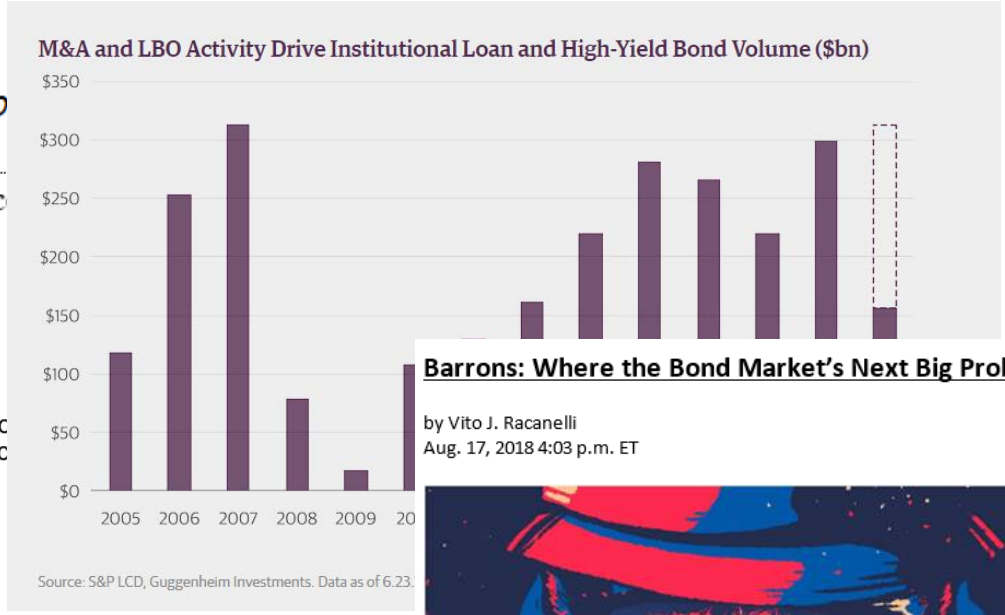
Markets

Junk Bonds Are Booming, But So Are Hedges Against Them

By Dani Burger

July 13, 2018, 7:38 AM EDT *Up*

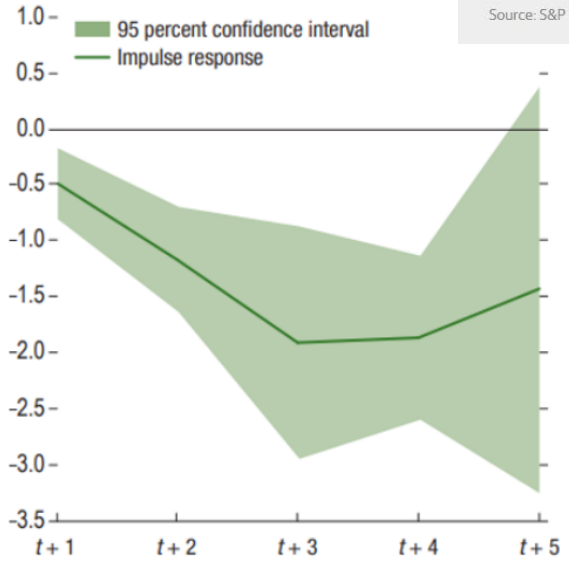
▶ Open interest for puts near rec



Bad boom

Credit booms marked by a rising share c
bonds were followed by lower economic
over the following three to four years.

(percentage points of GDP)

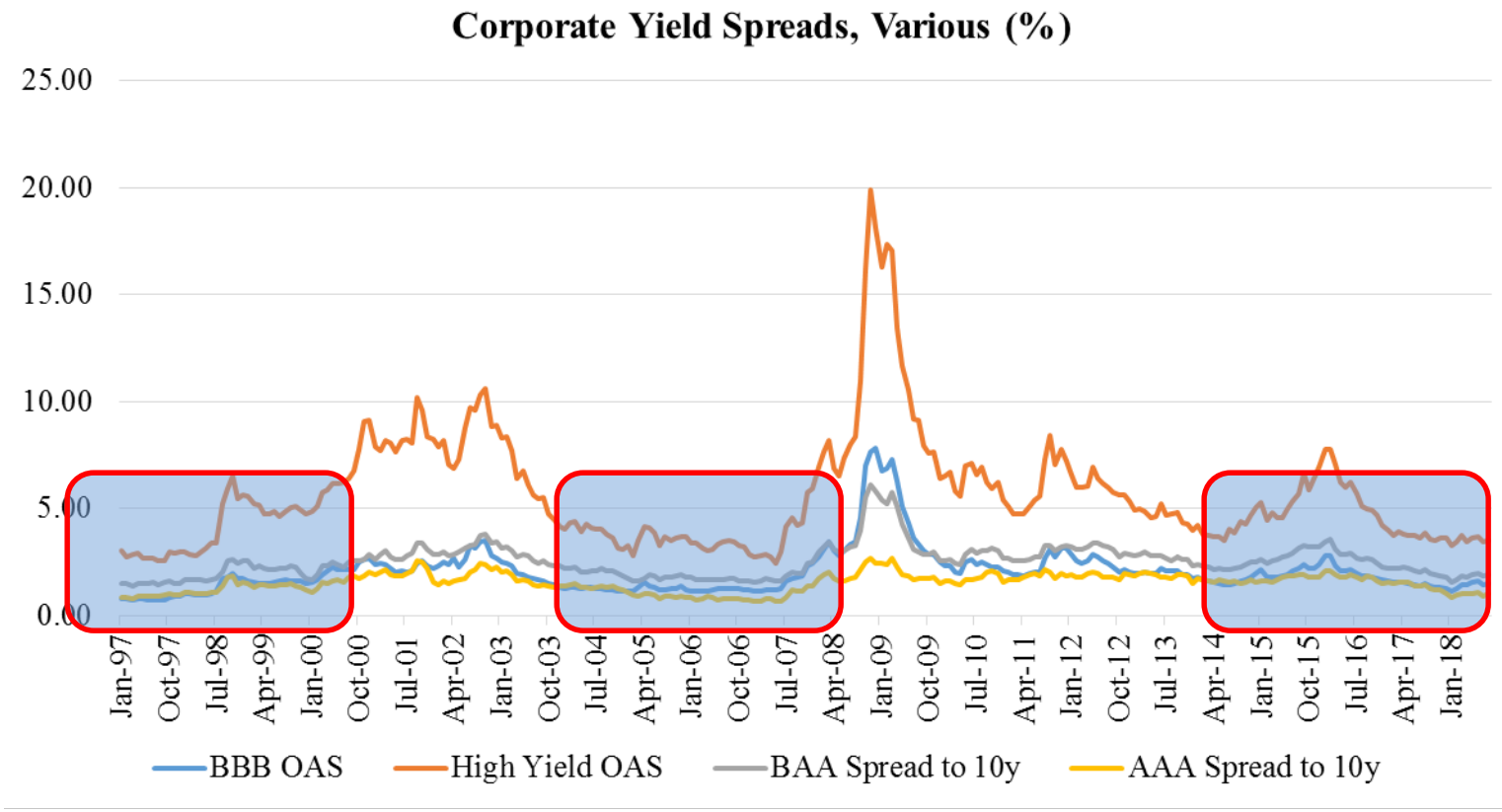


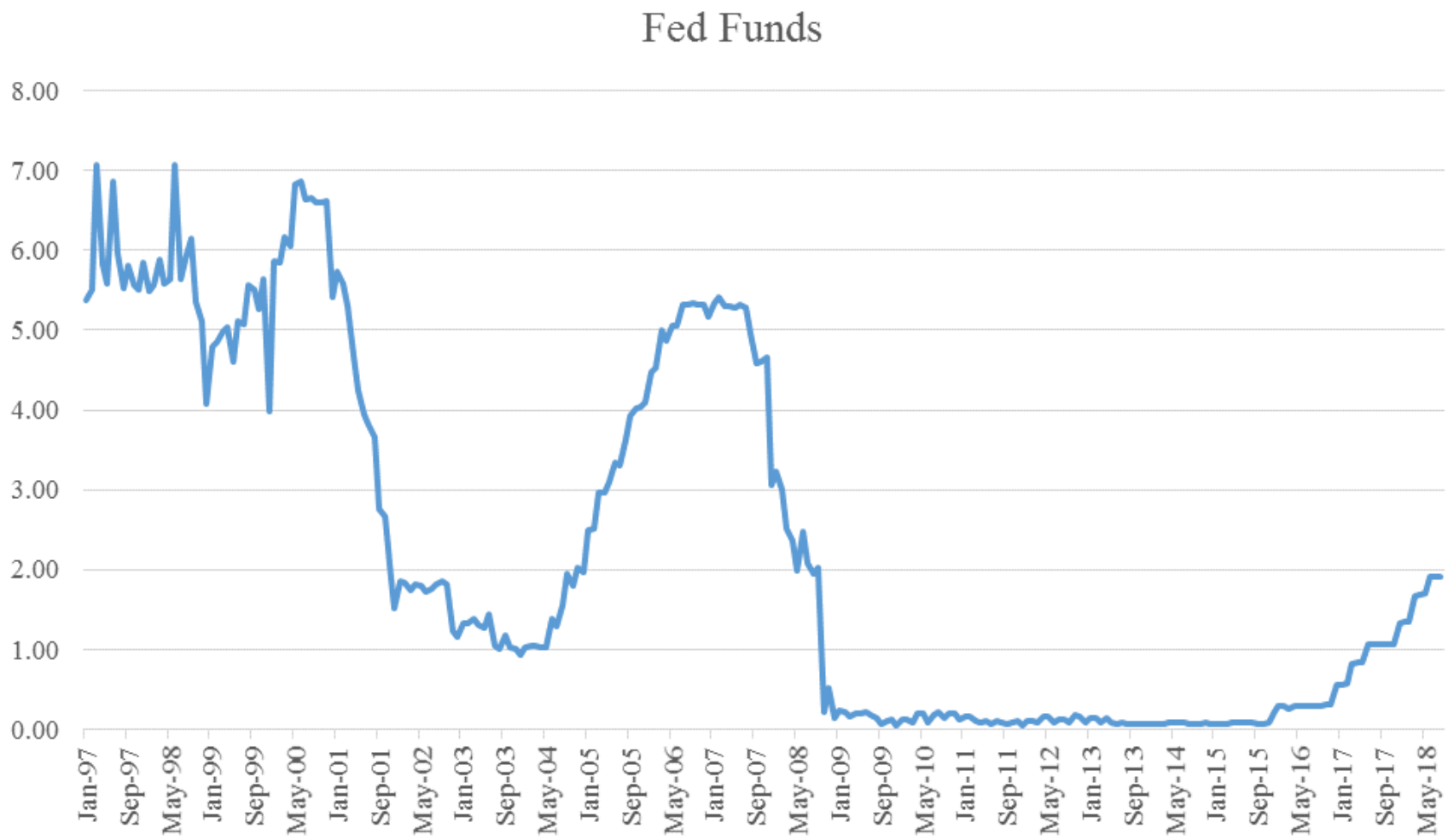
Barrons: Where the Bond Market's Next Big Problem Could Start

by Vito J. Racanelli
Aug. 17, 2018 4:03 p.m. ET

After the extraordinary rise in U.S. corporate borrowing in recent years, the investment-grade bond market resem
aged forest, littered with kindling and vulnerable to a lightning strike. And this sector—not high-yield or junk debt—
be where the next market conflagration starts.

CREDIT SPREADS




Fed Funds
8.00
7.00
6.00
5.00
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3.00
2.00
1.00
0.00
Jan-97
Sep-97
May-98
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May-16
Jan-17
Sep-17
May-18

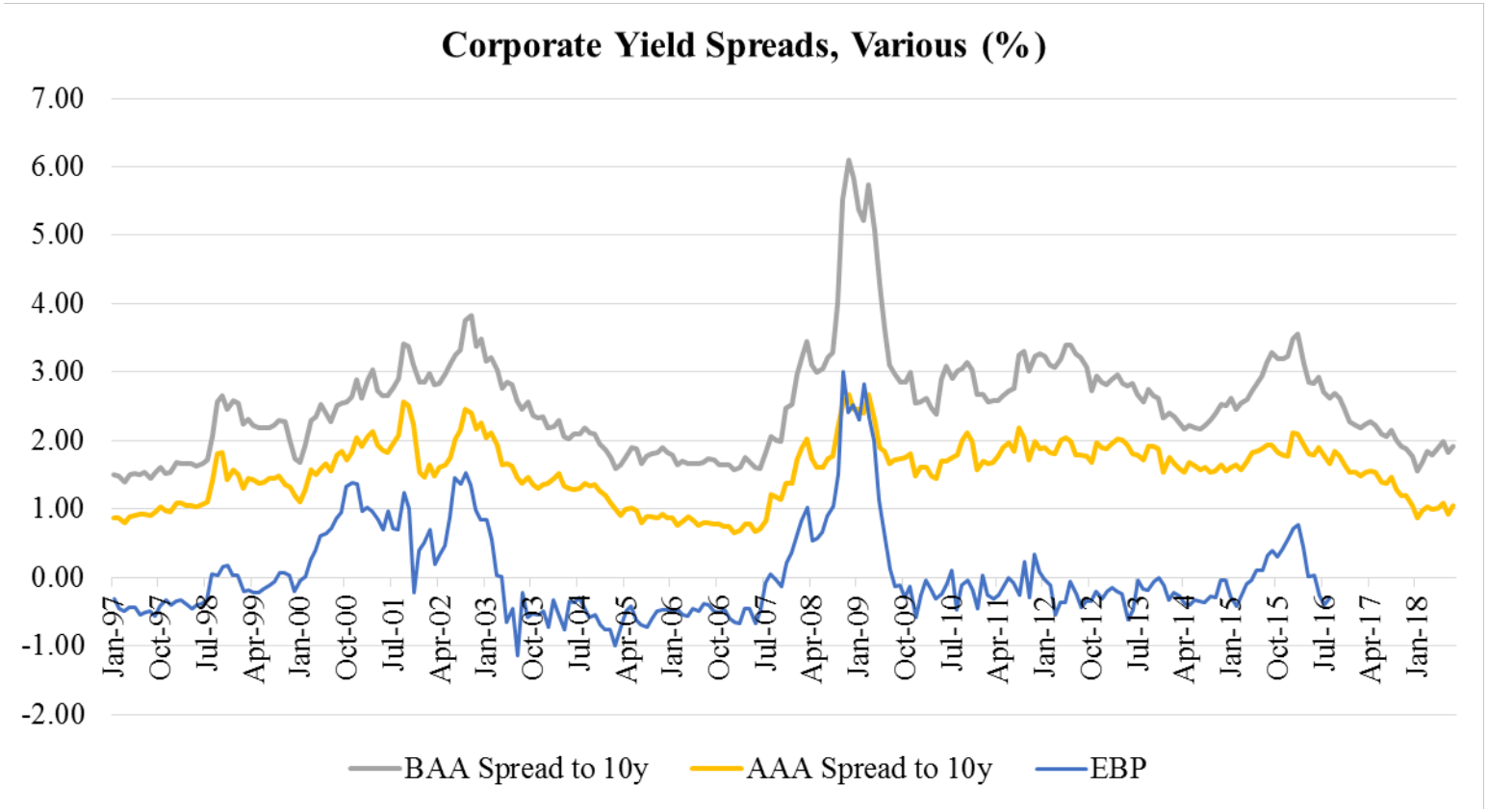
Main Approach

- Credit Risk Premium = Credit Spread – Expected Default*Recovery
- Credit spread obtained from CDS Prices
- Clearly, results depend on Expected default model
  - In general, with any structural model, more faith in estimates of changes than in levels

- Then analyze:
  - Event studies of QE dates
  - Time series

FOR COMPARISON

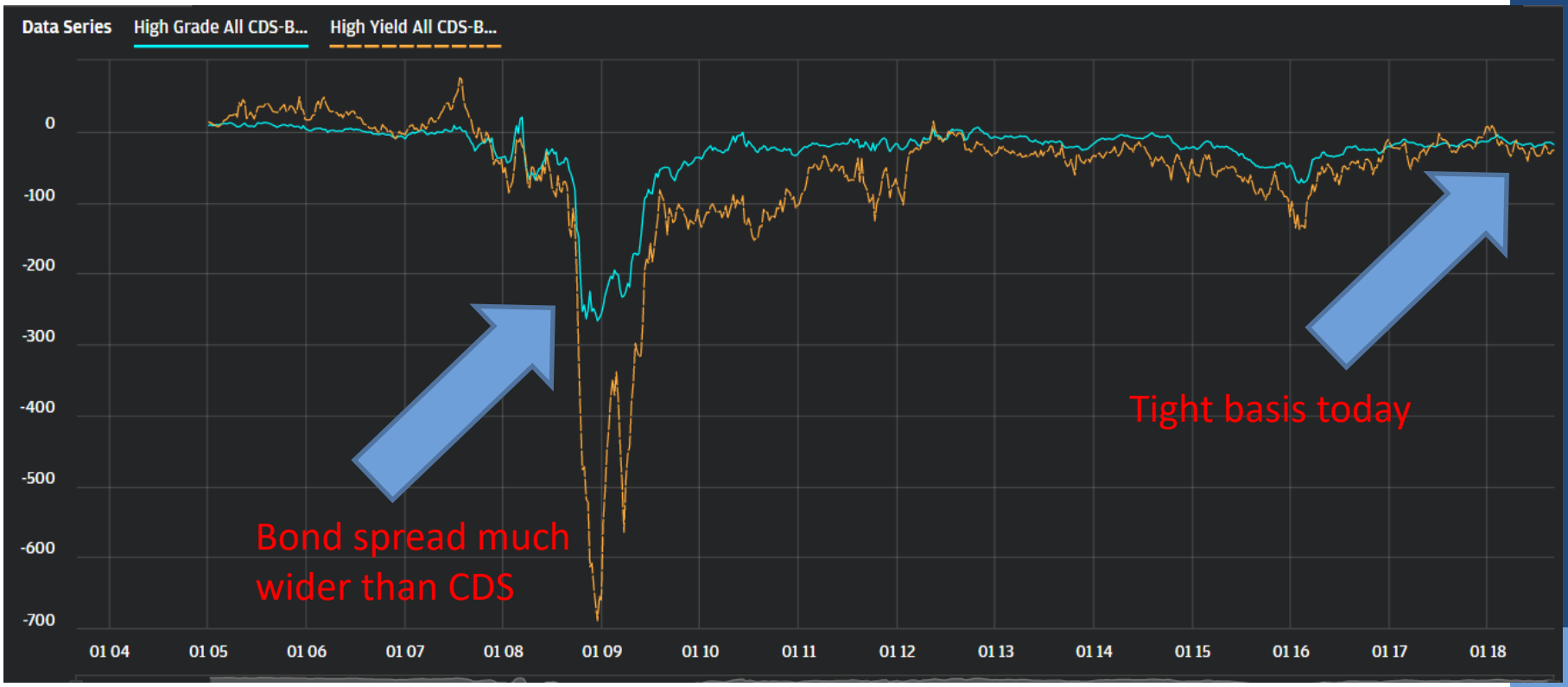
- Gilchrist and Zakrajsek (various years) have a competing measure, based on bond prices



ISSUES WITH THE APPROACH (1)

- Using the CDS spread implicitly takes a view on
  - Integration of the cash and CDS markets
  - Where the credit risk premium comes from
    - Expectations/Sentiment/Reaching for yield
    - Risk aversion
- Whether taking CDS spread or bond spread as the measure of risk-neutral probability depends on what were the non-fundamental forces. For example, during the crisis
  - On the bond side, there were forced deleveraging by bond holders and breakdown of repo market which made financing bond purchases by arbitrageurs harder.
  - On the CDS side, there were perceived counterpart risk in CDS contracts, since CDS contracts were written by banks. The demand for CDS protection is probably less because of possible defaults by banks.
  - Hard to tell whether the bond spread or CDS spread is a better measure of market implied risk-neutral expectation
    - I am persuaded by the evidence, but can the authors make a case?

CDS BOND BASIS

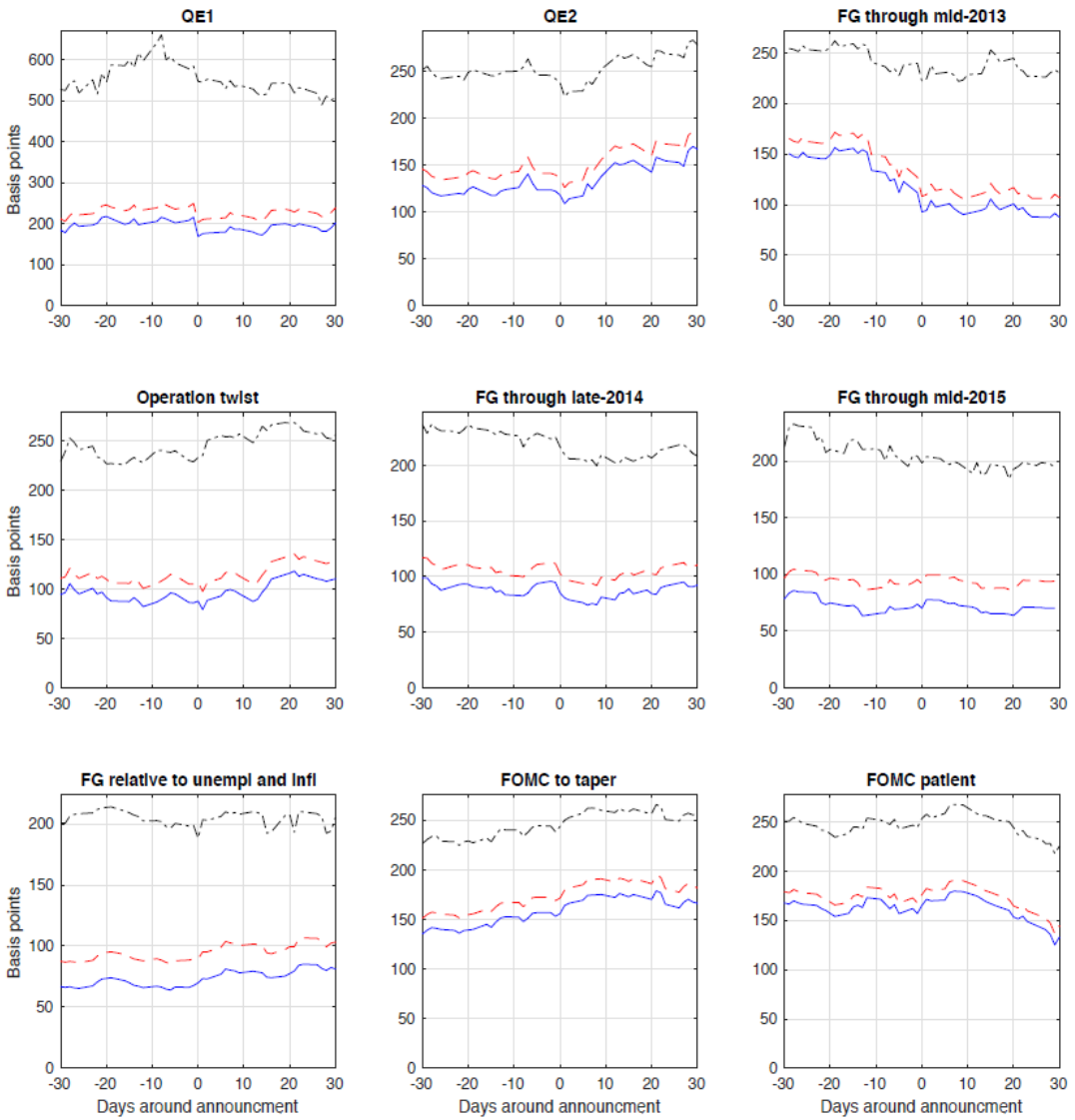


ISSUES WITH THE APPROACH (2)

- How directly do we think is the link between changes in short rates and reaching for yields (levels, changes)
- Some evidence that reaching for yield is immediate
  - Hanson, Lucca, Wright (2018), SR>LR
- Intuition suggests might play out over a longer horizon
- My favored account of the credit cycle
  - Fed lowers rates
  - This induces reach-for-yield behavior
  - In the short-run, this lowers risk of high yield credits, making them appear safe ex post
  - An expectations cycle kicks in, further reducing credit "risk premia"
- Much like output-inflation cycle, there are variable leads and lags here, making measurement difficult
  - This gives me some license as a discussant

EVENT STUDY EVIDENCE (3)

Paper finds
Very little
Movement
around QE
Announcement
Dates



GAGNON ET AL

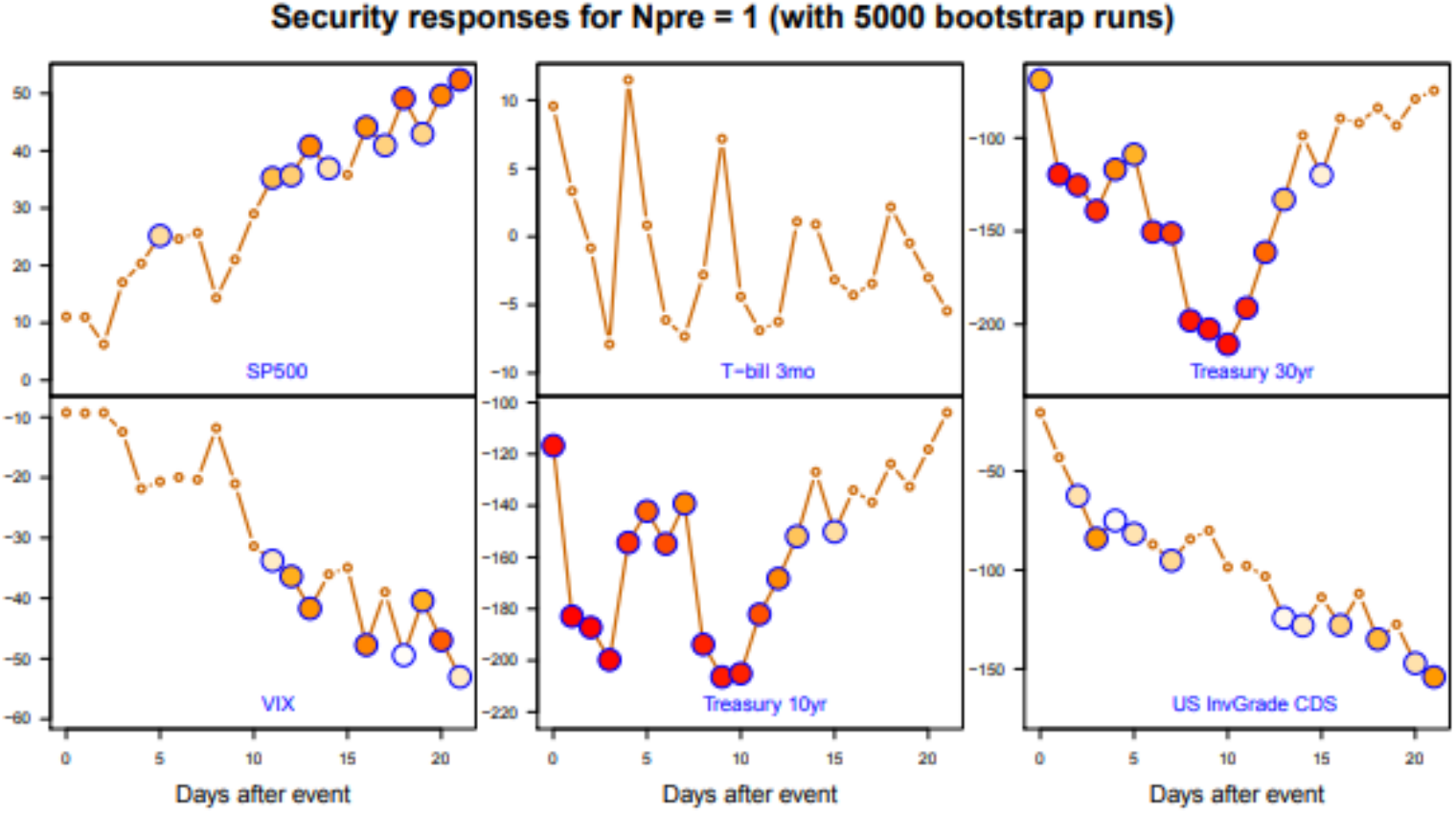
Table 1. Interest Rate Changes around Baseline and Extended Event Set Announcements

Date	Event	2y UST	10y UST	10y Agy	Agy MBS[b]	10y TP	10y Swap	Baa Index
11/25/2008[a]	Initial LSAP Announcement	−2	−22	−58	−44	−17	−29	−18
12/1/2008[a]	Chairman Speech	−8	−19	−39	−15	−17	−17	−12
12/16/2008[a]	FOMC Statement	−9	−26	−29	−37	−12	−32	−11
1/28/2009[a]	FOMC Statement	10	14	14	11	9	14	2
3/18/2009[a]	FOMC Statement	−22	−47	−52	−31	−40	−39	−29
4/29/2009	FOMC Statement	1	10	−1	6	6	8	−3
6/24/2009	FOMC Statement	10	6	3	2	4	4	5
8/12/2009[a]	FOMC Statement	−2	5	4	2	3	1	2
9/23/2009[a]	FOMC Statement	1	−3	−3	−1	−1	−5	−4
11/4/2009[a]	FOMC Statement	−2	6	8	1	5	5	3
12/16/2009	FOMC Statement	−2	1	0	−1	1	1	−1
1/27/2010	FOMC Statement	11	3	4	4	1	3	1
3/16/2010	FOMC Statement	−3	−5	−4	−4	−4	−4	−5
1/6/2009	Minutes Release	0	−4	3	−17	−1	−9	−14
2/18/2009	Minutes Release	9	11	4	6	8	9	16
4/8/2009	Minutes Release	2	−4	−7	−9	−4	−6	−6
5/20/2009	Minutes Release	−5	−5	−5	−7	−4	−4	−10
7/15/2009	Minutes Release	7	13	16	16	10	16	7
9/2/2009	Minutes Release	−1	−6	−6	−4	−7	−8	−5
10/14/2009	Minutes Release	1	7	10	3	7	7	8
11/24/2009	Minutes Release	0	−5	−5	−9	−5	−6	−3
1/6/2010	Minutes Release	−2	6	5	4	6	7	−1
2/17/2010	Minutes Release	4	7	7	8	6	8	5
Baseline Event Set		***−34***	***−91***	***−156***	***−113***	***−71***	***−101***	***−67***
Baseline Set + All FOMC		***−1***	***−55***	***−134***	***−114***	***−47***	***−75***	***−72***
Cumulative Change: 11/24/08 to 3/31/2010		***−19***	***50***	***−75***	***−95***	***30***	***28***	***−489***
Std Dev of Daily Changes: 11/24/08 to 3/31/10		***5***	***8***	***9***	***10***	***6***	***9***	***7***

[a]Included in the baseline event set.
[b]Two-day change for agency MBS on March 18, 2009 due to a Bloomberg data error.

BUT HORIZON MATTERS

Aggregate responses for Federal Reserve QE announcements



Source: Mamaysky 2018

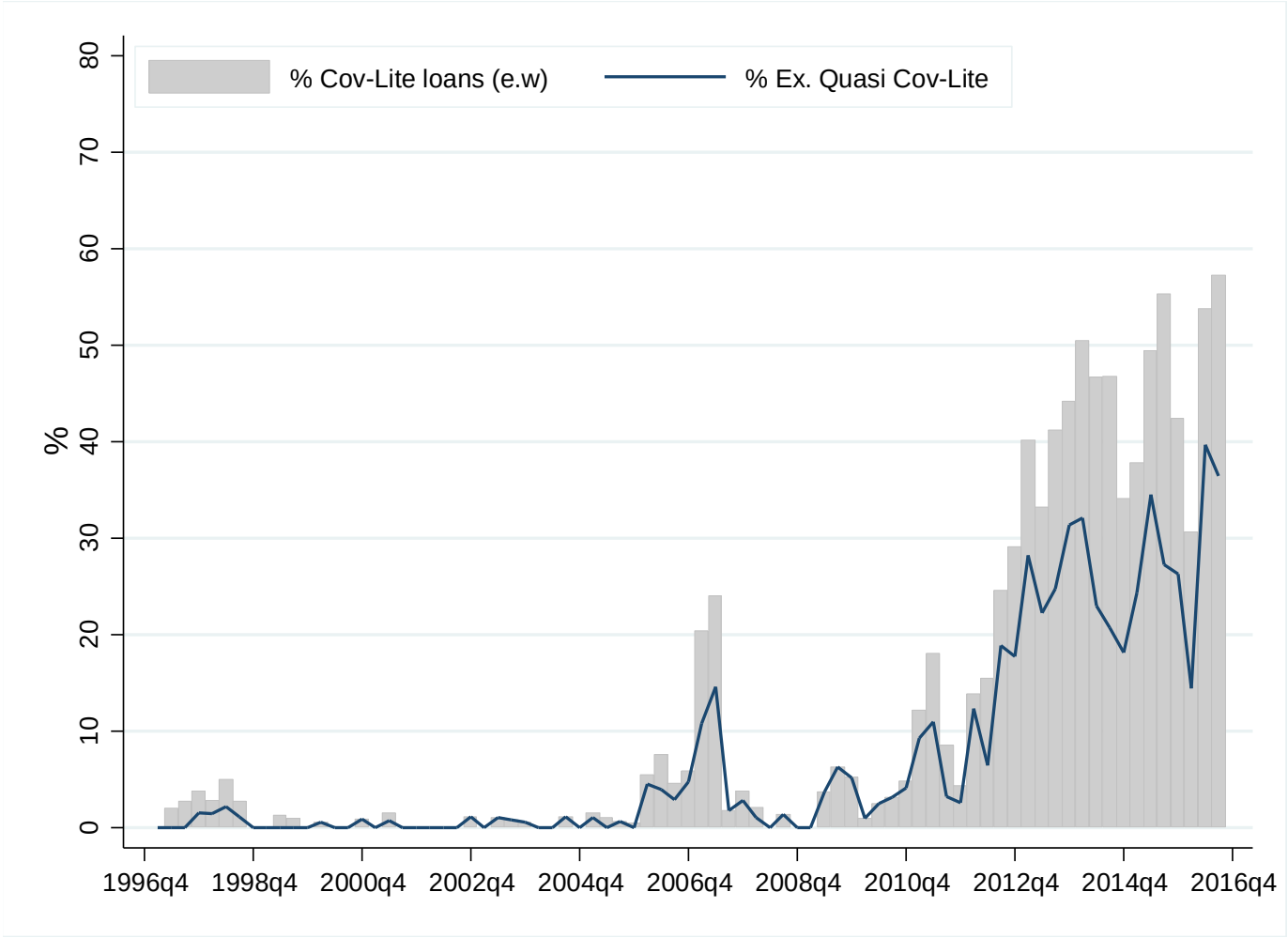
Issues with Event study analysis

- Assumes perfect integration of credit/CDS/ Treasury markets at all horizons
  - Greenwood, Hanson, Liao (2018) suggest unrealistic
- Correcting for impact that QE has on actual default probability is fraught with difficulty, making changes in both credit spreads and CDS prices hard to evaluate

ISSUES WITH THE APPROACH (4)

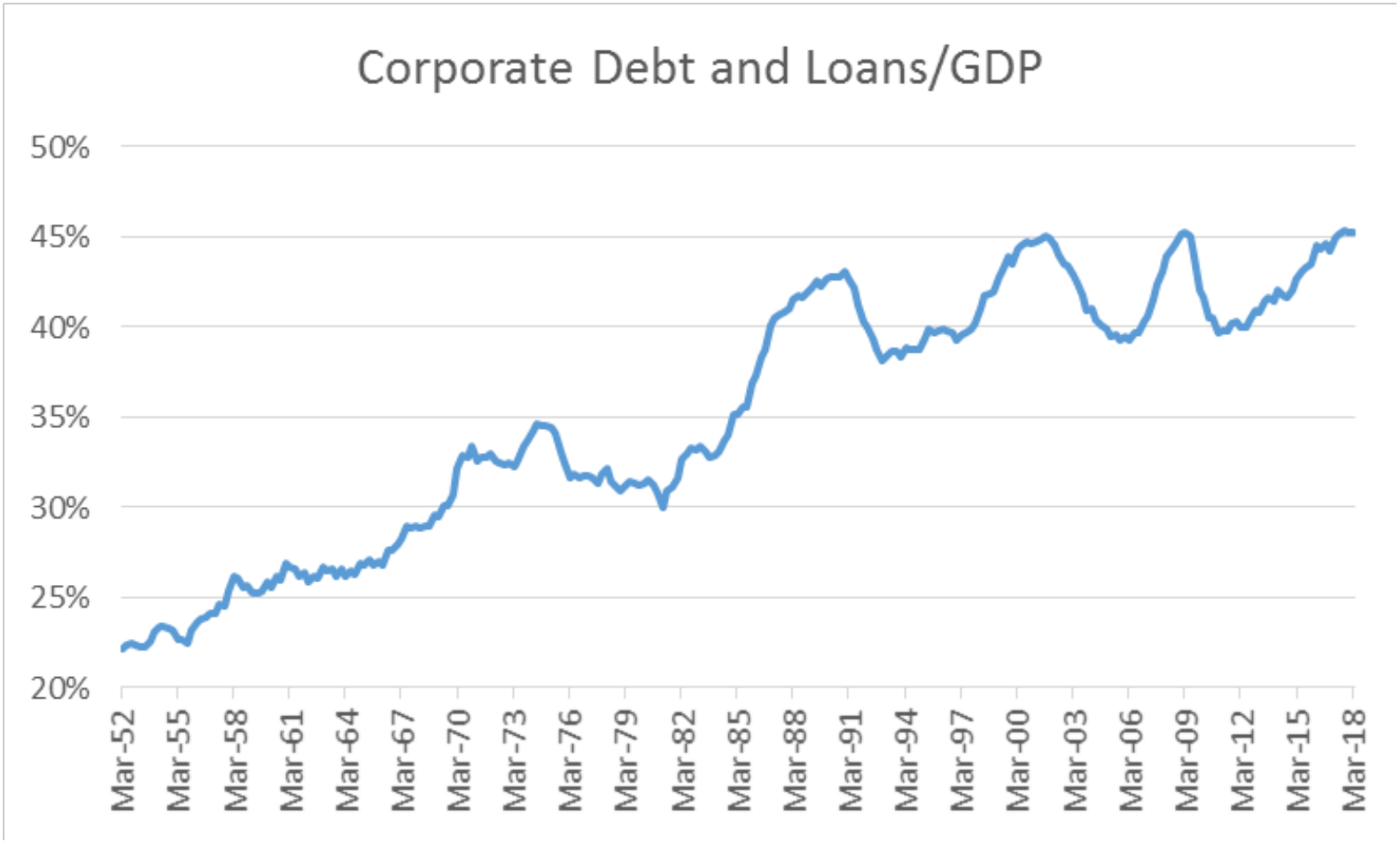
- The paper is solely concerned with prices, but a financial stability assessment would also consider:
  - Non-price features of the debt
    - Becker and Ivashina (2018), cov-lite etc
  - Quantities
    - Greenwood and Hanson (2013), Baron and Xiong (2017)

COV-LITE SHARE

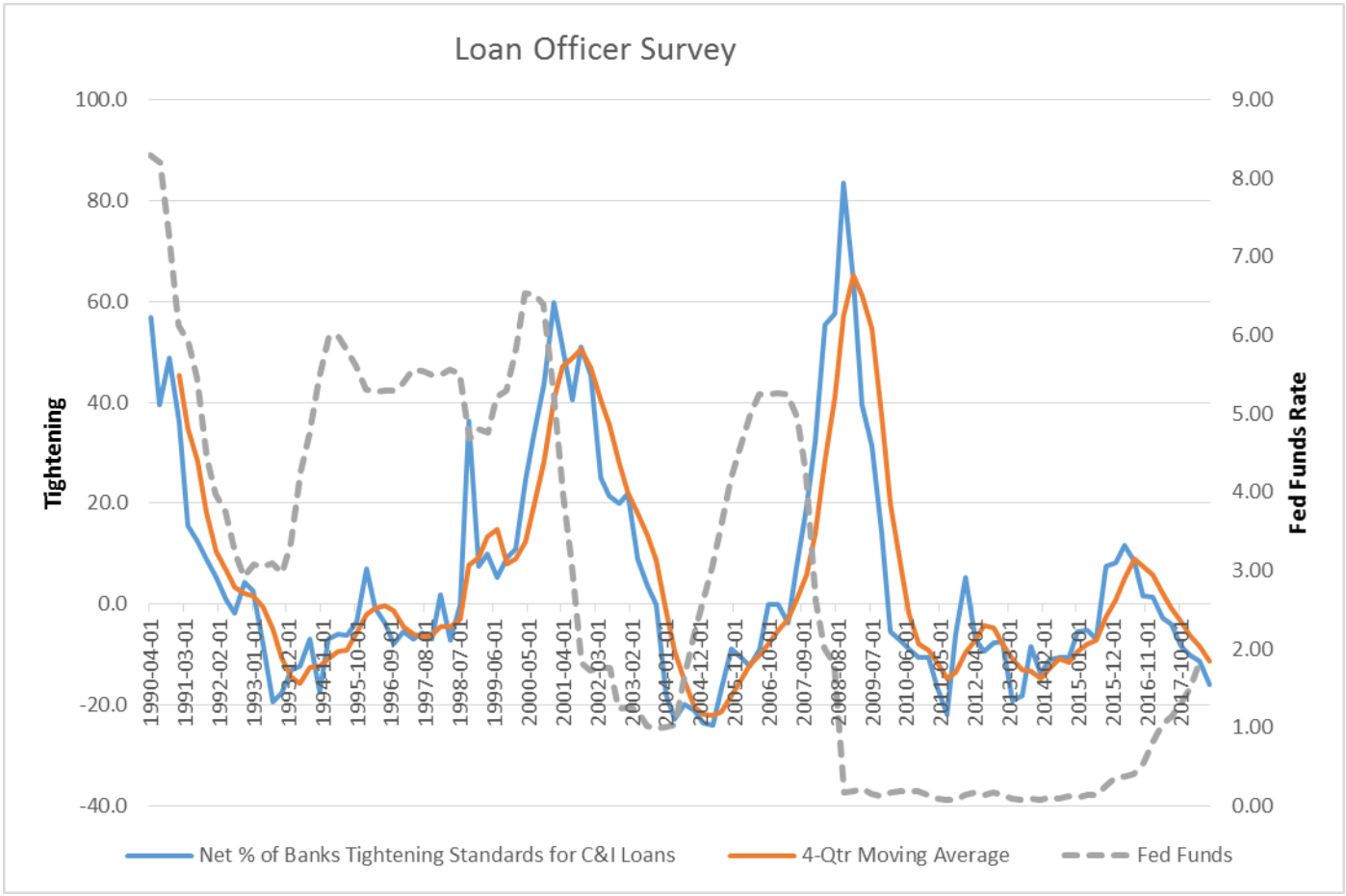


Becker and Ivashina 2018

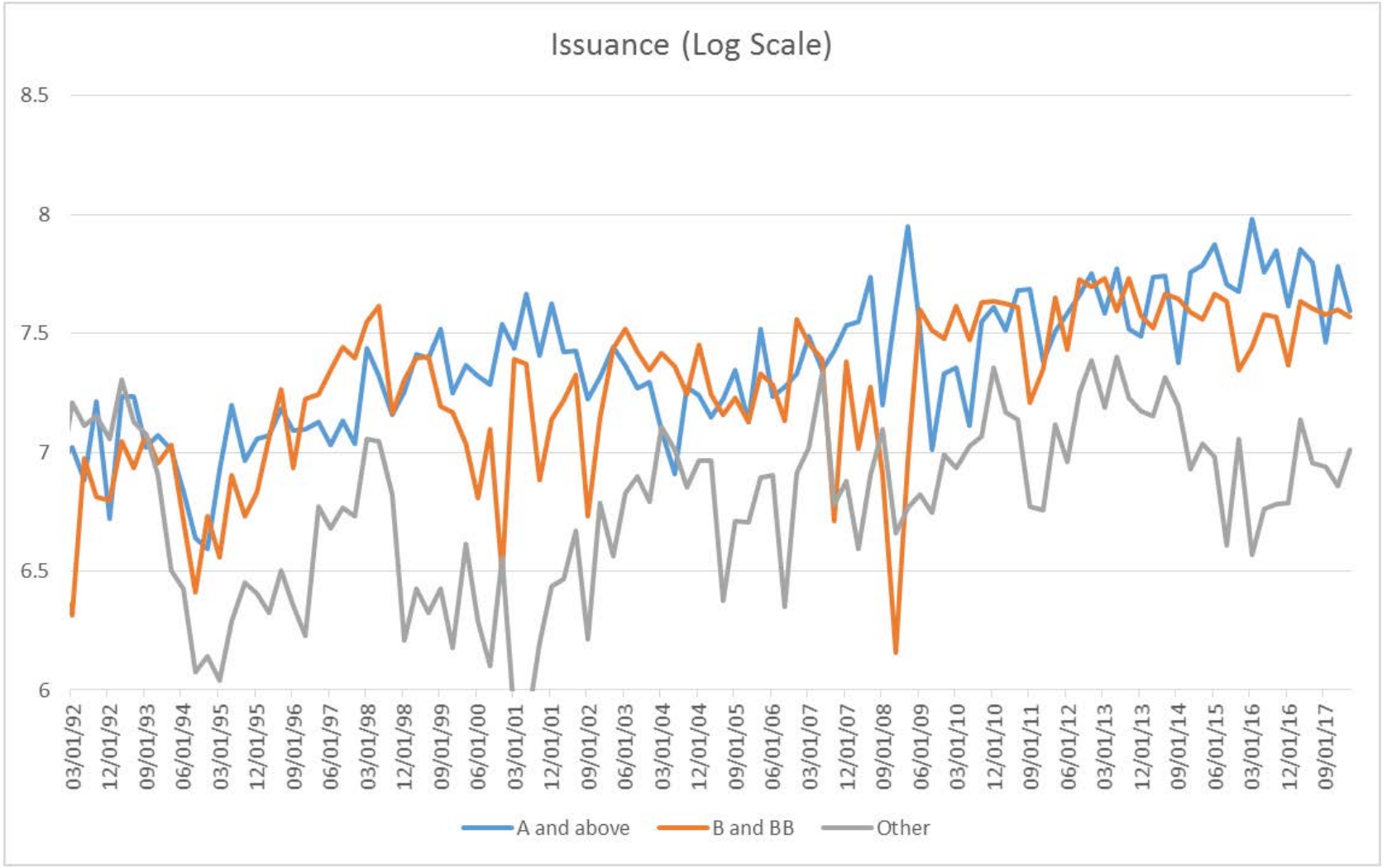
Credit Growth



Loan Officer Survey



ISSUANCE


Issuance (Log Scale)
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7
6.5
6
03/01/92
12/01/92
09/01/93
06/01/94
03/01/95
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09/01/96
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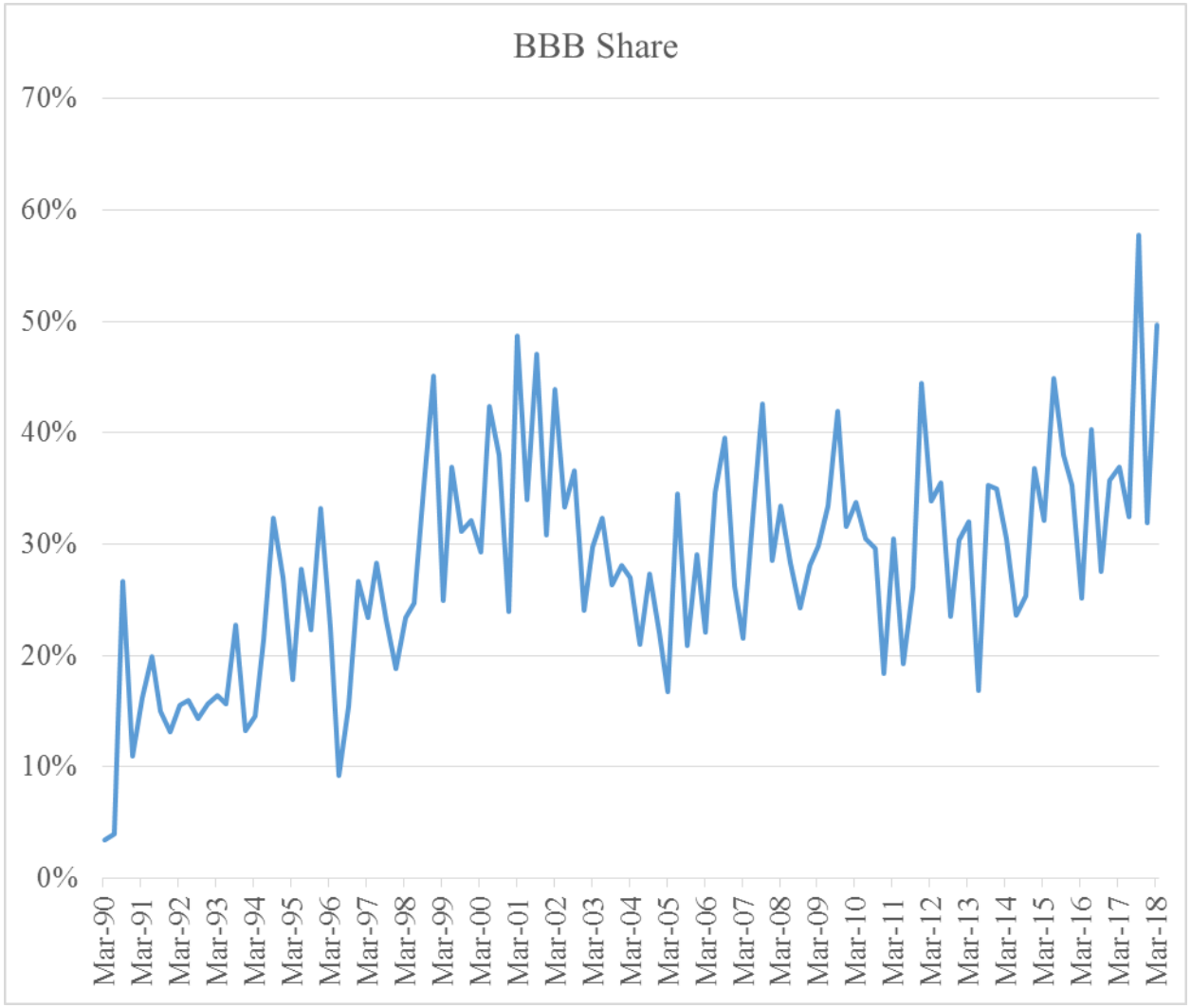
06/01/15
03/01/16
12/01/16
09/01/17
A and above
B and BB
Other

THE BBB SHARE TINDERBOX



WHERE DOES THIS LEAVE US

- The pricing evidence that Berndt and Helwege present suggests that pricing is much like any other credit boom, and not as extreme as the last one
- But all of this needs to be caveated with
  - High credit growth overall
  - Other estimates of credit risk premia suggest the market is bullish
  - Need to have greater clarity as to whether CDS is the right place to study risk premia
  - Combination of high growth and pretty low spreads suggests that a credit correction will produce a garden variety credit crunch, but most likely nothing like 2008
  - In my opinion, this is a fruitful area of research, and more explorations such as Berndt and Helwege present should be done