

Article

# Cards and CECL estimates

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Why are cards driving CECL estimates up, and what can we expect from other institutions?<sup>1</sup>

Recent CECL impact disclosures point directly to credit cards as the largest driver of the allowance. We can confirm those recent disclosures by looking at the consumer default volumes chart in Figure 1, which clearly point to the credit card segment as being one of the largest contributors of loss today.<sup>2</sup>

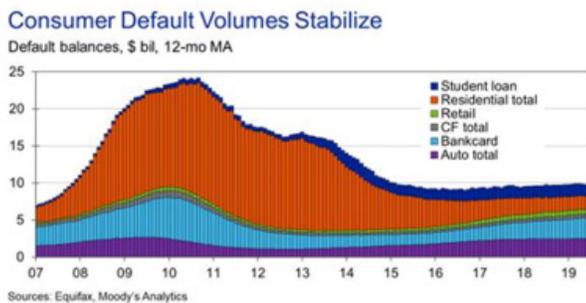


Figure 1. Consumer Default Volumes Stabilize. Source: Equifax, Moody's Analytics

Given the lack of product-specific disclosures from the majority of the market, what can be expected in terms of CECL impact for credit card portfolios for day 1 adoption and beyond as we near the end of the business cycle?<sup>3</sup>

Since the end of the first quarter of 2019, a few institutions have started providing product-based disclosures rather than simple overarching estimates for the entire bank book. The notable disclosures from JP Morgan Chase (JPM) and Bank of America—as well as specialty credit card issuers<sup>4</sup> such as Synchrony Financial and Discover—point to credit cards as the main driver for the largest allowance increase at adoption. JPM's CFO had some interesting comments to help us think about the increase: JP Morgan Chase will see its allowance grow at CECL adoption. As per chief financial officer Marianne Lake, the financial institution expects to have to increase reserves by about \$5 billion, or about 35 percent, on day 1 of its implementation of the current expected credit loss standard, or CECL, an estimate as of Q1 2019 which was reaffirmed in Q2. Additionally, JPM's CFO stipulates that, "In cards today, we have a little over \$5 billion in reserves," Lake said. "And remember that we are currently reserving for about 12 months of losses, while the weighted average life of revolving balances is closer to two

years. So obviously, the [CECL] modeling is considerably more complicated than that. But about two times our current reserves seems reasonable."

How do these initial disclosures help shape our expectations for credit card portfolios, whether for day 1 adoption impact or to understand the potential volatility of these new estimates? Let's start with a review of CECL basics and focus on key elements that drive the estimate for credit cards.

#### Current Expected Credit Loss (CECL): A crash course

In June 2016, the Financial Accounting Standards Board (FASB) issued ASU 2016-13, Measurement of Credit Losses on Financial Instruments, known as the current expected credit loss (CECL) standard. Intended to improve financial reporting, it requires earlier recognition of expected credit losses for assets measured at amortized cost.

CECL replaced the previous incurred loss impairment model. The incurred model was based on current and historical conditions only, recognized losses over a loss emergence period, and only after the probable threshold was met.<sup>5</sup> CECL is also based on historical and current information, but removes the "probable" threshold requirement. It introduces the notion of reasonable and supportable forecast, and requires the recognition of lifetime expected credit losses at origination based on the forecast of future conditions.

#### Credit cards

Historically, the standard practice for calculating the allowance for credit cards was to estimate projected losses over the next 12 months based on account balances at the reporting date. It could be less if an issuer could reasonably document that the loss emergence of the portfolio was less than 12 months.

With CECL about to take effect, the key difference with respect to credit card products is the estimation of the life (term) of a credit card receivable rather than the consideration of only the next 12 months. One of the unique features of that product is that there is no set term; therefore, the life of the receivable must be determined based on the balance run off at reporting date.

The run off period can vary drastically between types of borrowers. The two major borrower segments to consider when estimating the life of a credit card are the "revolvers"

and the “transactors” segments. The former is defined as accounts that carry balances month over month; the latter is defined as accounts that pay their entire balance each month. Revolvers tend to have a dominant share of the overall market in the lower credit categories and in the general-purpose card segment as illustrated in Figure 2.

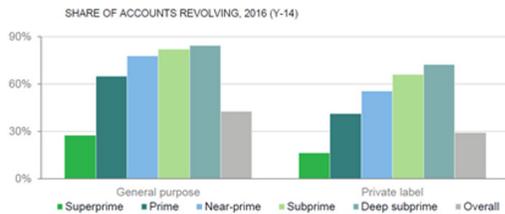


Figure 2. Revolving % of total accounts by credit quality - December 2017 - CFPB: The consumer credit card market

As part of the CECL guidance, the FASB permits two methods for the estimation of the term<sup>6</sup> based on a run off method.

#### Allowable lifetime estimation method<sup>7</sup>

The key lifetime metric is the time it takes to run off a current outstanding balance. It is based on expected payments after interest and fees have been paid. FASB has clarified the standard applicable on this issue by providing two primary choices:<sup>8</sup>•FIFO:<sup>9</sup> Determines the lifetime based on the application of all future payments to the current balance until it is extinguished.

•Pro-rata: Determines the lifetime based on the application of all future payments on a pro-rata basis to future draws and current balances until the current balance is extinguished.

#### Credit card performance over time

High-level performance data for the card portfolio may provide clues to the potential day 1 hit to the allowance account for different institutions. Credit cards present some of the more volatile performance estimates through time compared to other call report products.

In the current economic cycle, we can see that charge-off and delinquencies at banks that are not among the top 100

in asset size are by far the worst performers. Simultaneously, the top 100 banks still seem to enjoy a benign environment with relatively limited uptick in performance deterioration as depicted by the comparison of charge-offs and delinquency rates of US commercial banks.

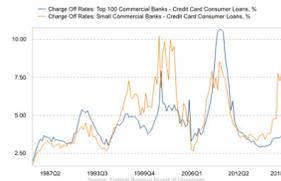


Figure 3. Federal Reserve Board of Governors

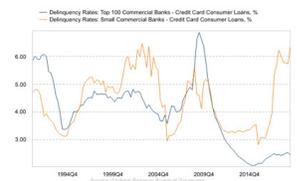


Figure 4. Federal Reserve Board of Governors

Let’s recall the disclosure by JPM. If they double their card allowance mostly due to the doubling of the weighted average life, we can assume that the lifetime credit parameters for their portfolio would have to be similar compared to those used under the incurred loss.

In the current better-than-average credit environment for the top 100 banks (as depicted in Figures 3 and 4), it is possible that the 24-month Point in Time (PIT) forecast would be close to the incurred loss Through-the-Cycle (TTC) 12-month parameters. Of course, it’s not that simple. The incurred loss was computed as the 12-month impact on the entire card balance, whereas for CECL, the credit parameters affect the balances as they run off into the future based on economic condition—but let’s assume this simplification.

How could CECL then affect banks that are currently experiencing worse-than-TTC condition credit performance, especially the banks outside the top 100? It’s possible that a multiple of current JPM estimates is in play for these institutions, assuming a similar weighted average life. To help provide some directional idea of the amplitude of this impact, we present a few charts. Figure 5 looks at delinquency rates by origination score, which expands on the overall delinquency charts in Figures 3 and 4:

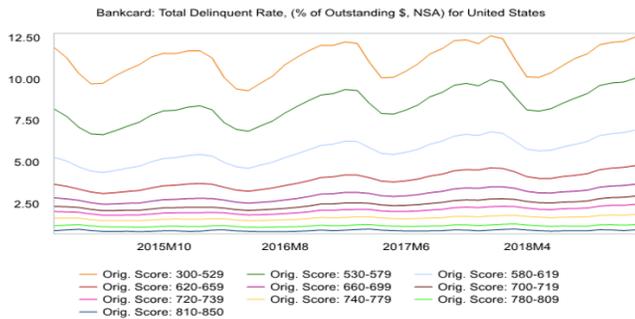


Figure 5. Equifax/Creditforecast.com

This could help explain the large differences between the top 100 banks and the rest of the market. Banks outside the top 100 may not have the resources to manage delinquencies early enough in the cycle. This may explain why they are left with a majority share of the lower-rated quality credit, pushing up their total average delinquencies.

Figure 6 represents the average expected credit loss rate for all credit cards in the entire United States as calculated from the Equifax database and based on Moody's Analytics ECCL model as of Q3 2019.

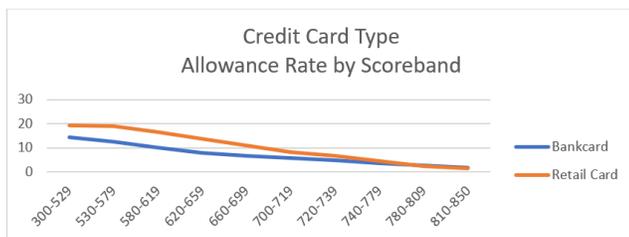


Figure 6. Moody's Analytics ECCL retail card<sup>10</sup> and bankcard CECL estimates as of Q3 2019

We can see lifetime reserve rates hovering between 1–5% for better-quality credit and up to 15–20% reserves for worst-quality credit. We can infer that the day 1 provision hit for banks with lower-quality credit on their balance sheets—which aren't today showing signs of strain—will attract much larger estimates under the new CECL regime. Lifetime expected credit loss is different in two main ways: lifetime credit worthiness and future economic conditions, not simply current credit condition and current economic

climate. This difference will drive reserving under CECL more acutely for the lower-credit quality segments under the CECL paradigm.

As shown in Figure 7, credit cards' credit quality is tightly tied to the economic index of unemployment insurance claims. The solid green line represents the history and baseline forecast of bankcard defaults. The dotted green line represents the forecast in a stressed scenario equivalent to the CCAR severely adverse scenario.

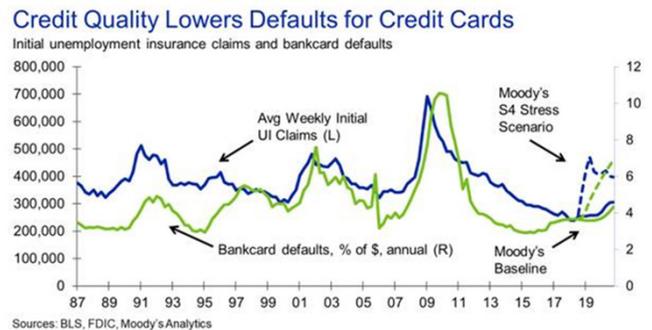


Figure 7. Source BLS, FDIC, Moody's Analytics

For the top 100 banks, we can envision a day where the PIT forecasted credit condition for credit card portfolios at these top banks deteriorates. At that time, the impact on the allowance will take a much more dramatic turn for the worse than a simple mirroring of the current TTC parameters as disclosed by JPM.

However, it's not all dire straits. Given that the forecast of expected credit conditions will worsen over time, the ability to absorb the hit as we enter a recession should be manageable. Also, this should serve as a break and help tighten the origination of credit cards as it becomes costlier and presumably less profitable for institutions.

But that is only one part of the equation

We reviewed the disclosure from JPM that essentially doubled its reserve on credit cards because they now have to reserve for the entire weighted average life of the portfolio. We know credit quality deterioration will affect the credit parameters, which will cause JPM's allowance to balloon some more over time—but are there other factors to consider?

Another aspect of credit quality is that it will also drive usage at default as represented in Figure 8, meaning that as the borrower’s credit quality worsens, its line usage increases.

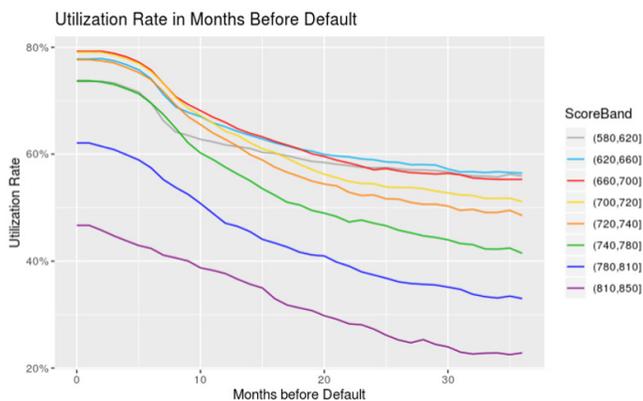


Figure 8. Usage at default for a given number of months prior to default – Source: Equifax

As we now know, the larger the initial balance, the longer the life of the product. And the longer the life of the product, the larger the CECL estimate—assuming that payment patterns remain the same<sup>11</sup> in dollar terms. Let’s look at payment patterns and understand why these are important drivers in our CECL estimate for credit cards.

Payment patterns are a building block of the lifetime estimate but one that can drastically affect the duration to which an expected credit loss parameters will be applied. Average payments are applied to an outstanding balance after interest, fees, and any pro-rata amounts are assigned to a new drawn amount during the period. What remains is the reduction on the reporting date balance which, over time, determines what the life of a credit card will be. Figure 9 shows gives a simple representation of the impact of payment pattern.



Figure 9. Payment pattern example<sup>12</sup>

The example shows that, on average, a 3% average payment will lead to full repayment in 76 months; increase that average payment to 5% and the average full repayment becomes 45 months. Now, let’s consider that our payment amounts stay the same, and our reporting date balance increases as the credit quality of our borrowers decreases. This behavior would lead to the same effect as reducing the payment percentage. As you would typically see in a downturn, you end up lengthening the life of the asset you are reserving for, which creates the need for additional reserves.

It’s important to understand that credit cards have built-in accelerators that can lead to very volatile swings in reserves based on any one of the components moving in one direction or the other. Understanding and being able to visualize these effects will lead to a better understanding of why the allowance moves for cards the way it does, but it will also arm you with the right questions to ask at disclosure time.

### Conclusions

Credit cards are one of the asset classes seemingly driving the CECL estimate much higher for banks. Without looking into the details, one may be surprised to find that not all credit card portfolios will react the same way. The parameters and questions to ask should center around:

- Proportion of change in the population of revolvers versus transactors

- Change in the creditworthiness of the borrowers

- Line usage and payment pattern change with credit conditions

- Economic conditions

Economic outlook will drive credit quality, which will have an impact on the estimate as well as the tendency of borrowers to carry larger balances. Eventually, this will affect the life over which the estimate must be constructed notwithstanding the fact that the percentage change in the type of borrowers will also be a material consideration.

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<sup>2</sup>This assumes an LGD that is typically higher than most products for these type of unsecured products.

<sup>3</sup>Current business cycle is the longest in history and it can be assumed that the end may be nearing.

<sup>4</sup>"Bloomberg tax – Synchrony, American Express warn of hikes in loan loss reserves" (Nicola M. White).

<sup>5</sup>Probable threshold is/was theoretical. In practice, the allowance covered the entire banking book through FAS 5 for collective assessment and FAS 114 for individual assessment of the allowance.

<sup>6</sup>We use "term" and "life" of a credit card interchangeably in the article.

<sup>7</sup>Memo #5 June 12, 2017, TRG - Determining the "Estimated Life" of a Credit Card Receivable.

<sup>8</sup>In practice, the first is likely to get a lot of pushback from auditors and regulators as it may shorten the cards' life to levels that may not be considered prudent from a risk management perspective.

<sup>9</sup>FIFO in this context is not to be confused with the FIFO (First in First out) methodology for inventory valuation.

<sup>10</sup>Bankcards are issued by banks. Retail cards are affinity cards issued through retailers or other businesses.

<sup>11</sup>It is highly unlikely that as credit conditions worsen, borrowers with increased balances will be able to keep up with a percentage balance payment similar to those made during benign conditions.

<sup>12</sup>In the payment pattern example, we excluded consideration of accrued interest and assumed that at 10% of original balance remaining the borrower pays in full.

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