Moody's Analytics

A CECL Benchmark Solution From Call Report Data

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The Problem

Many institutions

- » Need a benchmark for CECL allowances for Day 0 because –
  - They may have zero losses in history
  - They may lack good quality data on historical losses
  - They may have a new portfolio
- » Want to compare CECL allowances with industry peers
- » Want to project CECL allowances on future dates for capital planning

A Solution from Bank and Credit Union Call Reports

Top-down approach for small institutions, small and/or young portfolios

- Produces scenario-conditioned lifetime net losses at different evaluation dates (past, Day 0 & future)
- Takes into account current and future economic conditions
- Applies mean reversion after R&S period
- Produces lifetime net losses by estimated vintages
- Amortizes balance to calculate current book at each evaluation date
- Uses net loss rate methodology (one of the CECL acceptable methodologies)

And…Is CECL COMPLIANT!

Is This Different from Historical Loss/WARM Approaches?

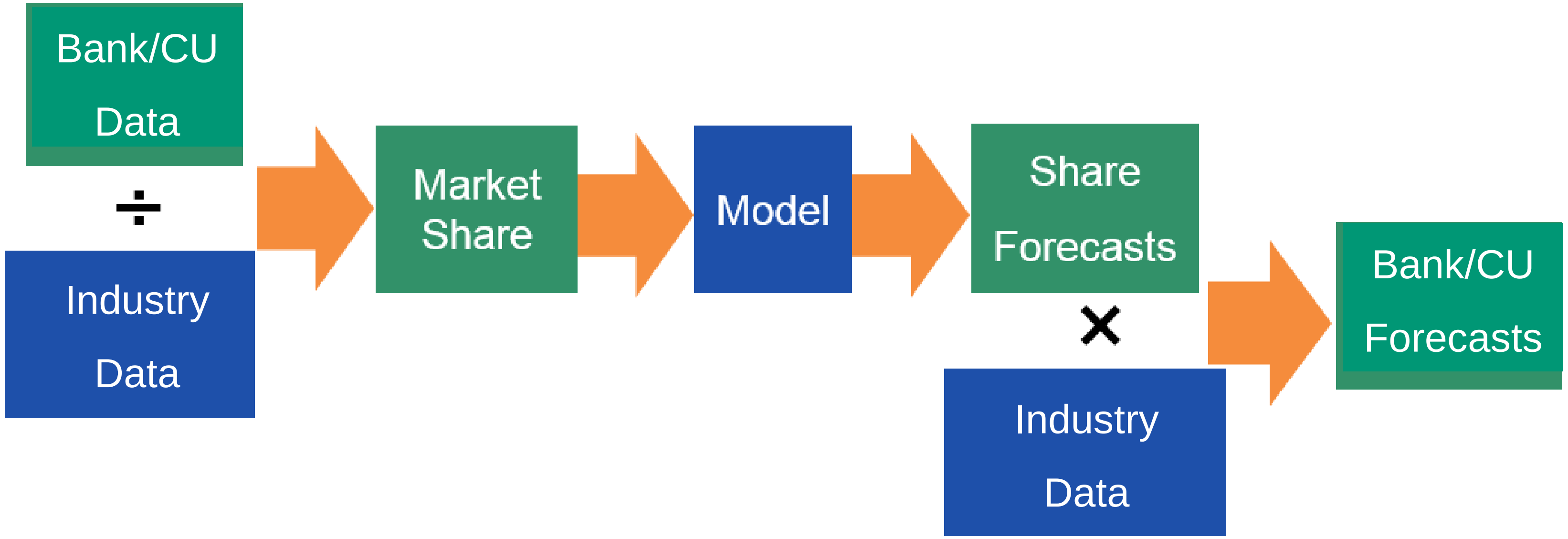
YES!!

- Historical Lifetime Loss/Historical Vintage/WARM approaches incorporate forward-looking elements only **qualitatively.**
- In this call report approach, industry and bank/CU net charge-off rate forecasts are produced **quantitatively** through an econometric model which incorporates **R&S economic forecasts.**

Is This Different from Loss Rate Approaches?

YES!!

- Does not model bank/CU loss data directly
- Data for small institutions is usually volatile, noisy or short. This is inadequate for modeling
- Industry data is smoother. Industry forecasts are combined with forecasts of the bank/CU market share to produce more accurate bank-level projections



3 Simple Steps

STEP 1 — Produce scenario-conditioned forecasts of bank/CU net chargeoff rates

STEP 2 — Define a R&S period, life of loan, interest rate

STEP 3 — Estimate outstanding balance at each evaluation date

→ Net lifetime losses by vintage

Choose Your Specifications

Select Bank

Central Bank

Select Asset Class

Auto

Select Peer for Net Charge-Offs

Industry

Enter Quarterly Originations:

BROWSE... No file selected

Enter Average Loan Life (Quarters)

4 20 50

4 9 14 19 24 29 34 39 44 49 50

Enter Reasonable and Supportable Period (Quarters)

1 8 20

1 3 5 7 9 11 13 15 17 19 20

Enter Reversion Period (Quarters)

1 8 30

1 4 7 10 13 16 19 22 25 28 30

Enter Long-Run Annual Net Charge-Off Rate (%) : Defaults to Historical Mean

Select Scenarios

- [x] Moody's Baseline
- [x] Stronger Near-Term Rebound (S1)
- [ ] Slower Near-Term Recovery (S2)
- [x] Moderate Recession (S3)
- [x] Protracted Slump (S4)
- [ ] Below-Trend Long-Term Growth (S5)
- [ ] Stagflation (S6)
- [ ] Next-Cycle Recession (S7)
- [ ] Low Oil Price (S8)

Enter As Of Date

2019 Q1

Enter Annual Interest Rate (%)

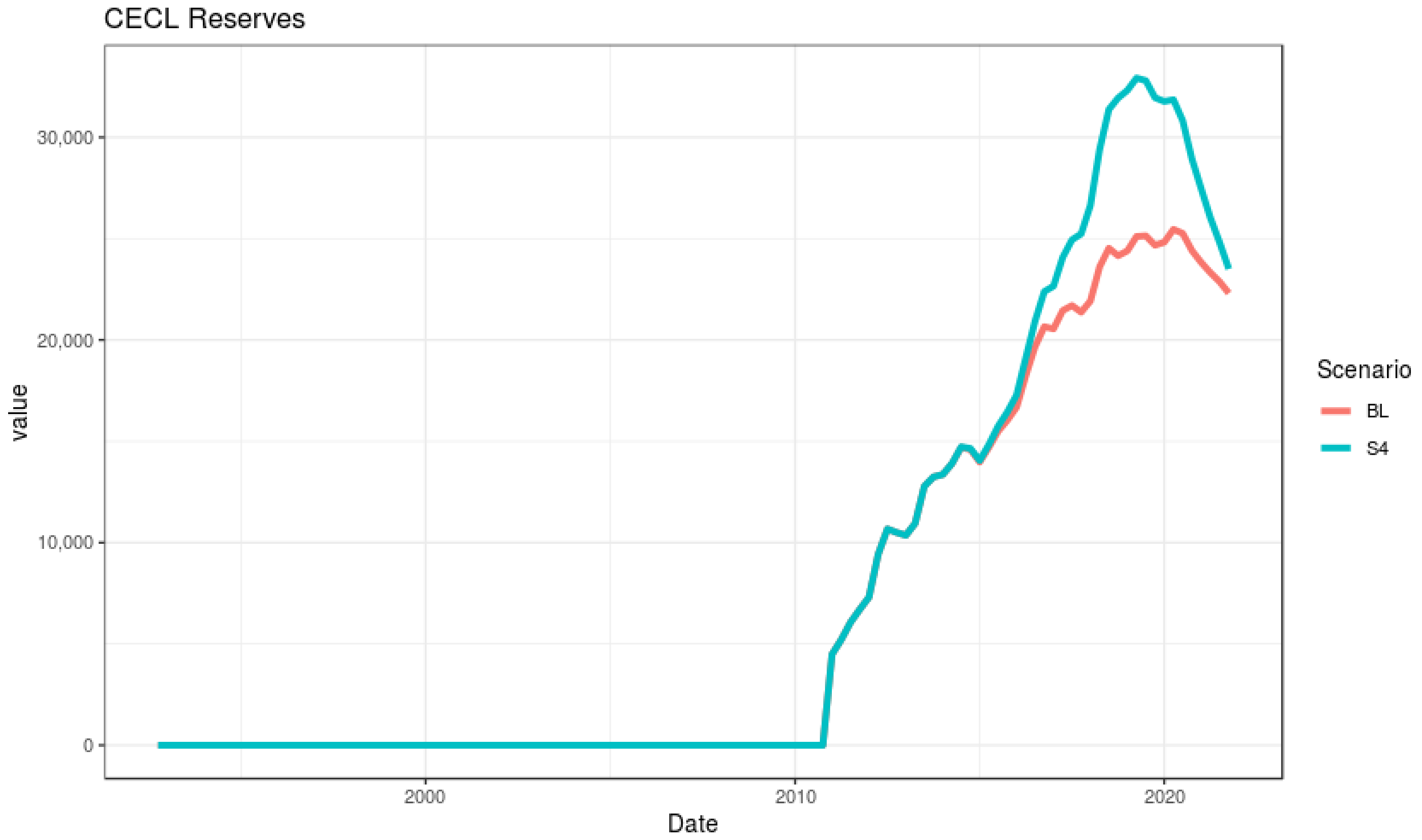
5

See CECL Reserves Under Diff. Economic Conditions…

Numbers in $1,000's

As Of	BL	S1	S3	S4
2019 Q1	$ 24,397	$ 23,337	$ 31,336	$ 32,315

…on Different ‘As of’ Dates…



…by Vintage of Loans

Numbers in $1,000's

Vintage	BL Originations	BL Current	BL CECL	S4 Originations	S4 Current	S4 CECL
2014 Q2	82,762	4,452	8	82,762	4,449	10
2014 Q3	129,598	13,907	40	129,598	13,900	53
2014 Q4	97,563	15,650	63	97,563	15,643	85
2015 Q1	47,643	10,147	52	47,643	10,143	70
2015 Q2	89,987	23,846	147	89,987	23,837	200
2015 Q3	117,324	37,151	270	117,324	37,137	369
2015 Q4	121,918	44,862	376	121,918	44,846	517

However, the Method is Not Without Limitations

- Available only for broad call report product categories/segments.
  - But, user can enter loss rate information for sub-segments. This can be used to share down call report segment losses
- Vintage information is estimated from amortization schedule. Prepayments are not recognized.
  - But, user can overwrite the estimated originations by entering quarterly origination information

Bank/Credit Union Call Report Segments

Consumer Credit/Retail → Mortgage, Auto, Credit Cards, HELOC, HELOAN, Student Loan, etc

C&I

CRE → Owner Occupied, Non-Owner Occupied, and Construction

For More Information

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