Mortgage Compliance Magazine

Risk Management, Quality Control & Statistics, part 1

Article by Kaan Etem

July 2014

Risk Management, Quality Control & Statistics, part 1

"Risk: the effect of uncertainty on objectives"

International Organization for Standardization ISO 31000

Kaan Etem

The official reaction to the Great Recession of 2008 is matched only by the tsunami of regulation following the Great Depression of the 1930's.

This is the first part of a two part series.

Financial services regulation is undergoing fundamental and far-reaching change, and at an unprecedented pace and scale. We have new regulators (CFPB is in, OTS is out); new standards (valuation rules, MLO compensation, and complaint management system); new terms and acronyms (QM, ATR, and SPOC); more complex and more comprehensive regulatory requirements with lower tolerance for error and higher risk of penalties; tighter regulation of non-bank entities; and an uncertain fate for the GSE's. The official reaction to the Great Recession of 2008 is matched only by the tsunami of regulation following the Great Depression of the 1930's.

This upheaval is challenging enough to face. When you consider that CFPB's enforcement authority is much broader than any previous regulator's; that its behavior is unpredictable (since it is too new to have a history of precedent); and that it can hold individuals (not just their employers) liable for certain violations, then the sense of uncertainty in the industry is palpable. If risk is defined as "the effect of uncertainty on objectives," then we are living in risky times.

Our aim here is to help manage some of this risk by focusing on regulatory compliance and quality control of lending, including mortgage, auto, consumer and commercial lending. Unless differentiated, we use the shorthand term "QC" to refer to quality control and regulatory compliance together.

Managing Risk

The enterprise risk management function has mushroomed in the last five years. Certain types of risk, like cyber-risk and information security, are more prominent due to other factors (like the global ubiquity of data and information). But it is regulatory risk management, a large part of enterprise risk management for financial institutions, that has radically expanded under Dodd-Frank.

QC has traditionally been the ugly stepchild of lending operations. Perpetually un-

der-funded and seen as an obstacle to loan production, many mortgage lenders thought that QC should be neither seen nor heard – just tolerated. No one should expect to get away with that anymore. Yet with all the other demands on their attention, how can managers get the most out of QC? Statistics can certainly leverage and streamline the activities of QC departments. But what are the proper activities of a QC department? What are QC's role and purpose?

Getting the Most Out of QC

While QC departments sometimes find themselves fixing errors in individual loans, the correction of historical mistakes is not QC's primary function. The primary function of QC is to reduce or prevent future errors and defects through process improvement. Reduced errors mean reduced losses and less risk, which leads to improved profits and lowered threats to the enterprise.

To get the most out of QC, it is important for senior management to understand and fully support QC's mission. Without senior management support, the QC department will be ineffectual, no matter how competently run. With their support, QC will have a critical seal of approval and the ability to put teeth behind quality standards. This often makes the difference between successful process improvement and unread QC reports that languish on shelves.

Caution: before tying any penalties or rewards to quality standards, QC must validate its findings and methodology thoroughly. It takes a long time to establish credibility and almost no time to lose it. Be sure that all stakeholders – including business unit leaders, risk management officers, and originating and servicing units – have provided input into your QC methodology and are aware of how it will be implemented. Then test your workflow, auditing standards, data and reporting in a beta program before launching officially.

With this understanding of its role and purpose, what are the main goals of the QC function?

Reduce Losses and Risk

All else being equal, a lender that originates higher quality loans will have a lower cost-per-loan, improved investor pricing and lower regulatory risk. Designing processes that reduce or avoid losses is where QC can make a big impact. Among the loss factors that can affect cost-per-loan are rejects, repurchases, claim denials, regulatory fines or penalties, preventable losses, process inefficiencies, and outright fraud. These factors should be placed on a scale of risk severity.

Note that these may have different impacts on value depending on asset disposition (portfolio retention, secondary market pricing, servicing value/pricing). It is the potential impact of a risk together with the options available to respond to it that will drive the priority of that risk.

Focus on What Matters

In order to be efficient and effective QC must prioritize defects by relative risk, identify significant outliers and issues, and focus on correcting the processes that produce the defects with the highest potential cost or risk. Put another way: identify the factors that affect your cost-per-loan and value-per-loan, prioritize them by weight or potential risk, and base your sampling and audit reviews on risk. The shorthand for this is risk-based sampling.

Minimize QC Costs

The QC department, as part of its mission to minimize cost-per-loan across the enterprise, must minimize its own costs. One way to do this is by managing the workload. What is QC responsible for and what is it not responsible for? Narrowing this down – clearly, from the outset – will allow QC to control their work scope. Allowing "scope creep" into the QC operation will frustrate efforts at efficiency, as QC finds itself repeatedly adjusting workflows to accommodate newly assigned tasks.

Once you have a work scope, the question is how to do it most efficiently and effectively. Since the biggest cost of traditional auditing is labor (i.e., auditors), a primary consideration should be to reduce the number of loans to audit. This is where an intelligent sampling methodology presents opportunities. Generally, effective sampling (statistical, random, or otherwise) seeks to achieve the greatest insight into your processes (depth and breadth) with the least effort and cost. More on this shortly.

Finally, the process of auditing the loans you have sampled must be streamlined. Streamlined QC processes will look different, and matter more, for an originator of 10,000 loans per month than to one originating only 1,000. However, under the new regulatory regime, no lender can afford to continue doing "business as usual," which until recently has meant doing as

little as necessary to comply with the letter of the law.

At a minimum, it is time to re-examine your workflows, re-visit the QC reviews that you are outsourcing vs. keeping in-house, and think about automation tools that will make you more effective in the long run, even though they may require investments in the short run.

Turning Feedback into Corrective Action

This is where the rubber meets the road. QC must communicate its findings to the field (originators, servicers, and others) in such a way that it results in corrective action. As discussed, senior management support for the QC department is a crucial piece of this. But QC can also make it easier for the field to cooperate. Minimize the effort it takes for them to be engaged, streamline the process of resolving findings, do not waste their time on trivial findings, be consistent and credible. And remember that QC for most people is a distraction from their regular work.

Why Use Statistical Methods?

Although automated tools exist that enable screening of all loans in a population, they are currently limited to certain aspects of QC, such as points and fees compliance thresholds or potential fraud red flags. Until artificial intelligence moves to the next level, it is up to human beings to conduct comprehensive QC and compliance audits. This means high labor costs for skilled and trained auditors.

Prior to the more stringent new regulatory regime, the cost of a mortgage QC review was pegged at approximately $150 per loan. It can only have gone up since then, but even at the $150 rate, a lender originating 1,000 loans per month would have to spend $150,000 per month if they wished to audit all loans originated. The numbers for a modest servicing portfolio would be far higher. Clearly, it is cost-prohibitive to audit 100% of loans originated (much less serviced).

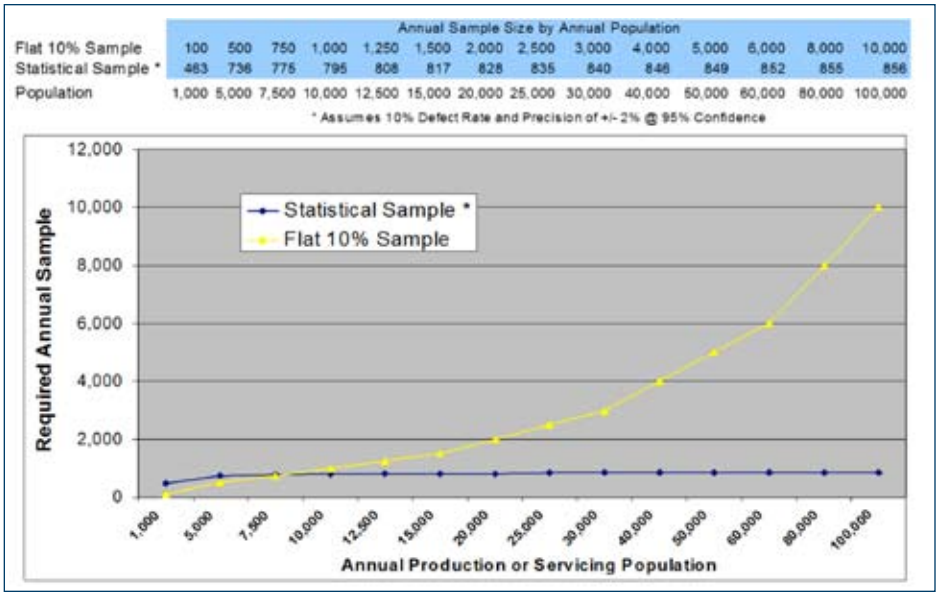

Figure 1. Straight 10% Sample vs. Statistical Sample. With statistical sampling, required annual sample size levels off beyond approximately 10,000 units in annual loan production.

The only way to reliably and cost-effectively measure the quality range of a lender's origination and servicing processes is with statistical methods. Regulators, GSE's, investors, lenders and servicers all recognize this. Indeed, statistical methods have been in use for some time (though not always correctly.) As an introduction to the topic, here is a quick guide to the fundamentals.

What Are You Measuring?

The defect rate is the fundamental measure of quality and the key to effective use of statistics in QC. It is a binary metric, classifying a loan as either acceptable or defective, based on the number and severity of errors in the loan file. It is also used in sample size estimation, playing a crucial role in sampling optimization.

We use the term "defect" to refer to loans that fall outside the acceptable range of deviation from the standard. Generally, this now means loans that do not conform to the investor's (buyer's) specifications. If we were manufacturing bolts, our standard might be a diameter of one inch, but bolts deviating from the standard by one-hundredth of an inch might be acceptable. More than one-hundredth would be defective.

Likewise, in manufacturing loan products, certain deviations (or "errors" or "findings") might be acceptable, such as missing pages on a termite inspection, but others might not, such as wide deviations from stated income or appraised value. By using the defect ▷

concept, we avoid getting lost in the detail of small and inconsequential details and instead focus on what really matters.

It is up to each lender to define for their organization – based on their product mix, business lines and strategic objectives – what constitutes "unacceptable" or "defective." Currently there is no standard definition for the mortgage industry, though we are getting tighter guidance from regulators and the GSE's. Broadly speaking, deviations that have a material impact on the salability of the loan should be considered potentially defective. More specifically, a loan that does not meet the buyer's specifications or is not eligible under the program guidelines under which it was originated is defective.

Fannie Mae has recently weighed in on this topic by defining "gross defect rate vs. net defect rate." Gross refers to the defect rate found in the sample prior to fixing any errors or omissions in the files. Net refers to the defect rate in the sample after correcting fixable errors. It is the gross defect rate in the sample that should be used to make an inference about the defect rate in the population as a whole. Reporting net defect rate may be appropriate for certain audiences, but gross defect rate captures the errors, findings and deviations that quality control seeks to correct.

However defect rate is defined, it is the foundational measure of quality. At a high level, it sets a benchmark for the business unit as a whole. At progressively lower levels – by origination channel, by branch, by product, by loan officer – it allows QC managers to drill down to root causes of quality errors and to begin fixing them. MCM

- to be continued in the August Issue.

Kaan Etem is Senior Vice President of Cogent QC Systems, a provider of risk management software solutions for loan quality and compliance. Mr. Etem can be reached at Kaan.Etem@cogentqc.com.