PAYNET® | TAKING THE RISK OUT OF SMALL BUSINESS LENDING

CECL - A Key Element in the Planning Process

For almost 20 years PWC along with The Center for the Study of Financial Innovation has every two years published the "Banking Banana Skins" report which is the outcome of an extensive global survey completed by banks, regulators and analysts as to what they believe will be the greatest threats facing the banking industry during the coming year. With the exception of 1999 when the supposed threat of Y2K consumed the business, the top ten have remained remarkably consistent as well as remarkably wrong. Table 1 shows the top five risks over the last five surveys.

Table 1

2015	2014	2012	2010	2008
Criminality	Regulation	Macro Environment	Political Interference	Liquidity
Macro Environment	Political Interference	Credit Risk	Credit Risk	Credit Risk
Regulation	Macro Environment	Liquidity	Regulation	Credit Spreads
Technology	Technology	Capital	Macro Environment	Derivatives
Political Interference	Profitability	Political Interference	Liquidity	Macro Environment

The reports themselves are always interesting, especially while trying to follow the logic that places such things as "regulation" and "political interference" ahead of the risks that have been the proximate cause for most of the bank failures in the last 50 years and probably longer. The report is also worth reading in its longer form because the differences in returns from the bankers, the risk managers, the analysts and the regulators is itself revealing. For example, it should be no surprise at all that the regulator responses have not included their influence on the industry as any form of risk at all. What perhaps should be a surprise is that in the 18 years these reports have been produced 'Credit Risk' has appeared as the top risk only once (2002) whereas 'Regulation' has appeared at the top three times (2005, 2006, 2014). In the decade 2004 to 2014 there have been over 400 bank failures in the U.S., almost all from credit risk.

It is noteworthy that none of the risks above, which after all are based on a forecast, are covered in any way by accounting and financial reporting. Bank financial reporting is so opaque that it is no wonder that the equity markets consistently have banks in the lower quartiles of P/E multiples. Their value is reduced by this failure to inform.

When Accounting Changes, Attitudes Change

During 2016, PayNet, Inc. sponsored a series of webinars designed to discuss the imminent changes that will arise from the adoption of new accounting rules for the recording and reporting of credit risk (the Current and Expected Credit Loss "CECL" rules within FASB 825-15). The overriding theme of these webinars and the papers that have accompanied them (see Appendix) has been that, although the changes will be difficult, there will be tremendous strides in knowledge that will come from the need to record data on risk and risk outcomes that has not formerly been tracked, mainly because previous accounting rules did not require such information.

The new rules will engender a change in how data is gathered, what data is gathered and how that data must be reported. These changes are needed in order to satisfy a complex and different approach to credit risk by accounting for the future risk within a portfolio of loans and securities. The intent of this final paper in the series is to look at the new information that has or will become available and observe how this can and should be used by three different but very important audiences: the Boards of Directors, the Chief Executive Officers and the Chief Risk Officers. All have different agendas, but all have the same objectives. They must comply with the regulations and the accounting standards, but their responsibilities and needs go well beyond accounting, for they have to protect the shareholders from loss while at the same time manage the institution profitably.

Looking at the challenge in three directions is important. Risk managers have a very clear priority to make sure that the CEO can rely on their skill and judgment as does the CEO with the Board of Directors. The Board of Directors is in perhaps the most awkward position for their view of risk is generally limited by the information that the CEO provides them and many do not have the background to question whether that information is of sufficient depth or quality for them to carry out their duties as Directors.

For many banks the accounting changes can be cathartic. There are many examples of banks where the risk of credit loss has been delegated to a crusty, experienced skeptic who, with a panel of equally grizzled veterans preside over credit applications with the belief that nothing bad will get past them. For them the pricing of a loan is of little or no importance for "price doesn't matter if the principal is at risk" and yet a sound lending operation must make enough profit to absorb the losses that are simply inevitable in the business. For them the focus is on two elements: stopping the bad ones from getting in and then focusing on ensuring that the bad ones that did get through are managed to achieve the lowest possible loss. Loans that are performing as expected are simply off the radar. But CECL changes all that. The big difference is that the changes will come from the performing loans as much or more than from those that decline or fall into bankruptcy. Every loan throughout its life will have a reservation against loss and the amount of that reservation will change each time a set of financial statements is prepared. The grizzled veteran model will no longer apply.

The Chief Risk Officer

For many readers, the heading of this section will cause little or no eyebrow-raising, but for those who have been in the banking business for a longer time there was no such title in any bank. If you have the chance to look through annual reports of banks in North America up to (say) 1995

and look at the list of senior officers there is no such title. There will be a Chief Credit Officer ("CCO") but no-one whose job it was to concentrate on the total operations of the institution with all the key risks in mind. Liquidity was usually the responsibility of the Treasury, the CCO had the credit risk and the rest was probably left to the CFO. The various risks could not be added for there was no common denominator. Not an apparent problem however, as neither the accounting profession, the regulators or the Board and CEO demanded any aggregation.

The primary problem faced by the CRO is that, if asked, the CEO would generally be in favor of less risk while at the same time hoping for or expecting better returns. The business planning process tends to begin with a demand for growth in assets and profitability directed at the business heads and the CRO is expected to simply react to the consequences as business comes in. This must change. Suppose the CRO has information such as that contained in Table 2 representing an SME (Small and Medium Sized Enterprise) portfolio.

Table 2: Assessing the market impact of maturities

Risk Grade	Balances $M	Drawn Spread BPs	Revenue $M	Renewals $M	Market Spread BPs	Rev Loss $M
1	$125,456	25	$314	$42,415	20	$21
2	$267,349	50	$1,337	$77,342	40	$77
3	$499,345	75	$3,745	$128,543	65	$129
4	$734,126	125	$9,177	$207,098	100	$518
5	$882,452	250	$22,061	$306,567	200	$1,533
6	$669,452	400	$26,778	$188,765	350	$944
7	$203,674	600	$12,220	$76,873	500	$769
	$3,381,854		$75,632	$1,027,603		$3,990

What can be seen is that there is a spread of risk denoted by the risk rating process and that the price of that risk rises as the risk rises. We can also see that current market conditions are such that the average risk price is likely to fall in the coming year since the market spread for renewals is less than the drawn spread. This is common after an economy recovers from a slump or is in a stable condition. Competition for growth will always be strong in an oversupplied market. We can also see that about a third of the portfolio will become due in the next year which will either be renewed or paid off.

Suppose further that the CEO begins the planning process by demanding that the revenue for next year needs to increase by 10%. That means another $7.6MM. Before reacting to that request consider what will happen to the portfolio if no-one defaults and every one renews or replaces current outstandings. The change in revenue is shown in the final column. Revenues

will probably fall by $3.99MM on the existing book so the request is really that the revenues are increased by about $11.6MM. The growth challenge is really closer to 15%.

The quickest way to get revenue is to find the highest spreads. If we head for the highest acceptable risks (risk 7 in the example) then the portfolio size of that group has to grow by almost 40%. Not only would this be highly impractical (there is probably not enough of this business to be found), but it would of course make the entire portfolio significantly riskier as the business most easily captured is that which existing lenders are most happy to lose.

The CECL consequences are important. Under the current incurred loss rules, adding substantially to risk 6 and 7 balances would have little immediate impact on the loss provisions. The change in risk would be far from obvious, at least in the short term. Under CECL, a move to a riskier portfolio would have immediate consequences on expected loss ("EL"), a fact that the CEO would have to explain and justify to the Board and the market/shareholders.

We could of course try to make the average risk go down and therefore seek the best quality we can. But to get $11.6MM in revenue from risks 1-3 (for example) would mean that the balances would have to more than double and there are almost certainly not enough prospects of that quality available unless of course a totally imprudent price cut was offered.

So, the risk manager has to ask the CEO what his expectations are for the risk of the portfolio given the directive for significant growth. If the answer is that lower risk is preferable, then the consequences have to be addressed. If the answer is that the current risk profile is acceptable there will be a risk plan together with the revenue plan which is where the risk manager needs to go.

At this point it is important to ask whether an equivalent to Table 2 can be compiled by your institution. Of course, the table is just illustrative, for a more realistic approach would have both the drawn and undrawn amounts so that fee income can be separated from spread income. The objective remains the same: to look forward from the existing portfolio and establish a running rate from the current risk profile based on an understanding of what is transpiring in a competitive market.

Setting Limits

The amount that can be borrowed by a single customer, or group of related customers, is normally controlled through policy. That policy should be risk sensitive. In other words, the limit for a risk 1 might be $80MM (depending of course on the size of the institution) but the risk 5 client should have far less credit available. The limits should also be explicitly approved by the CEO and the Board. Figure 1 reflects such a control process. In Figure 2 the current risks are shown

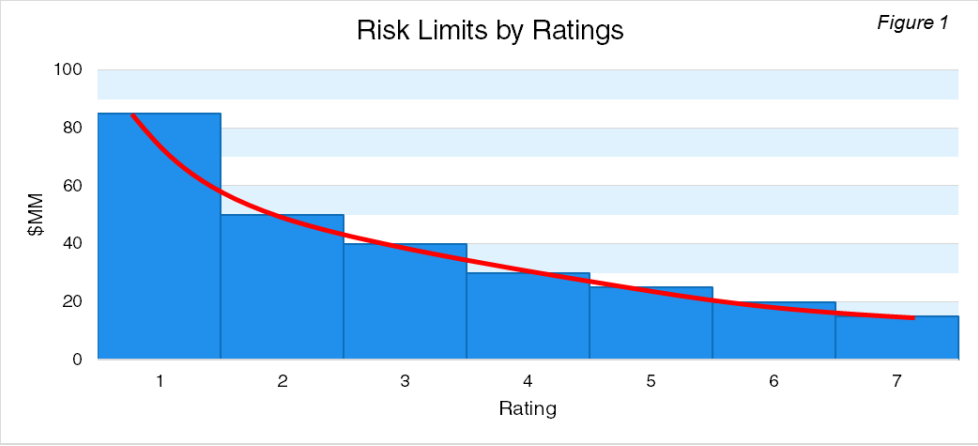
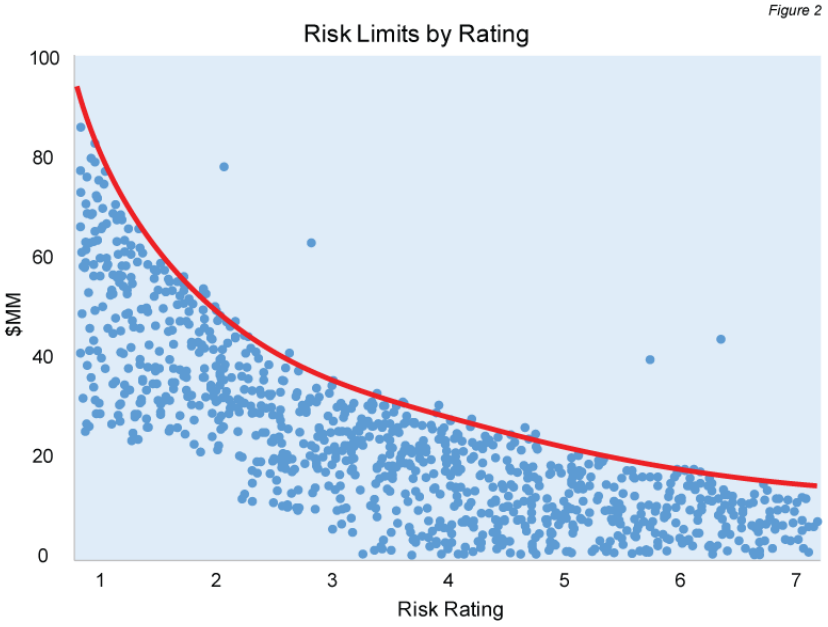


Figure 2

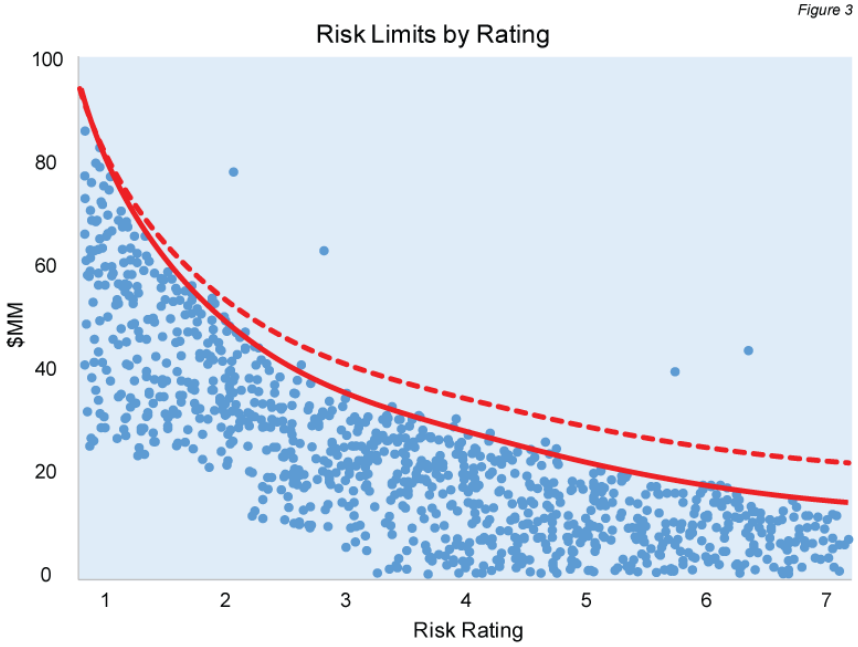


plotted within that environment. Note that the plot points should represent the exposure amounts and not the outstanding (drawn) balances.

You will note that Figure 2 shows a few clients that are outside the policy limits. This is to be expected for it is not uncommon for a line to be granted to a firm that deteriorates in risk and by doing so has balances that are now outside the acceptable parameters. There may also be exceptions that have been explicitly approved though these should be rare. The outliers should engender pointed questions from the CEO and the Board and the risk manager has to be acutely aware of each one and have a plan to manage the problem. It is not only management that will focus on these outliers, the regulatory process will certainly find them of interest, as well.

Figure 3 illustrates the application of a decision that reflects the current and expected market conditions or a conscious decision to try and shift the portfolio risk profile. It may well be that the most profitable segment of the market lies in the higher risk categories. The risk 5 or 6 clients are of course more likely to default, especially in difficult economic times, but they pay a much higher spread, provide collateral and other safety features, and are more numerous. They are important in another respect for their preponderance of idiosyncratic risk can provide vital diversification benefits. If the expectation of the lender is that economic conditions are improving and these are the most profitable group, then there might be a policy adjustment to allow for more growth in the segment. It should be clear that such a change has to be agreed upon by all levels in the organization. It should also be clear that flexing can go both ways.

Figure 3



Grade Changes

Most lenders have an insufficient number of pass grades and one consequence of that shortcoming is that moving between pass grades is uncommon and far less frequent than the real risk changes that are taking place. This is true of both upgrades and downgrades. The reality is that grade changes are usually of consequence. Overly broad categories deter or even prevent those consequences being measured. When the CECL rules are in effect, the grade change will precipitate a change in the EL that may be substantial. Under the incurred loss rules, a risk 4 moving to a risk 5 or a risk 3 was of little interest to anyone.

Grade changes are a reality that has been largely ignored. Every study of credit risk has shown that early intervention carries real benefits for both the lender and the borrower. Early intervention is facilitated by an event that causes the loan to come under scrutiny. It may allow a greater loan to help expansion of a successful venture (and thereby retain the client perhaps for life) or it may help a struggling client to survive a setback (with perhaps similar good results). Every relationship manager needs to embrace this and lose a reluctance to change grades for fear of criticism. More differentiated grading would help enormously for banks of all sizes. Every risk manager needs to promote and encourage this improvement and at the same time reduce the bureaucracy that often deters relationship managers from proactively moving clients between grades.

Term Risk

When credit is tight and the lenders have the power, loans tend to have shorter terms, higher prices, more conditions and greater security. When the economy is healthy and expanding and the borrowers have more choice, loans tend to be larger, for longer terms with lower prices and less structure. These are the seeds that can produce much worse outcomes when the economy falls than should be the case. Longer term equates to greater risk that can be masked when it is the borrower's current financial condition that is rated and a price set based on that position. Monitoring term is a very sound practice and one that should be pursued by the CRO. Average term alone does not tell the story and so an understanding has to be gained of the term changes for each risk rating. Figure 4 illustrates a relatively simple report that has the objective of providing a view of term risk so that the CRO can see whether 'term creep' is taking place thus adding to risk and increasing the EL of the portfolio even when growth is stagnant.

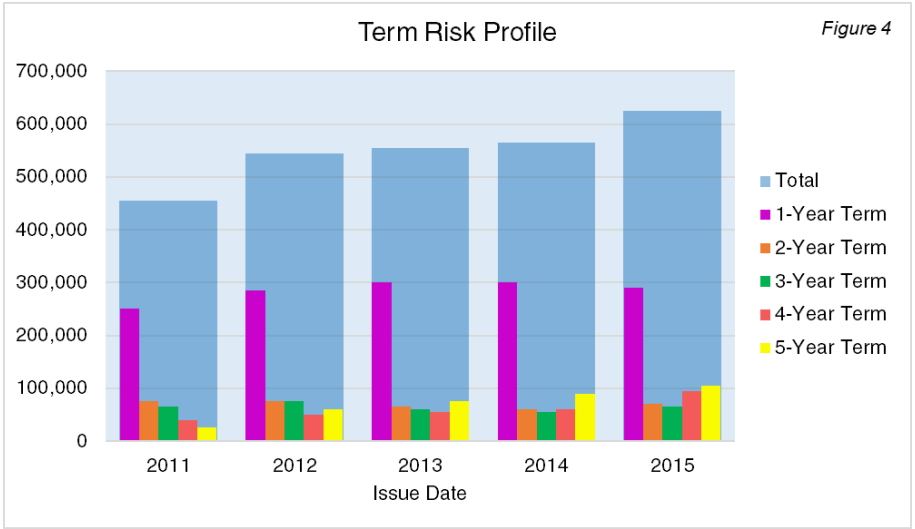


Figure 4

Once again CECL will make a big difference. Incurred loss had no interest in term; the loan was either performing or needed attention. The CECL rules demand a forecast of risk to the

contractual term and thus a 5-year loan will have a significant loss reserve as soon as it is booked. Many comments were made in the discussion phase of FASB 825-15 that the rules would make many 5 year loans show a loss at inception thus seriously discouraging such business. It is never positive when accounting clashes with economics.

One imperative from this issue is that the loan databases must record prepayments for it will be very valuable and very necessary to prove to the regulators and auditors that this is a meaningful adjustment that must be allowed as CECL rules are improved over time.

Troubled and Defaulted Loans

Under the incurred loss model any loan that moved into the "Special Mention" category or worse received intense scrutiny, especially from the auditors and the regulators. Despite the arrival of CECL this will not abate too much, even though it probably should. In the earlier papers (Appendix 'A') the need for a default database was emphasized. It is critical to understand what the outcomes were of loans that defaulted with different types of businesses, different economic conditions and different types of security.

The most important purpose is to inform the future. A default database will facilitate better structuring, enable better risk-sensitive pricing, and assist in planning for growth in areas where the outcomes are more measurable. It will inform on term risk and it will expose vulnerabilities. Another benefit will be the improvement in the discussions between the banker, the auditor and the regulator so that any necessary reservations are based on fact-based assumptions rather than an innate pessimism that is excused on the grounds of conservatism.

Reports from this database as well as reports on all movements through special mention to write-off (or return to 'normal') are recorded. Losses are inevitable, good risk management is the ability to anticipate and control their extent and correlation.

Every lender, big or small, should consider joining a larger database where their results can be compared with peers and where much can be learned about loss given default, the calculation of expected loss, and achieving better pricing and structuring polices.

The CRO and CEO

At the beginning, Table 2 showed a view of the current loan book and what is likely to happen to that book of business over the next year. It showed how the risk was distributed and it showed where the current market was pricing equivalent risk. If the CRO worries about risk, the CEO is paid to worry about everything. The CRO has to make sure that the CEO is well versed in risk concepts and well informed on risk measures and changes that are taking place. The unenviable task will be to take the changes and inform the CEO and the Board of the causes and of the steps that are being taken to keep the ship on an even keel. The CEO will be taking these to the Board where the knowledge level and experience will be varied. Only the most important items move upward.

Expected Loss

Every CEO and every Board member must understand EL. The CECL rules will have a profound effect on the reported earnings in the future. The CEO needs to see the forecast, for EL as part of the planning cycle for the macro economic environment is always a key consideration and there will be times where prudence dictates the plans for growth.

Not only is EL a key element in the planning process, it is a key element in the communication to the Board and a key element in the ongoing monitoring of the portfolio. If EL is the foundation of CECL and if the CEO must show it to the Board then the CEO will most certainly want to be able to answer any questions that arise from that disclosure.

Figure 7 below shows an EL chart for which key elements should be mentioned:

- *It must always be shown as a long-term trend. Calendar years are a function of earth orbits not economic cycles, and the volatility of credit risk is a long-term management challenge ill-served by a one year view.*

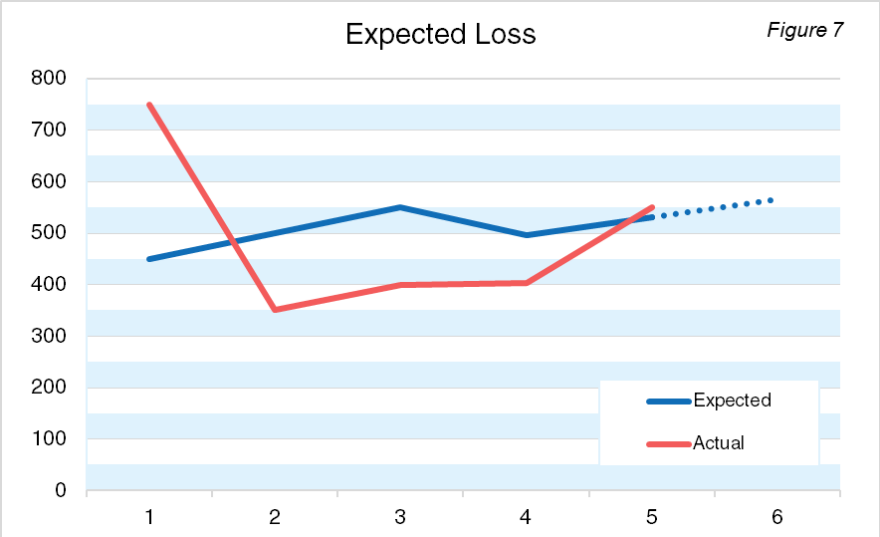


Figure 7

- *Actual losses should normally be below expected losses. Achieving an actual result below the expected result is not a cause for celebration or bonus. The Board and even the shareholders must appreciate that EL is not risk, it is a cost of doing business.*
- *Figure 7 is an illustration of long term management and stewardship but risk occurs when the volatility of these losses has not been contained.*

Business Trends

If the CEO of a bank was asked whether the credit risk in the institution was rising or falling, how many do you think could answer that question with confidence? I would venture a guess that there are few CEOs who would be able to answer that question without making a phone call and even then, find disappointment.

Figure 8 below shows the distribution of credit granted and used by rating group through time. It can be observed from the chart that there have been changes in that the higher risk categories have been gradually increasing and the lower risk staying quite stable. These trends could be from a number of causes. It may be that there was a strategic decision to move down the risk curve where the return on capital was better. It may be that risk within the system has been rising and this is the effect of the tide raising all boats. On the other hand, the system might be improving and we are defying the trend. It may be that the portfolio is growing contrary to expectations. In any event, it is a chart that should be in every CEOs in-box.

As noted earlier, the business plan should always incorporate a risk plan. But as the business plan is essentially a hope and a blueprint for the coming year then it must inherently include a view of the future for the area(s) in which the lender operates. To that end a forward-looking risk 'map' can be very effective in both making the portfolio plan as well as in the ongoing monitoring of the risk. Figure 9 shows such a risk map. It is a heat map of the 12-month default forecast by county and currently shows benign conditions throughout the country as might be expected. Such a map needs to be proven over time and it is therefore valuable to look at a more troubled time. The map in Figure 10 illustrates the 12-month default forecast as of 1/1/2009. The reader can easily observe that the problems that were to rear their heads in 200x were there to be seen, but more importantly were there to be seen with sufficient warning to give management some time to prepare for the downturn and one which should be discussed with the Board. Many ex banks might have avoided their fate with such data.

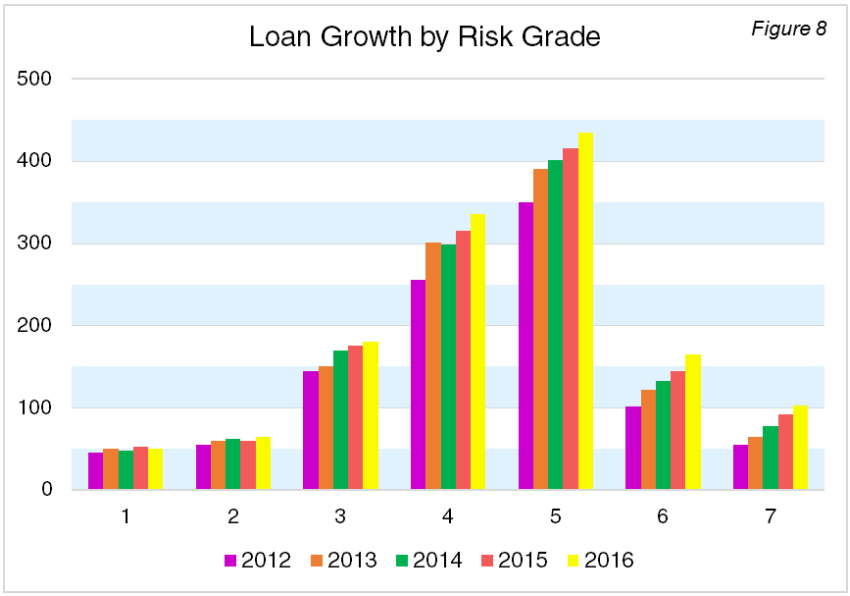


Figure 8

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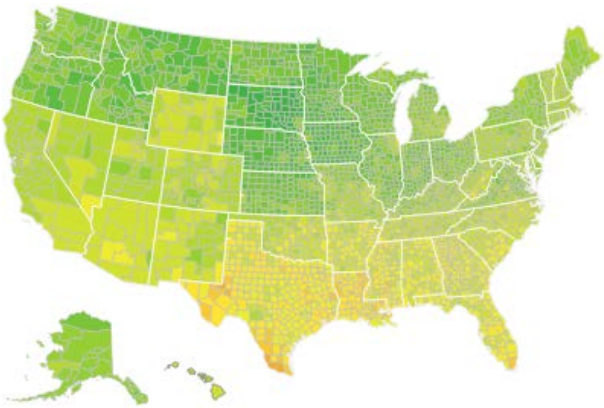
Figure 9

1/1/2009

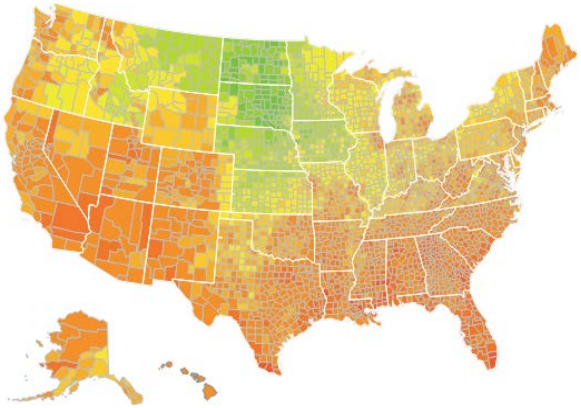
Figure 10

Of course, there is no imperative for any lender to reduce risk, after all the business is that of taking risk. So, the important question is whether the lender is being properly compensated for taking the risk. Indeed, there may be capacity to take on more risk. But what then is the risk we have to relate to? As explained above, it is not expected loss, an ongoing expense, rather it is the possibility that the portfolio will have a decline in value well in excess of the expected level due to the fact that the proximate cause for the losses was spread throughout the portfolio, in other words there were correlated risks.

It is these losses that cause lenders to have catastrophic outcomes often leading to failure. As this is a true job-threatening possibility, every CEO should have an abiding interest in having some means by which to either prevent such concentrations or to be able to react in time to prevent catastrophe. Once again, a database of credit risk is the primary means by which proactive management can take place. Some examples:

- *If there is a concern that the national (or regional) economic conditions are declining, then it is probable that the average portfolio risk has increased and may still worsen. This will be revealed by data such as provided in Figures 9 and 10 above.*
- *An industry profile might help keeping credit considerations in mind. There may be a dominant employer on which local suppliers depend on for their livelihoods. A calamity in that business will not only affect the suppliers but the impact on local employment can have serious effects on mortgage defaults as well as the prospects for retailers of discretionary goods such as furniture or vehicles. For Community Banks the risk of very significant local employers should be monitored continuously whether or not they are a customer. Further it is not necessarily true that two firms in the same business are correlated, an underlying assumption in industry exposure charts. Walgreens and the local drug store may well be inversely correlated.*
- *If there is a concentration of a particular type of business it can come from a perceived competence or from a risk flaw that draws them to terms that they cannot get elsewhere. It has been far from uncommon for a bank to fail because they believed that their innate lending competence allowed them to concentrate lending into a particular area. You might want to be the go-to bank for dry cleaners but you perhaps do not want that reputation for restaurants. That being said, diversifying into a region or business where there is poor understanding of the local industry condition and competition can be a terrible decision as many foreign banks have found in expanding into the U.S.*

The CECL rules do not embrace the measurement of concentration risk, but the CEO should see that problem as one that must be always top of mind. It is a long-observed phenomenon that bankers advise their wealth management clients to always diversify and yet can run their lending books ignoring such sound advice.

The Board

Following the problems of 2008-2011, there have been multiple studies as to how this happened yet again. A similar process took place after the 1988 crisis where hundreds of banks and Savings and Loans failed. In both cases the management and the Board laid the principal blame on the macroeconomic environment (and you may recall that the "Banana Skins Report" noted at the beginning expressed similar importance to this factor), yet an OCC study in 1988[1] cited "non-existent or poor lending policies, inadequate supervision and inadequate problem loan identification" as the three most significant factors. Indeed, the OCC report actually determined that the depressed environment was a dominant factor in only 7% of bank failures.

[1] "Bank Failure: An Evaluation of the Factors Contributing to the Failure of National Banks". Office of the Comptroller of the Currency, June 1988.

Board members of failed institutions interviewed after the default occurred were consistent in blaming the management for not informing them of the level of risk being taken. Almost none blamed their own body for not authorizing sensible policy limits and controls. Many admitted that they were highly inexpert in risk measurement and management and relied on the CEO and what was placed before them. Dodd Frank requires that every bank board contain at least one risk 'expert' though that is such an ill-defined term that compliance is essentially voluntary.

The Board will always, for the most part, have to rely on what they see and thus on the CEO. Interestingly over half of the failures analyzed by the OCC in 1988 had a "dominant CEO" as a major cause of the failure of governance. But with the advent of CECL there is an opportunity for a substantial upgrade in the relationship of the Board and CEO when considering credit risk. It will be much harder to 'store' problem loans until they reach the watch list or worse. The data that is essential for compliance with the CECL rules mean that the CEO will have the facts to put to the Board that were altogether unavailable in the past. As one CEO said to the writer once; "I would love to give better risk information to the Board but I don't have it myself and what I do get I do not have enough confidence in to take it to them."

Educating a Board on risk management is principally an exercise in having them ask the right questions. In good credit risk governance, the Board must take an active role in the development and discussion of policy. If exceptions to policy are frequent, then the policy needs to be revisited or its importance underlined to make such breaches consequential. Setting limits is simple enough in concept, but setting those limits in the context of the risk profile is critical. Concentration risk can be a bank killer and while it is difficult to measure, the Board should not be fobbed off with colorful pie charts that claim to show linked risks where there is no evidence of that link.

The questions must also be directed to the person who can provide the most comprehensive answers. The CRO must be well known to the Board and be available to answer questions, defend policy and be seen as an integral part of the planning process. If it apparent that that role is dominated by the CEO then there is a warning sign that too many have ignored in the past.

What interests my boss……

Matthew Barrett, CEO of both Bank of Montreal in Canada and Barclays Bank in the U.K., once said "what interests my boss should fascinate me". Risk managers often face the problem that what fascinates and challenges them does not appear on the radar of the CEO and the Board. The idea of saying "here is the answer to the question you should have asked" is seriously unappealing. It is likely that the CECL rules will have a major impact on the interests of the CEO for suddenly the 98% of the loan portfolio that is performing will require a charge that will hit the bottom line. If current forecasts are true, then this impact could be very significant indeed. Estimates by FASB and several analysts are for loss provisions to rise by 50% or more in the first year. As Ricky Ricardo said so often "you've got some splainin' to do" for it is highly likely that the 'bosses' are going to need to know why this is happening and how they need to communicate it to people for whom such a precipitous change may well be alarming.

Appendix A

PayNet's CECL Webinar Series and White Papers

Webinars

- *Prepare Now for CECL*
  March, 2015
- *LGD, Expected Loss & CECL*
  August, 2015
- *Establishing and Maintaining the Probabilities of Default*
  October 22, 2015
- *Effectively Estimating Exposure at Default*
  February 18, 2016
- *LGD: How Much is This Going to Cost?*
  June 8, 2016
- *The Role of CECL in Business Planning, Strategy & Reporting*
  April 27, 2017

White Papers

- *Preparing for Current Expected Credit Loss*
- *Measuring Default Risk*
- *Estimating Exposure at Default*
- *Loss Given Default – How Much is This Going to Cost?*