

Banks' Motivations for Designating Securities as Held to Maturity

Sehwa Kim
Columbia University

Seil Kim
Baruch College, City University of New York

Stephen G. Ryan
New York University







Where Research and Policy Meet



Unrealized Gains (Losses) on Investment Securities



2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

Source: FDIC.









Motivation

• How did accounting contribute to the recent banking crisis?

- Two accounting features allow unrealized gains and losses to be unrecognized
 - Financial reporting: amortized cost basis accounting for held-to-maturity (HTM) classification ignores fair value changes
 - Regulatory accounting: the AOCI filter excludes unrealized gains and losses on available-forsale (AFS) securities from Tier 1 capital calculation









Evidence from Banks Affected by the Tailoring Rules

- Five banks were allowed to reinstate the AOCI filter in 2019
 - Capital One Financial; Charles Schwab; PNC Financial; US Bancorp; American Express
 - All five banks reinstate the AOCI filter ("opt-out" banks)

- "Opt-out" banks transfer securities from AFS to HTM to AFS to HTM
 - Evidence of the fluidity of the HTM classification

- "Opt-out" banks take greater risk in their AFS securities after AOCI filter is reinstated
 - Evidence that the AOCI filter allows banks to take greater risk









Background on Accounting for Debt Securities

- Held to maturity (HTM): unrealized gains and losses are ignored
- Available for sale (AFS): unrealized gains and losses recognized under accumulated other comprehensive income (AOCI)

 AFS was introduced in response to banks holding bonds with large unrealized losses during the 1980s savings and loan crisis

• Intent was to make banks hold less riskier bonds









Background on the AOCI filter

- Unrealized gains and losses from AFS not reflected in regulatory capital
 - Neutralized the regulatory capital effect of the AFS classification

 Under Basel III, in 2014, AOCI filter is removed for advanced approaches banks, in response to banks holding risky securities during the 2008 financial crisis

 Under the 2019 Tailoring Rules, AOCI filter is reinstated for banks with less than \$700 billion in assets









Preferred Classification: AFS vs HTM

- With the AOCI filter and stable interest rates, banks prefer AFS
 - Securities classified as HTM need to be held to maturity
 - Selling HTM securities leads to "tainting"; all HTM securities are transferred to AFS and HTM classification is not allowed for two years

When AOCI filter is removed, banks prefer HTM to shield regulatory capital

With interest rate hikes, all banks prefer HTM to ignore unrealized losses









Preferred Classification: AFS vs HTM

Bank Category	AOCI Filter	Banks
Advanced Approaches (AA) GSIBs and non-GSIBs with ≥700 bn assets or ≥75 billion foreign exposure	AOCI filter removed in 2014	JP Morgan Bank of America Citigroup Wells Fargo Goldman Sachs Morgan Stanley BNY Mellon State Street Northern Trust
Opt-out 250 bn ≤ assets < 700 bn 10 bn ≤ foreign exposure < 75 bn	AOCI filter removed in 2014 but reinstated in 2019	Capital One Financial Charles Schwab PNC Financial US Bancorp American Express
Non-Advanced Approaches (non-AA)	AOCI filter never removed	All other banks











Preferred Classification: AFS vs HTM

2012Q1 2013Q2 2019Q4 2021Q4 2022Q4

Pre-Basel III Basel III Tailoring Rules Interest Rate Hike

2012Q1-2013Q2 2013Q3-2019Q3 2019Q4-2021Q3 2021Q4-2022Q4

All banks have AOCI Banks with assets ≥ Banks with assets

filter \$250 billion have <\$700 billion have

AOCI filter removed AOCI filter restored

Preferred treatment of "opt-out" banks

AFS HTM AFS HTM

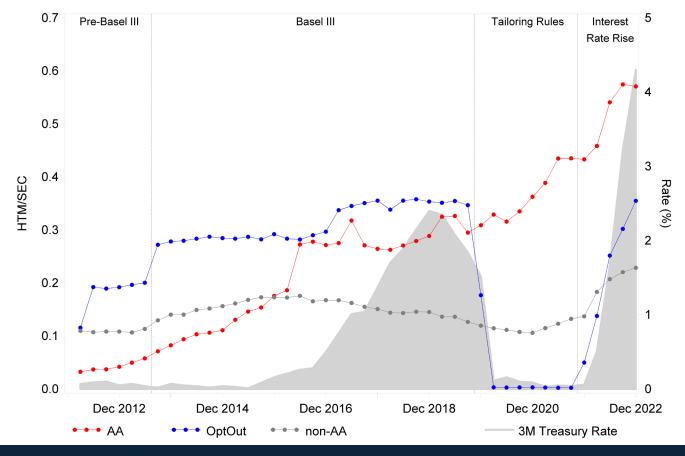








Trends in HTM as a proportion of Securities



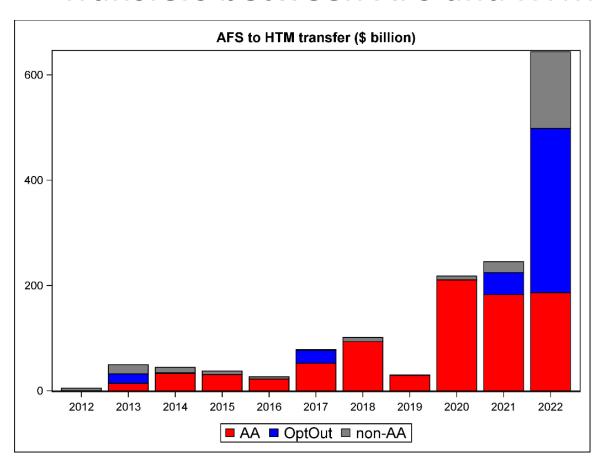


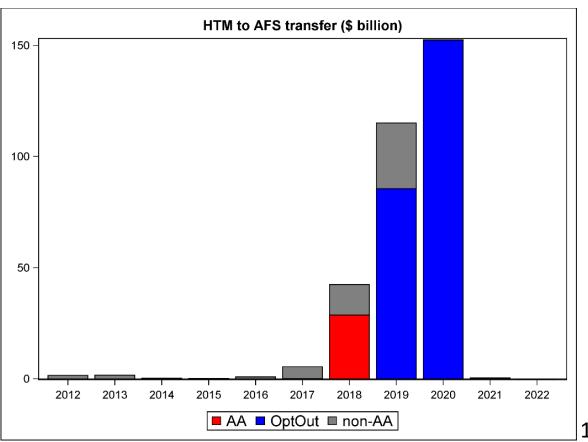






Transfers between AFS and HTM





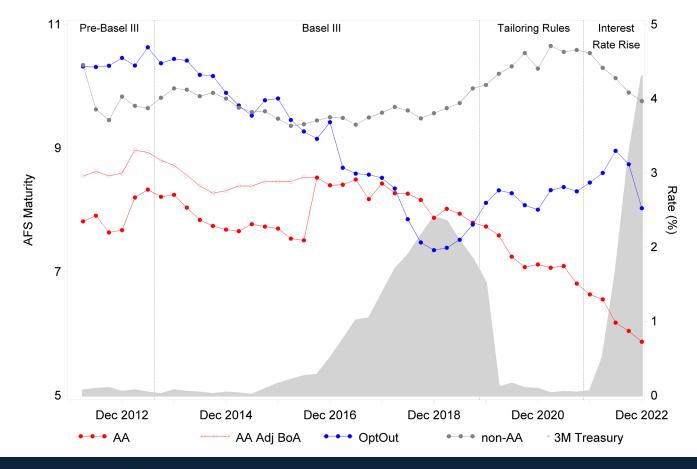








Trends in AFS securities maturities





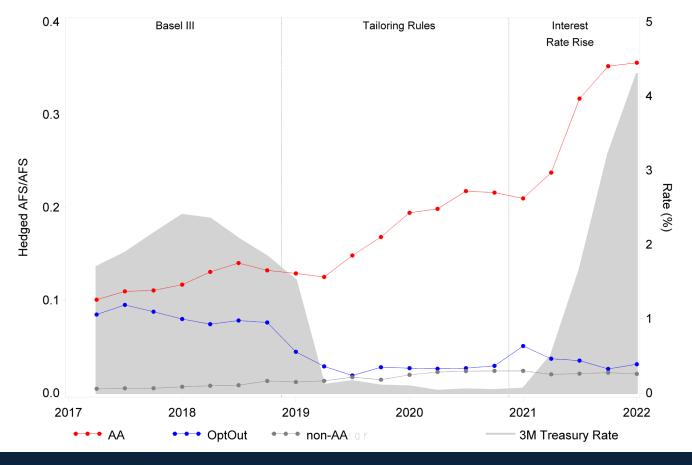








Trends in hedges of AFS securities











Conclusion

 Banks classify securities to AFS or HTM to obtain preferred accounting and regulatory treatment

The HTM classification and the AOCI filter, by ignoring unrealized gains and losses,
 motivates banks to take greater securities risk

Our findings support elimination of the HTM classification and the AOCI filter









Implications for Proposed Rule of July 27

- Proposal to remove AOCI filter for banks above \$100 billion in assets
 - Unrealized gains and losses on AFS securities to affect regulatory capital

- Affected banks will hold less risky securities classified as AFS
- Affected banks will transfer (risky) securities from AFS to HTM to offset the effect of the AOCI filter removal
 - Limits banks' financing and risk management options
 - Potentially reduce loan supply





