

**OFFICE OF THE COMPTROLLER OF THE CURRENCY  
ADMINISTRATOR OF NATIONAL BANKS**

**Supervisory Expectations for Interest Rate Risk Management**

**Telephone Seminar**

**Monday, November 7, 2011**

**Presented By:**

Timothy T. Ward  
Kerri Corn  
Marshall Osborne  
Kurt Kirch  
Russell Miyashiro

Operator: The Office of the Comptroller of the Currency presents the Supervisory Expectations for Interest Rate Risk Management Teleconference. And at this time, it is my great pleasure to turn the call over to Mr. Tim Ward. Tim is Deputy Comptroller for Thrift Supervision with the OCC. Mr. Ward, welcome sir, the audience is all yours.

Tim Ward: Thank you Don. Thank you to everybody for joining us today. We have over 630 registered callers for this teleconference. So, great turnout. This is our second call with the thrift executives, as a follow on to the informational sessions we held across the country between January and March of this year. The first call was held back on October 13<sup>th</sup>, and we discussed the Thrift Financial Report to the Call Report migration and related accounting and credit issues. The transcript and the audio recording of that call are posted on BankNet and the OCC website. So please visit those if you want to refer back.

Today we will provide a detailed discussion of OCC's supervisory expectations for interest rate risk management. The principles and approaches we discuss on this call have been applied to national banks for a number of years, and will be applied to Federal Savings Associations going forward.

On October 27<sup>th</sup>, we held the same call that we're having today, with all of the Midsize and Community Bank Supervision staff. Since we will be applying existing OCC approaches to a new group of institutions, the Federal Savings Associations, and with new exam staff members joining us from OTS, we thought it was a perfect time to refresh and make sure all of the OCC examiners have the same

understanding and expectations and are applying the OCC guidance consistently and effectively.

The presentation today will walk through the handout that was sent out in advance and should take about 80 minutes. We will leave plenty of time at the end for your questions. So with that, I will turn it over now to Kerri Corn, who's the Director for Market Risk Policy here. Thank you.

Kerri Corn: Thanks Tim. Good afternoon from Washington. I want to thank you for taking time out of your busy schedules to participate on this call. We look forward to sharing our expectations for interest rate risk management with you today, and to respond to any questions you may have after this presentation.

With me today in DC is Marshall Osborne from my staff. Marshall is our focal point for interest rate risk issues, and has been our primary point of contact on the transition of the OTS interest rate risk model to the OCC, for the last three quarterly runs, through year end 2011.

We have two other examiners participating on the call today from their respective examination locations. Kurt Kirch and Russell Miyashiro will be joining us, as they do, throughout the presentation. Kurt and Russ are experienced FTRs, Federal Thrift Regulators, who are now working with our capital markets examiners in banks and thrifts. So they will be providing comments along the way from their perspectives as thrift regulators now involved in OCC exams.

If you flip through these slides, there will be some that are fairly busy, full of comments and not typical of a proper PowerPoint slide. The intent is for you to use these as handouts in the future. So hopefully the full to overflowing content won't obscure that purpose. So without further delay, let's get started.

Slide two, I'd like to briefly go over our agenda for this call. We'll highlight the economic environment we find ourselves in; the key points from the 2010 Interagency Advisory; discuss the key principles from Thrift Bulletin 13a, the primary guidance document for interest rate risk assessment in thrifts; and we'll discuss the regulatory reporting changes that will occur at year end.

We'll also review the OCC's risk assessment, measurement and management process. We'll provide insight into our expectations for risk limits and the types of limits our banks currently use. We'll also discuss key expectations for modeling interest rate risk, and common problems we've noted with the use of models in our banks. And then

we'll summarize the key points of the presentation and give you the opportunity to ask questions.

Slide three covers a brief economic background. As you know, we're in a sustained period of low rates and uncertainty exists on almost all fronts, including regulatory, economic policy and the effects of the global economy on our marketplace. Many banks and thrifts are operating with lower margins and lower earnings. Large institutions and numerous smaller ones have seen a surge in deposit growth that began during the heat of the market crisis as depositors sought safety. And much of this balance has remained or even continued to grow.

With low or no loan demand, banks have been faced with the dilemma of what to do with these deposits, from an earnings and capital standpoint. Normally increased deposits would be a blessing, but institutions that can't deploy them profitably have to deal with an inflated balance sheet and the resulting effect on capital ratios.

Some have invested these funds into medium and longer-term securities. For many, this means an increase in mortgage-related securities and an increase in optionality on the balance sheet. So now institutions are faced with determining the true behavior of these surge deposits and mortgage products in this unusual economic environment. Interest rate risk measurement is at the heart of this issue, and changes to existing processes and assumptions are probably necessary to accurately capture the level of risk.

On to slide four. The 2010 Interagency Advisory was issued by the banking regulators, the OTS, NCUA, as well as the various state regulators through the FFIEC Liaison Committee. It was prompted by concerns about the low rate environment and the need to prepare for rising rates, as well as the weakened condition of many banks and earnings and capital pressures due to credit quality issues and the illiquidity of some assets. So we decided to send out a reminder of supervisory expectations for sound interest rate risk management practices. This advisory covers key management principles, and references back to the more detailed guidance provided in the 1996 Interagency Policy Statement on interest rate risk that was issued by the Banking Regulators.

The OTS was not a part of that policy statement. That statement is included as an appendix in the OCC's interest rate risk handbook, which is referenced at the end of this presentation.

Slide five covers the key points of the advisory, which I'd like to go over quickly now. Institutions are expected to have a robust interest rate risk management and measurement process. This should include earnings and economic capital perspectives, short and long-term risk. Processes should always be based on the financial condition of the institution, complexity of balance sheet and business lines, risk profile and scope of operations. But both earnings and capital at risk, should be measured.

Measurement methodologies should capture the interest rate risk from the institution's strategies and transactions to accomplish those strategies. Not just over the next year, but over a time horizon that fully captures the key risk to earnings and economic capital. EVE, Economic Value of Equity models, typically measure the changes in the present value of assets, liabilities and off-balance sheet accounts in different interest rate scenarios. Advances in technology have enabled institutions of all sizes and levels of complexity to invest in simulation models to better capture their risk profile. Based on our meetings with model vendors and knowledge of those models currently in use in our banks, the cost of vendor models today is truly not prohibitive.

The advisory reiterates the importance of stress testing. That is running various scenarios that really stress your normal operation, going beyond standard 200 or 300 basis point shocks. Assumption accuracy is key to effective measurement and internal controls and validation processes ensure the integrity of the overall interest rate risk management process. We'll discuss many of these points in more detail as we move through this presentation.

Slide six covers the differences in how the OCC and the OTS implemented the Interagency Interest Rate Risk Advisory. The OTS issued a CEO memo that released the Interagency Advisory. For thrifts, the advisory supplemented existing guidance in Thrift Bulletin 13a, but did not replace it. For those thrifts that relied exclusively on the OTS interest rate risk model and the measurement of net portfolio value, certain aspects of the Interagency Advisory did not apply. While the advisory stated that institutions should measure earnings and economic capital at risk to changes in rates, thrifts relying on the NPV model only received the capital at risk measurements. And the CEO memo allowed this difference in application of the advisory between thrifts and commercial banks.

The OTS model admittedly was not expected to provide a complete picture of a thrift's interest rate risk profile. It captures only parallel shocks to NPV and does not capture the level of earnings at risk to

changes in rates. The Interagency Advisory, as previously described, expected institutions to measure the impact of various interest rate scenarios and stresses, and to cover earnings as well as capital. The OTS CEO memo stated that well managed institutions should be able to quantify these risks, meaning non-parallel shocks and earnings at risk. But it was not part of the OTS model and not an explicit requirement of thrifts.

Slide seven captures some of the key differences between TB 13a and OCC interest rate risk policy. As just discussed, TB 13a does not require earnings at risk measurements or limits. Many thrifts have them, but it was not required. OCC expects both measurements and appropriate limits for monitoring exposures. TB 13a requires smaller thrifts to independently measure the risk of complex securities when the investment exceeds 5% of total assets. OCC requires all institutions to practice appropriate due diligence and sensitivity analysis for all complex securities prior to purchase. It is my understanding that the majority of thrifts do practice appropriate due diligence when considering the purchase of a more complex or structured security, regardless of its size. So if that's true, then there won't be a need to change existing practices in most cases.

Slide eight continues the key areas of comparison between TB 13a and OCC interest rate risk policy. First, there was a requirement for institutions over \$1 billion to analyze transactions that might significantly affect interest rate sensitivity. The OCC doesn't have an asset size delineation, but expects all institutions to evaluate the potential impact on interest rate risk exposures resulting from new financial products or future business plans.

TB 13a referred to qualitative measures for a complete assessment of interest rate risk for complex institutions, but primarily relied on the NPV model results in determining an institution's interest rate risk assessment. OCC's guidance places equal weight on qualitative and quantitative measures. We'll cover more of our risk assessment process later in this presentation. For now, I'd like for Marshall to spend some time discussing the OTS measurement process and the NPV model and upcoming changes to required measurement processes.

Marshall Osborne: As Kerri detailed in the previous few slides, there are some significant differences in approaches to measuring interest rate risk. For many of you, the OTS Net Portfolio Value model was the primary measurement tool. From a theoretical perspective, this is not greatly different from the economic value of equity models that most national banks use. The key differences were in the data inputs and how the

output was interpreted to assign ratings and determine compliance with policy limits. Both models will calculate a base economic value for assets and liabilities. They both then determine the economic value of assets and liabilities in different rate environments.

Institutions that use an NPV approach typically set policy limits to maintain a minimum level of capital after rate shocks. The EVE approach typically controls risk by focusing on maximum changes in the economic capital and shock scenarios. Another key difference is that the OCC has historically not used a defined matrix as contained in TB 13a, to determine the level of risk for modeling results.

Now we'd like to call on Russell Miyashiro, who is a thrift examiner and capital market specialist, to provide us some perspective on these differences. Russell?

Russell Miyashiro: Thank you Marshall. The OTS interest rate risk supervisory expectations and observed practices differ between the size of an institution and the complexity of institution activities. Common practices observed for thrift institutions with assets over \$1 billion include the following: they internally model interest rate risk exposures to both economic value and earnings at risk; these institutions have established formal limit frameworks around both types of interest rate risk measures; they utilize interest rate risk models commensurate with the complexity and risk profile of the institution, with a degree of sophistication much larger for institutions, let's say over \$10 billion in assets; they conduct sensitivity tests for all complex securities, for both pre-purchase analysis and ongoing interest rate risk analysis; they conduct incremental analysis of all significant transactions; and they utilize more sophisticated, quantitative measures and qualitative practices. Common practices observed for thrift institutions with assets less than \$1 billion vary.

The OTS generally allows institutions to rely on OTS NPV model results if deemed appropriate in measuring interest rate risk for institutions with traditional thrift business profiles. Or the institution may have been required to internally model interest rate risk if the OTS NPV model was considered inappropriate in capturing the thrift's interest rate risk exposure.

One requirement of all thrifts is that they establish formal NPV limits. I've also seen many smaller institutions perform an interest risk analysis and have established respective limits, although individual practices vary. These thrift institutions typically obtain sensitivity

analyses for all complex securities, regardless of size or minimum thresholds, as Kerri had mentioned before. These institutions typically evaluate the impact of significant transactions that may increase bank-wide interest rate risk sensitivity by more than 25 basis points. And these institutions typically utilize more simplistic, quantitative measures and qualitative practices, taking into consideration the thrift's activities profile and resources. Marshall?

Marshall Osborne: Thanks Russell. Now that we've covered some of the key policy differences for interest rate risk, let's talk about what the practical effects for thrifts will be over the next several months. As examinations of your institutions are conducted over the next several months, examiners will be concerned with the following primary issues for interest rate risk.

Thrifts may or may not have in-house measurement systems for short and long-term interest rate risk. Thrifts may or may not have policy limits for short-term interest rate risk. Thrifts, if you have not already done so, will be required to implement interest rate risk measurement systems for both short and long-term risk. Thrifts have been notified of these changes through CEO Memo #391 and should already be reacting to these changes.

The current OTS long-term interest rate risk measurement process will no longer be run after the December 2011 reporting cycle. In other words, thrifts will be expected to have measurement processes for short and long-term interest rate risk in place by March 31<sup>st</sup>, 2012.

Kerri would like to talk about some supervisory policy issues around that.

Kerri Corn: The OCC and the OTS proposed rule changes back in April, and final rule notices followed in July, made it clear that thrifts can no longer depend on the OTS interest rate risk model after year end 2011. And that the expectations for the 2010 Interagency Advisory, implementing an independent interest rate risk process that measures both earnings and capital at risk, should be incorporated into any interest rate risk measurement process. By March 31<sup>st</sup>, 2012, the industry will have had almost a full year to implement an interest rate risk measurement process that fully complies with the Interagency Advisory. From what Russ and other FTRs tell us, many thrifts already have processes in place that comply with our guidance, or you're well on your way.

Industry groups, model vendor groups and your examining teams, are available to assist you in meeting the intent of the advisory as

you have questions along the way. It is probable that processes implemented by 3/31 will continue to be tweaked and improved as you go through 2012, as is the case with any new process implementation.

Examiners will be reviewing your progress toward implementation of an independent interest rate risk measurement process by 3/31/12. Examiners will assess and let you know, through calls or an examination report, what their views are on your efforts to achieve full compliance with our advisory. Examination report comments will communicate any material weaknesses and outline supervisory expectations under the interagency guidance. Examination reports will acknowledge what has been accomplished to date and set reasonable time frames for achieving full implementation of an independent, interest rate risk measurement process. It is our expectation that management will take the steps necessary to address examination concerns, so that you are ready by the end of March to independently measure, monitor and manage your risk. I'll turn the program back over to Marshall to wrap up this discussion.

Marshall Osborne: Thanks Kerri. And we'll continue on with slide 11. One of the consequences of discontinuing the net portfolio value model, is that the OTS Asset and Liability Price Tables will no longer be published after the December 2011 reporting cycle. Many financial institutions and model vendors use these tables as default assumptions or data points for their interest rate risk measurement processes.

Many financial institutions, as well as model vendors, have asked where this information can be sourced after the December 2011 reporting cycle. Not to worry. Except for the non-maturity deposit prices, all of the information in these tables is available from other sources. The OTS and now the OCC merely gathers interest rate and price data from sources such as Bloomberg, the Federal Reserve and others. In fact, the price tables already indicate where many items are already sourced. Model vendors can also provide assistance in this area.

The OCC encourages all financial institutions to base non-maturity deposit modelling on the behavior of their own customers. We fully expect that when institutions implement their own measurement systems, they will have significantly different results from the NPV model, especially with the non-maturity deposits, since those assumptions should be thrift specific. The OTS price tables are not to be considered a benchmark or target, and material differences do not mean the thrift specific assumptions are automatically wrong.



As institutions develop this data, the OCC has noted that many institutions are currently recalibrating their non-maturity deposit models to account for the multitude of potential issues that have come from the credit crisis. These include changes to the FDIC insurance coverage, changes to Reg Q, what we term as surge deposits that have flowed into the institutions, as Kerri alluded to earlier. These may or may not be core deposits. Also what appears to be increasing price sensitivity for certain types of money market funds.

Moving forward to slide 12. In the meantime, as you're going through the due diligence process for selecting a model, setting up your interest rate risk measurement processes, we would like you to remember to use the 2010 Interagency Advisory as your guiding document in order to implement these processes. Risk management principles in TB 13a that align with the advisory and highlight key considerations, given the inherent risk profiles of thrifts, can be used to assist in establishing or revising your interest rate risk management processes. As Kerri indicated before, we have a long list of OCC handbooks and bulletins and other documents that you can use as source documents.

The OCC is currently working through a reconciliation of OCC and OTS policies and hopes to resolve any differences in the future.

Kerri Corn:

Slide 13, we're going to switch topics to overall risk measurement processes that the OCC uses. We also use CAMELS rating processes, you're already familiar with those. And then we have a RAS, Risk Assessment System, that was introduced into many thrifts earlier this year. Both the CAMELS rating system and the RAS process are evaluation methods that help us assess the safety and soundness of the institution, including financial and operational weaknesses or trends, problems or deteriorating conditions and overall risk management practices.

The Uniform Financial Institutions Rating System, CAMELS, is a point in time measurement of current performance. Interest rate risk measurements provide the basis for the sensitivity to market risk, the "S" component of the CAMELS rating. The RAS reflects the current aggregate risk position, as well as a prospective view of the institution's risk profile. So in that way, the RAS provides a view on the direction of risk, not just a snapshot of risk at the end of a particular quarter.

On slide 14, we continue this risk measurement discussion. I won't spend much time here, as I know you're familiar with the CAMELS

ratings. This slide captures the evaluation factors for the market risk sensitivity rating. It addresses the adequacy of risk measurement processes, to effectively measure earnings and capital at risk to rate changes, given the institution's risk profile and complexity. As you can see, a one rated institution indicates that this risk is well controlled and that strong risk management processes are in place. I would just note here that this definition assumes management is taking steps beyond risk measurement to being fully engaged in analyzing, documenting, reporting and validating the risk, and then taking the appropriate steps to control the identified risk.

One rated institutions are continually assessing and enhancing risk management processes to address changes in the institution's risk profile and any new external risks. Strong risk management is a high bar and one most institutions should aspire to.

Slide 15 focuses in on the Risk Assessment System, what we call the RAS. OCC handbooks cover the RAS process in much detail, so I'd refer you to that additional guidance to further your understanding of this assessment process that is completed for each of your institutions. The RAS process concludes with a determination of the quantity of risk and the quality of risk management. The quantity of interest rate risk will be determined to be low, moderate or high, while the quality of risk management can be weak, satisfactory or strong. Once these determinations are made, one then concludes on the aggregate interest rate risk position and the direction of risk expected over the next 12 months.

It is important that the quantity of risk and the quality of risk management be assessed independently of each other. In other words, the quantity of risk determination should stand alone and not be affected by the strength of risk management practices. Likewise, a strong capital position or financial performance should not offset one's determination of an inadequate risk management process. The quantity of risk and the quality of risk management need to be assessed independently. Then the aggregate interest rate risk position would take into account these independent assessments.

I believe Kurt Kirch, an experienced Federal Thrift Regulator, who is now working on the West Coast in some of our larger banks, has a perspective on interest rate risk assessment processes in thrifts that he'd like to share. Kurt?

Kurt Kirch:

Yes, thank you Kerri. I think you raised a very important point here regarding the qualitative factors in assessing adequate risk management practices. I know from looking at OTS model data, that

when you look across the thrift industry, a lot of the model results are very, very positive, indicating minimal levels of risk, largely due to the low interest rate environment.

And so, you know, this is not the time to become complacent, but it's an opportunity to focus even more diligently on qualitative risk management factors. And as you know, examiners out there are an inquisitive bunch, and they will be looking at these areas. But having said that, I have had calls from some of our smaller institutions, and it's evident that they have been reading some of the CEO memos and other communications that OTS previously sent out and that OCC has been providing. And they seem to understand where they need to go from here and Russ and I both know, from working with larger thrifts, that in most cases they've been quite proactive in addressing these issues. And in many cases they're probably very much compliant with the Interagency Advisory. And that's all the comments I had Kerri.

Kerri Corn:

Thanks Kurt. Slide 16 continues the RAS discussion. A high level of interest rate risk exposure will be assessed if current or potential changes in economic value if recognized, would cause capital ratios to fall below the "adequately capitalized" level for prompt corrective action purposes. Management would be expected to take action to address this level of risk. Outside of a PCA trigger, one should not conclude that high levels of risk are bad, or that low levels of risk are good. Whether the quantity is bad or good depends on the institution's capability of identifying, measuring, monitoring and controlling the amount of risk.

As we discussed earlier, the overall business profile and financial and operational condition of the institution, along with risk management practices, are factored into the assessment of an institution's risk profile, and therefore the aggregate level of interest rate risk.

Slide 17 continues a discussion of the RAS. This slide depicts various indicators of a high quantity of interest rate risk: repricing mismatches that are longer-term; potential exposure of risk to earnings and capital in stressed scenarios is significant; potential exposure to scenarios beyond the standard 200 basis point shock could be significant, or positions are complex; options on the balance sheet could materially change your risk profile; the level of non-maturity deposits does not sufficiently offset longer-term risk.

The Interagency Advisory was issued to address the risk management processes needed to analyze and control interest rate risk, so that institutions are not surprised by hidden risk on the

balance sheet. A robust interest rate risk management process enables management to identify risk throughout the balance sheet, and to evaluate exposures particular to your individual business and growth strategies and marketplace.

The OTS NPV model did not provide this type of in-depth assessment, especially with regard to earnings at risk and exposure to various stress scenarios and non-parallel yield curve changes. Interest rate risk measurement tools that comply with the Interagency Advisory have the ability to provide a much more institution-specific, dynamic process for managing your company's overall risk. Many of you have already implemented new processes or enhanced your existing ones, and have a better picture of your risk profile now, and have incorporated new limits, triggers and controls to manage your risk positions.

OCC banks, including community banks, have used third-party vendor models for years that cover a full spectrum of interest rate risk and test their earnings and capital levels to various stress scenarios. So I want to encourage you as you research potential measurement processes and models, or enhancements to your current measurement techniques. You have the opportunity to implement a tool that is tailored to your institution, rather than the aggregated OTS model you relied on in the past.

Model capabilities have increased tremendously over the last decade, and the improved ability to control your risk positions and ensure consistent earnings and capital support, will bring immediate and hopefully lasting benefits.

Slide 18 points out indicators of weak interest rate risk management. Inadequate policies, ineffective risk limits and controls, inability to identify risk in new products or services and overall deficient risk measurement processes are some of the indicators of weak management. The purpose of this presentation, and existing interest rate risk guidance, is to remind management of our expectations for appropriate interest rate risk management processes. As you make decisions and changes to fully comply with interest rate risk guidance, we are confident you will be customizing and enhancing your risk measurement and management processes.

Slide 19 begins our discussion of risk management limits. I think the first bullet is the important point on this slide. Your interest rate risk measurement process should do more than just report exposures. Does the limit process lead to appropriate risk discussions and then appropriate actions to reduce or hedge or control exposures? Some

institutions establish limits, some triggers, thresholds, whatever your management team determines will work best to stir up discussion at the appropriate levels within your company, and then cause appropriate action to be taken. That could be accelerated monitoring, changing a risk trigger, changing a balance sheet position or hedging the risk in some way.

Limits are needed for earnings and capital at risk.

There can be flexibility applied to institutions with low risk profiles and non-complex balance sheets. Low growth and risk profile, few complex holdings, those types of institutions, flexibility will be allowed from the examiners. Sometimes simple limits on permissible holdings or on types of mismatches at certain tenors may be appropriate. But generally, more extensive limit structures are necessary. Whatever you use, it needs to be actionable.

Slide 20 we continue our discussion of risk limits. Well managed institutions find a balance between establishing limits that are neither so high as to never be breached, nor so low that exceeding the limit is considered routine and therefore not worthy of action. We expect risk limits to truly trigger action, at least management discussion of current risk levels and why they may be increasing.

Risk limits aren't just for putting in board reports to satisfy regulatory requirements and then you're done until the next quarterly calculations. I say that because we found that in many institutions in the past, this didn't go beyond a board reporting process and a regulatory requirement. Actual exposures compared to limits should provide insight into management's risk appetite and trends in risk measures should provide useful information to identify any incremental increases you may have in your risk profile.

Now Marshall will share some risk limit data we have collected from our community banks.

Marshall Osborne: Thanks Kerri. As you may or may not know, examiners are required to gather certain data items when conducting exams that include interest rate risk. These are put into our internal databases so that OCC can track trends and risk levels, policy limits, types of shocks and internal controls.

Looking at slide 21, you can look at some of the things that we try to track. In looking at the second quarter of 2011, we can see that net interest income at risk and economic value of equity are the primary tools that national banks use for measuring short and long-term

exposures, respectively. We can also see that in interest income at risk and economic value of equity scenarios, alternative scenarios are employed that go well beyond the traditional plus or minus 200 basis point shocks to which Kerri alluded. Some even exceed 400 basis points. These are the types of stress scenarios that we were talking about earlier.

Also, 12 month exposures for net interest income at risk for a plus 200 basis point rate shock remain in the -10% to -20% range, with corresponding risk limits of -10 to -20. Economic value of equity sensitivity exposures to the up 200 basis point shock are in the -5 to -25% range, with corresponding risk limits of -10% to -30%.

One additional trend we have seen that is not on this slide, is that some institutions have decided to take on interest rate risk. These risk takers, whether bank or thrift, will be expected to have sufficient controls around this additional risk, systems to measure the risk and adequate capital for the overall risk level.

Moving on to slide 22. We recognize that a major challenge for some of you will be doing a due diligence to select a model to measure short and long-term interest rate risk. The next couple of slides talk about some factors to consider. We would also refer you to the wealth of information contained in OCC and OTS policy guidance and handbooks.

Any institutions with large concentrations in mortgages, and other types of positions with embedded options, should ensure that the model has the capability to price and model cash flows properly. For those of you who would like a specific reference, we would refer you to OTS Thrift Bulletin 13a, part 2, section B, paragraph 2, for some specific methodologies in that guidance.

Moving on to slide 23. One of the areas we want to spend some time on today is stress testing. When we say stress test, we are specifically referring to scenarios that are low probability but high impact. The 2010 advisory on interest rate risk re-emphasized the need to periodically run rate scenarios that go well beyond traditional plus or minus 200 basis point shocks. Recent history has shown us that rate moves of 400 basis points or more are realistic. Stress scenarios should also go beyond parallel shocks, to include changing slopes and twists of the yield curve.

Many times, especially in the current environment, these scenarios will show more risk than large parallel shocks. Although you may not need to set policy limits against these scenarios, they do need to be

run periodically. With that said, we have received questions about whether large rate decline scenarios are necessary today in this very low rate environment. The OCC understands that these scenarios would not be useful in the current environment and would not expect institutions to run them until the level of short-term rates rises significantly. Bottom line is that you should ensure that any model you select is capable of accurately running these types of scenarios.

Another area that we wanted to highlight today is model validation. Model validation will be a critical part of your planning and implementation of models. We refer you to OCC Bulletin 2011-12, Sound Practices for Model Risk Management, for guidance on this issue.

There are some key points we want to highlight on the call today about model validation and back testing. First, use a risk-based approach to determine frequency of validations and back testing. Judgement can be exercised to determine which activities need to be performed more frequently than annually and which can be performed less frequently than annually. For instance, back testing of key assumptions such as non-maturity deposits or prepayments may need to be done monthly or quarterly. Validation of the model mechanics may be done less frequently than annually, unless there has been a major update to the model, major change in strategy or management turnover.

Second, institutions are allowed to use model validations commissioned by the model vendors and provided to customers. These can be used to satisfy the requirement to validate the soundness of the model itself. However, you should closely review these validations and ensure that they meet the standards set in OCC Bulletin 2011-12, the sound practices for model risk management. The responsibility for ensuring that the model is adequately validated remains with the institution.

Kerri Corn: Slide 25 begins the discussion of keys to effective interest rate risk models. We think these points should be helpful if you're considering new models or enhancements to your existing models. First, the ability to model your business, who you are, what you do, your current and planned activities and products, on and off balance sheet. You need to know if the model provides the level of detail you need, especially with regard to data aggregation and stratification.

Second, the ability to automate processes compared with manual workarounds. Most vendors I know of do have automated interfaces with most of our bank's common operating systems and other source

systems. You definitely need to consider all of your requirements, cost, hardware, expertise, reporting needs, before making a model decision. Investigate all the services and reporting options available from any third party vendor to ensure you get what you really need.

Slide 26 continues this discussion. The ability to measure embedded option related risk. For many of our companies, this primarily means mortgages and prepayment risk, and also call features on investments. Most interest rate measurement processes today incorporate an OAS, Option Adjusted Spread function, for capturing this risk. Given the typical profile of a thrift, an OAS calculation would provide the most accurate measurement of this risk.

Slide 27 continues with the keys to effective models. It allows the flexibility to choose alternative scenarios for measuring interest rate risk. We've talked about this several times already. Many institutions start out modeling the effect of interest rate shocks on earnings and capital. Over time, a 200 basis point shock became a standard measurement offered by the model vendor community. The 2010 advisory upped the ante. It recommended running various rate scenarios, including more extreme shocks and ramps, and changes to the shape and level of the yield curve, as Marshall just discussed.

So should all institutions run all of the suggested or recommended scenarios from the advisory? Probably not, but I'll tell you this, one shock isn't enough. All institutions need to establish interest rate risk measurement processes that fit their overall risk profile, business strategy, complexity and risk governance processes. The initial step from moving from the OTS interest rate risk model is to establish an earnings and capital at risk measurement process. Then based on your balance sheet composition and strategy, determine the types of additional scenarios to build on to the foundation of your basic earnings and capital rate shocks.

Which scenarios will flesh out the risk the best? Make sure your model provides you the flexibility to try various alternatives, until you reach the right mix of scenarios to complete your interest rate risk assessment process.

Slide 28, we continue the discussion. An effective model allows you to select the appropriate key driver rate or yield curve for discounting cash flows. Can you choose the driver rates and easily change them when appropriate? It includes a high level of model transparency and appropriate model validations and internal control reviews.



You need to understand the input and output of the model and ensure appropriate validations have been done. It ensures an appropriate level of vendor implementation and support is received. The vendor relationship continues beyond the initial implementation. Make sure you understand the level of support commitment from any model vendor.

Slide 29 provides a recap of common issues, or should I say problems, we've encountered with interest rate risk models. First, the model isn't suited to your risk profile, and therefore it can't accurately predict interest rate risk. Or key assumptions aren't well supported or don't match your actual situation. Model inputs are not updated regularly, and they don't match you anymore. There are no formal procedures for the model and support requirements. Absence of back-testing the model to actual results. Without this you cannot determine the root cause of exposure or make any adjustments to mitigate any exposure. Those are just a recap of the common issues.

So you've hung in there so far, we're on slide 30 which really is the last presentation slide. So I'd like to talk about summary and takeaways from this presentation. We're in a challenging operating environment given everything that's going on today. We've had the same period of low interest rates and margins at many of our institutions, and it's a perfect set up for interest rate risk. So now is the time to evaluate your interest rate risk management systems and controls in light of who you are, what is your business model, your risk profile, overall condition, and what are your strategic growth plans that could change or exaggerate your interest rate risk positions.

Simulation models are a cost effective alternative for institutions of all sizes and levels of complexity. These models can improve your budgeting and strategic planning processes in addition to interest rate risk management.

OCC has additional guidance available on the Internet and through your assigned supervisory offices and capital market experts located throughout the districts, Midsize and Large Bank locations. And the market risk policy group is available for consultation as well.

The next slide recaps the various OCC issuances that address interest rate risk for your reference, as needed. That concludes our part of the presentation. Thank you and I'll turn the attention back over to our moderator, Mr. Ward.

Tim Ward: Right, thank you Kerri and Marshall and Kurt and Russ. Of course the second time we go through something, we go a little faster because we leave out things that we did the first time. I said it was going to be 80 minutes, but that was a little longer than it actually took, which leaves plenty of time for you to ask questions. So with that, I'm going to turn it over to our operator Don Roux, to talk about how you can call in with a question or send an email. So Don--

Operator: Excellent, thank you sir. If you'd like to ask a question or if you have a comment for our panel, we certainly encourage you to interact with them directly by phone and have your comments addressed. If you'd like to ask a question by phone, we ask that you please press "star 1" on your phone's touchtone keypad to enter the telephone queue to ask a question or make a comment.

After pressing "star 1," we ask that you please limit yourself to one question, and if you do have additional questions, we ask that you please re-enter the queue to have your additional questions or comments addressed. And with that being said, we do have one caller in the queue at this time. So let's make our way to Seattle, Washington and Brent's location. Go ahead please.

Seattle: Yes, good morning from rainy Seattle. This is Brent Beardall with Washington Federal. Thank you for having this call, first of all. I wanted to ask about having a static balance sheet when we're running all of the different interest rate scenarios versus managing the balance sheet, actually what we would do when the interest rates change. So I don't know if my question's clear, in that if we run it just based off of a static balance sheet, obviously the interest rate risk measures are going to show much more extreme, versus running it where we're changing the composition of the balance sheet, which historically we have done.

Marshall Osborne: This is Marshall Osborne. I think what we've encouraged institutions to do is actually run—well, I guess the way I would put it is that, the most effective way to manage interest rate risk is to run your model under both types of methodologies. And the reason I say that is that, as you've just alluded to, you're really getting at different types of risk. One is sort of the risk as it exists currently, and that would be the static balance sheet. The reason that we would also encourage you to run, if you do run the managed balance sheet, is so that you can compare and contrast the two. Because depending on what your business strategy is, what your future plans are, that can change your fundamental risk profile going forward.

Tim Ward: And this is Tim Ward, it's a great question and one of the reasons that OTS didn't have a net interest income simulation. OTS had a lot of discussion internally about the fact that we weren't able to do a managed balance sheet. And that it would become quickly irrelevant if we projected what was going to happen to earnings when the institution couldn't apply their own assumptions for how they would react to a change in interest rates to their balance sheet. So great question, and I hope that answers it.

Seattle: It does, and as follow up, if I'm allowed, and that's exactly what we've run. I guess my follow up question would be on our limits and/or thresholds. We've historically done it on a static balance sheet. Would it also be appropriate, or where would the OCC prefer the thresholds to be based off of static balance sheet or the managed balance sheet or a combination of both?

Marshall Osborne: Historically we've seen institutions use policy limits on both. Obviously, you would have to set the limits with the understanding of which type of scenario that you're dealing with. I would think that your institution would have slightly different limits if you're going to be basing it on a static balance sheet or a managed balance sheet.

Seattle: Thank you very much.

Operator: All right, thank you for that question. Off now to New York and Frank's location. Go ahead please.

New York: Hi, this is Frank with Astoria. Earlier there was a discussion about the rate environment that we're currently in, and the inability right now to really consider a downward stress environment. When we put together our policy and established our limits we did so at clearly a more reasonable interest rate environment. My direct question is, at this stage, given where rates are and the expectation with the Fed keeping them low, would it be inappropriate at this time, would the OCC consider it inappropriate, that we would eliminate any type of down modelling, given where—you know, if you look at where the two, the three, the four year treasury are now. I've already got funding costs that tell me my core deposits are—cost me more in value from an NPV point of view than they're worth because I'm discounting them back with non-interest costs involved. So would anybody be against eliminating down rate scenarios?

Kerri Corn: This is Kerri. I think it would be the examiners coming in, listening to your story and understanding what your risk profile is and how you're trying to get to it, that would make that decision. I don't think it would be a hard and fast call that you should cut out all the down scenarios,

or a hard and fast keep something minimal in there. I think typically institutions are still running some sort of smaller down ramp or down shock. It may be not immediate, it may be further out on the curve, showing a change in the curve that way.

So really it's up to you to explain to the examiners coming and to your own management team, here's where I see the risks based on our balance sheet. I think these are the better indicators of where there could be hidden risk on our balance sheet. And if you think that, based on what you just said, if the down doesn't show you anything, then I think you have a case for what you're doing.

New York: Great, thank you.

Kerri Corn: And just for—the last question too, the 2010 advisory, I really refer you all back to that because there's a whole section on the static versus dynamic modelling and limits and all the things we talked about today, really draw heavily from that advisory. So that would provide you good input.

Operator: All right, very good. Up next from Brooklyn, New York, it's Timothy's location. Welcome to the seminar.

Brooklyn: Yeah, hi. Can you hear me?

Operator: Yes sir.

Brooklyn: Oh, I'm sorry okay. Listen, I—one quick question. The issue of the OCC—the OTS model going away and a lot of the thrifts in the country had used the assumptions and the modelling practices as, if not their only source of information, for a big part of it, especially with some of the assumptions on attrition and core deposits and so forth. Is there any thought being given at the OCC to make that model availability to the client base going forward in any form whatsoever? The old Ho model or the old—or the assumptions that were built into the modelling. Any thought of giving that—making that available on a service provider basis?

Marshall Osborne: I guess when you're saying make it available, actually the documentation, the formulas, that type of stuff, is available I believe. And maybe one of the OTS folks can correct me if I'm wrong, but I believe if you look at the OTS web site, there is a manual around the NPV model itself. And the prices that we actually publish in the asset liability price tables on a quarterly basis, obviously are just the output from that model. But I believe—theoretically—someone would be able to take the formulations that are in the NPV manual and other

documentation and be able to recreate those non-maturity deposit prices.

Brooklyn: Well, we use it, like a lot of firms I'm sure, we use the data output from the model, not as a sole source of information, but as a model validation technique. So that's where I'm coming from.

Tim Ward: So it's a great question. This is Tim Ward. The decision at the OCC in coming out with the comments that Kerri and Marshall have provided today, was that we were not going to continue the model because of the way it aggregated, and because of the fact that the OCC historically has not provided that kind of a service to the national banks. So the expectation is no longer that we would provide this service. It would be that the thrifts would go out and find their own way of measuring and monitoring and could tailor it to their specific circumstances.

So the short answer to the question is, no, there are no plans at this time to continue to offer it on a service related process. You mentioned that the model was created by an outside party for OTS. It was leased to OTS. It's just one of the companies that has the ability to produce that kind of output. That the big key was always that we were using Schedule CMR, aggregated information, to produce a barometer that would show your interest rate risk measures. Not a thermometer specific to your entity, but a general number. And of course we relied on it for many years, and for many thrifts that is the only model that you were able to rely on.

So we understand this is a big change, but the OCC is not going to be a service provider. We're not going to make this model available, just as we don't provide one for national banks. So unfortunately that's the real short answer. Thank you for the question though.

Brooklyn: Appreciate it.

Operator: All right, next it's Franklin, Tennessee and Marsha's location. Hello.

Franklin: Thank you very much. I appreciate your doing this call today. We are a trust only thrift, and when we go through our risk assessment as it pertains to us, one of the biggest constraints we have is the qualified thrift lender requirements. Are you anticipating any changes in those in the near future?

Tim Ward: So this is Tim Ward. The qualified thrift investment requirement is not something that we plan to change. It's part of the statutory requirements for a thrift; you need to qualify under the thrift lender

test. The issue with that is if you are having trouble meeting QTL, switching charters is the outcome, right. So if you're bumping up against the commercial loan limit, or some other aspects that are difficult, a different charter, including a national bank charter, may give you the latitude to be able to structure your balance sheet more consistent with your objectives.

That's the avenue that you should consider. But no, the QTL is part of the statute. We don't have any ability to change that. So that will continue to apply to thrifts.

Franklin: Okay.

Operator: All right, Brookfield, Wisconsin is next in the queue. It's Drew's location this time around. Welcome to the seminar.

Brookfield: Thank you. I appreciate the opportunity to have heard this information and its really great insights. A lot of people have talked about the fact that many companies can offer services to replace or augment models we've used in the past. But I was wondering if there is a way that the OCC could make statements on vendors whose models they find to be inadequate or just fundamentally wrong. Or even better, a list of entities who have models that you've vetted and felt comfortable with. Obviously anything can be used wrong, but some things can't be used right.

Tim Ward: So thank you for the question. This is Tim Ward again. What we said in the outreach and what we continue to say in meetings with thrift executives, is that we don't endorse any particular model at the OCC. Unfortunately we can't give you a list of the best models or the ones not to buy. What we've suggested is that you talk to your trade associations. That you talk to local national banks, or even state banks who have their own model and what their experiences are. And counting on your peers to provide good input as to their success or failures in these areas would be the better avenue.

I wish we could recommend a vendor, but we just can't do that. The best avenue is the trade associations or talking to other banks in your area that have experience with their own models and what those experiences are.

Marshall Osborne: This is Marshall Osborne. I'd like to also add to that, I think I alluded to this in the presentation, is that contained in TB 13a, I believe it's part 2, there were several bullet points meant to be guidance to thrifts that were going to implement a model. And these were sort of minimum requirements that a model needed to be able to have,

minimum capabilities in order to be able to properly measure mortgage options, option adjusted pricing, things like that.

So that would be a good resource, sort of a benchmark to hold the model vendor up against also.

Brookfield: Okay, thank you.

Operator: All right, we have two questions remaining in the phone queue at this time. A reminder for our attendees, that if you'd like to ask a question or have a comment, please press "star 1" on your phone's touchtone keypad. That will get you into our queue. We'll go to Michigan and Tim's location, welcome.

Michigan: Tim Jewell from Eaton Federal Savings. Can you provide a definition of what you mean by qualitative versus quantitative factors in the interest rate risk analysis?

Kerri Corn: Sure, the qualitative factors, we're talking about the quality of risk management. So how you go about measuring your interest rate risk. How you set up processes around that qualitative aspect, the quality of your processes. Where the quantity is really the measurement itself, the numbers you're looking at, the limits, the actual exposures you have. If you look through the appendix there, all the different handbook sections talk about the risk assessment process to give you a lot of detail on the quality of risk management components that we'd look at. I don't know if you want to add anything to that Marshall.

Marshall Osborne: No, that's exactly right Kerri. You have the—we would refer you to the risk assessment process in our handbooks. If you go through that, each of the different factors have a number of different bullet points that would walk you through exactly the factors, the assessment factors that are considered in each of those areas.

Kerri Corn: It gets to what the previous question was as far as which vendor is right for me, and why we really don't opine on the quality of a vendor. Really, you need to do both of these types of assessments to know what type of a model you need. The qualitative factors help you understand and express what you know about your company and the types of strategies you have and the types of risk you're willing to take. And taking that information to your model vendor for getting information on how they could help you measure that. That would be a qualitative side of it.

Whereas the output that the model gives you is your quantity of risk. The qualitative is how you set that up so that your quantity is accurate, if that makes any sense.

Michigan: Okay.

Operator: All right, next is Columbus, Ohio and Brian's location, hello.

Columbus: Yeah, good afternoon, this is [indiscernible] Nationwide Bank. I had a question on thrifts which have a large concentration of mortgage-backed securities and mortgages loans on their balance sheets. If you look at different prepayment models that are used by different banks, whether [indiscernible] or AFT or Alco [ph], especially in the last 12 to 15 months, prepayment models have not been very accurate in predicting prepayment behavior. And this has a big impact on valuation of your securities and loans in the different shock environments.

So I guess my question is, is there some kind of benchmarking data that we can refer, to kind of get a gauge of how good these models and these valuations are?

Marshall Osborne: This is Marshall Osborne. Yeah, you're right. It's been a very tough environment for the folks who try to put together prepayment models. It seems that the folks that we've talked to are continually challenged to try to sort of make adjustments to their models on the run. Right now, I'm not sure if there's really anybody that's been able to do this perfectly or consistently at this point in time. I guess the biggest factors that everyone's been dealing with are building credit factors into the prepayment models and then also the various government programs.

Kind of until the credit factors settle down and the government programs sort of settle down also, it's going to be a tough environment. I guess one of the things that we try to encourage all institutions to do is, if you have the internal capabilities, try to follow your own internal prepayment speeds. That should be a basic part of your internal back testing processes, and we would encourage—I mean, I guess traditionally, we would encourage you to benchmark your model prepayment speeds against your own internal, actual performance. I think that would probably be a more accurate way to go.

Kerri Corn: Everything Marshall said is absolutely correct. The various vendors are having difficulty with this one based on everything he just said. So just even showing comparisons of your own measurements



quarter to quarter, how has that changed, to get just an idea of magnitude and direction of the change, what may be different. Running different scenarios yourself if you have the ability. A change in the prepayment assumptions to see what is the difference, if this is wrong, what might be an alternative prepayment assumption?

So most companies now are trying just to run their own variations of what they're getting through a model to get a gauge for what this— what might this be if it's different. But everybody's all over the place on this right now. You're right, it's very difficult, and it is key to your balance sheet, absolutely.

Marshall Osborne: Yeah, I'll reiterate what Kerri said about stress testing, that's one of the reasons that we are, in the current guidance, in the 2010 advisory, we talk about stress testing assumptions. And that's exactly what Kerri was alluding to. Is that because we have seen such large swings in things like this, it's a good practice to, even though you may be getting prepayment speeds from a vendor and you trust that vendor, we know from past experience that those prepayments can be off significantly and will definitely speed up, slow down. So you need to go through and stress test those assumptions.

Kerri Corn: So on a qualitative factor, this would be an example of what you would report up to your Alco or to your board that, here's the environment we're in, and we don't feel comfortable with the rates that are coming in from the vendor. So here's an alternative scenario we've run and here's the change. Explaining that to your upper management team, that would be a positive, qualitative management practice.

Operator: All right, we still have four callers remaining in the queue at this time. So next let's go to North Carolina, Tony's location. Go ahead please.

North Carolina: Hi, this is Tony VanCannan [ph]. Just had a question, previously the OTS required you as a bank of over \$1 billion, to have an internal model that you then reconciled with the OTS model. Under the OCC guidance now, would we be required to have an internal model or could that be outsourced to a third party, an appropriate third party?

Marshall Osborne: Yeah, I think when we say an in-house or internal model, we just mean, that could include somebody that you outsource the processes to.

Kerri Corn: Yeah, our comment is independent, meaning independent from the NPV model. So absolutely, it could be outsourced or something you do in-house. Your call.

North Carolina: Great, thank you.

Operator: All right, next it's Brooklyn, New York and Gabriel's location. Go ahead please.

Brooklyn: Hi, this is Gabby. I just had a question that you kind of raised before in terms of managing interest rate risk on a managed balance sheet. Can you just explain what you mean by managed? Because in previous terms, we would call it dynamic, where you just basically—you're assuming a growth scenario and you're going to assume that if rates rise, you're going to continue with this growth scenario? Or do you mean managed where, okay, you assume this, assume X and then our rate scenario will change and you just—the management decides to take a different approach? So could you please elaborate on that?

Marshall Osborne: Yeah, generally when I think about a managed balance sheet, what most institutions are actually doing is using their management's best guess as to what's going to happen to the balance sheet going forward. This could include assumptions about growth. It could be discontinued lines of business. A lot of institutions actually will take their beginning sort of budget projections, management's projections, and use that for their view of what the balance sheet is going to look like over the next 12 months, 24 months. And then use that as the basis for running their earnings at risk projections and their economic analysis.

Kerri Corn: I don't think we intended a distinction be made between managed and dynamic. It's—that's what we talked about dynamic, you're adding your own assumptions, your own projections into it. I think we meant what you mean when you think about dynamic.

Brooklyn: Okay, because the reason is, one of the things I've always had a hard time conceptualizing is, since management does have the ability to see or know effects of what happens with interest rates, they can easily decide, if we had a target of a 5% growth, and we see that rates are going up not what we expected, we're going to stop that, and we have the ability to. I mean, once you have—of course you have firm commitments that of course you have to assume. But you could easily stop that and therefore your interest rate risk profile could change. That was my hard time always conceptualizing this idea of dynamic.

Marshall Osborne: Well, that's exactly why we suggest that if you're going to run dynamic or managed balance sheet scenarios, to also run a static scenario so that you can kind of compare and contrast that.

Brooklyn: Okay, thank you.

Operator: All right, off to Dickson, Tennessee and Joe's location. Hello.

Dickson: Hi, a question about deposits. Decay rates, based on what's happened in the last year or so, the rates come down but deposits haven't gone down. How do you do a decent job of predicting that?

Kerri Corn: Deposit decay?

Dickson: Yes.

Kerri Corn: Yeah.

Marshall Osborne: Yeah, that's where—

Kerri Corn: That's the question of the hour.

Marshall Osborne: That's just like the prepayment speeds.

Kerri Corn: Exactly.

Marshall Osborne: Yeah, everyone is really struggling with that, and we're noticing a lot of institutions have really tried to go back and completely rethink how they're modelling their non-maturity deposit behavior. And one of the things that we're definitely noticing institutions doing, is trying to—instead of looking backwards and trying to predict a decay rate, is that they're sitting down and talking to their lines of business, the deposit gathering type people. And trying to figure out, when rates start moving, how badly do we want to hang on to these customers? In other words, how bad—you know, how much are we going to fight for them?

When rates start going up and the guy across the street starts paying up for deposits, how badly are we going to do battle with him to try to keep those customers? They're diving in and saying—trying to look at the customers that have come in the door in the past several years during the crisis, for instance, and trying to determine which of those are maybe more price sensitive, which ones are core. And trying to identify the customers that you want to try to battle to keep and which ones you're willing to let go and trying to look at it that way.

That's just one approach. I mean, there's obviously a lot of other issues out there.

Kerri Corn: Some companies are just looking right now and saying, I have no idea. I mean, I really don't know how to adjust my assumptions at

this point in time. And they're pretty much going with what they have, adjusting as they can slightly. But taking on the approach of going forward, I'm going to put in processes that really capture my own deposit decay rates, my own deposit movements better.

And so they're focusing on going forward. I'm going to collect this data, so I will have more definitive assumptions going forward. But today, I'm not real sure what it is. And if that's the truth, and I would think part of the quality of risk management would be, well in this situation then, do you handle your limits on that type of thing a little bit differently in this period of indecision, not really being secure with that assumption? Maybe make a change as far as the level of risk you're willing to take until you have a better feel for those deposit movements going forward.

So that's where examiners would talk to you about, well how are you handling that then? How do you address the whole, overall impact on your risk measurement if it's an assumption you're not real secure in? Because many companies really are looking forward saying, I'm going to gather the data on my own deposits going forward because what I have today, really I'm not certain of. It's the ongoing dilemma, and I would say, sit with your various vendors and your industry groups to see what they're coming up with lately because we've heard some—we've heard many different stories about this lately.

Marshall Osborne: Yeah, and we would encourage you, just as we indicated with the prepayment speeds, this is exactly why we talked to you about stress testing assumptions. If you know that your fundamental models that you're using for major assumptions such as non-maturity deposits and prepayments, if you know those are going to be unreliable, you need to kind of take the next step. You need to talk about that instead of just sitting still.

One of the things you can do is set up some assumptions that say that, what if my non-maturity deposit assumptions speed up, slow down significantly? What effect does that have on my model?

Tim Ward: This is Tim Ward. This is a great question for the thrifts that historically just relied on the OTS model. You didn't do this kind of decay rate analysis for your institution. And in fact at OTS, I think in the last 17 years, we changed the decay rates twice. I mean, so we didn't do it either, and this was a point of contention in a number of cases where the OTS model would produce a result and the institution's specific experience, or studies that they had conducted, varied greatly from what the OTS assumptions were. And it was one of those points where the institution would show us as examiners

what the difference was, and we would have to rely on that in most cases.

Sometimes it was a little aggressive, but typically it was more accurate than the OTS because it's not something that we updated. It was difficult to be able to do that on an industry wide basis when we had so many variances, depending on the way you priced your deposits, the type of customer you had in the local community. It was a challenge.

Kerri and Marshall said earlier that the expectation is you will be ready March 31<sup>st</sup>, 2012 to be able to model—measure, monitor your risk on your own. We recognize these are types of areas (e.g., deposit decay rates) where a number of thrifts just did not have the experience because they weren't required to do it.

So we're going to be reasonable when we come out there on exams. We're not trying to intimidate in any way, but there's an expectation that has existed for the national banks for all these years, even the very small community banks, that they could do this on their own. And that expectation is transferring over to the thrifts. So we don't want you to be worried about it. We're going to work with you. Please call your local office if you have questions. Please reach out to your peers who have some experience in this, so that you can get up to speed and up to that same level that was expected for the national banks for quite some time now.

So I say that in a very reassuring tone because I know we can get there. I know you have experiences that can translate into model assumptions going forward.

Operator: All right, next it's Boston, Massachusetts and Joe's location.

Boston: Hey guys. Thank you very much for the information and everything in the call. Hopefully my question is kind of straightforward here. On slide 21 you mentioned the interest rate risk survey information that you guys—your examiners put together. And I was curious two things. One, do you guys provide the details behind that in an aggregate form? And then also, if you guys have ever seen an institution that has a positive limit on the 12 month exposure from an NII standpoint?

Marshall Osborne: I guess the first question is, we have not ever published the data that we gather in the interest rate risk survey out to the public. That's not something that we have ever done. I don't know if it would be considered in the future, but we have not done that in the past.

As far as the positive limit for a 12 month exposure, are you indicating that you would be—you would have a positive impact if rates rose? Is that what you're indicating?

Boston: Yeah, the—sorry, the point of the question I guess is, obviously it makes sense, your true exposure would be a negative change to your earnings at risk or your market value of equity or EVE. But have you ever seen an institution that has a positive limit? Like in other words, a plus or minus 10% and is that—

Kerri Corn: Yeah, you do see plus or minus.

Marshall Osborne: Yeah, certainly. It just depends on how the institution has positioned itself.

Kerri Corn: Yeah, we do see plus or minus. On the vendor survey, we had thought about making it public and then we thought about it again because when we—actually when we gathered this data from the vendors, we didn't tell them we would be comparing them against other vendors and we might make it available to other people. It's not what we ever disclosed. And so we did not do that. We make it available to examiners, and so we have made a list, and please hear this clearly because we don't endorse vendors.

We have, just based on the information we've collected from our community banks, we do have a list of vendors that are currently in use in our banks. Again, this is not an endorsement. It's just that we have a list of vendors that are being used in our banks. We've made that available to our examiners, and we have told them they can make that available to you. But that's with no endorsement.

Now in the future, and we've been talking with FDIC and Fed people actually this last couple of weeks about doing another vendor survey. We will discuss with them the possibility to actually gather information that can be comparable and shared with the industry.

So maybe we'll have something soon, but we're about to do another survey and I'll see if we can maybe make something that would be available to the public. It'd probably be a good idea.

Boston: Yeah, it definitely would be something that we'd be looking forward to I'm sure. When it comes to setting limits on policy and everything like that, it always kind of helps to know what your peers are doing.

Kerri Corn: Yeah, well our survey has different cost information and actually shows the section in TB 13a that Marshall referred to, there's actually

a section of the survey where we ask them to explain, can you measure these components of TB 13a? They actually answer yes or no. So we do have all that for the vendors.

Tim Ward: Yes, this is Tim again. Just to clarify, we're mixing things. We're talking about two different things here. Kerri's talking about a survey that we do offline with vendors to talk about what types of modeling they perform, what services they're able to do for the institutions that are their clients. Okay, so that's information we don't share. We do have a list of the vendors that your supervisory office can provide. It's just a list with no endorsement.

The other point that Marshall had talked about in the examiner survey, information that we enter at each exam on how the limits are being set, what the measurements are showing, what tools they're using to measure. That's internal, and we use it really for statistical reasons internally. Perhaps we'll issue a tip, a supervision tip to the examiners. We might do something to the industry, but it's not to publish aggregate numbers. Just like we don't publish aggregate numbers on classified assets that we collect during the exam processes.

So two different things. Vendor survey, examiner survey, neither one is public information, unfortunately.

Marshall Osborne: Something to remember too, it's always—you're always available to talk to your—the examiners that are coming out on your examination. And they can contact us and we can try to put together some type of a, maybe a peer information to give you an idea of sort of where you stack up with banks that are of similar size, make-up, that type of thing. And we're always available to do that, but that's more of a one-off type of a basis.

Boston: Great, thanks guys.

Operator: All right, up next it's Kerry's location in Rochester, Minnesota.

Rochester: Hi guys. My question's in regard to the 2010 advisory. One of the takeaways on that was, true impact of strategies and transactions captured over a longer period of time, at least two years, perhaps longer. Given that this is so assumption driven, and really arbitrary in my mind, what are your guys' thoughts and what kind of weight is the examiner going to put on this kind of stuff versus more of a 12 month NII or EVE [calcs]?

Marshall Osborne: This gets to a point where we've seen, I guess a trend for many institutions, especially the larger ones. And I think the model vendors have sort of followed along with this recently, is that the model vendors are going to give you the ability many times to build unlimited horizon projections. You can go two years, three years, five years, ten years, whatever you want to do. And along with that you can build out your projections, your balance sheet projections and basically go whichever direction management thinks it's going to go.

You're exactly right. I mean, that's a great point, is that this gets to be very complicated and the longer you go out, the less reliance you can typically put on those types of numbers. And again, just to reiterate, this is, if I understand the question, why we emphasize that if you're going to run those types of scenarios, running a static balance sheet alongside of it, is a very good practice. So that you can sort of see how your risk—how you're projecting your risk position could change as you move through time.

We also encourage institutions to try to measure, if you are doing these extended projections, to measure risk within each of those time buckets. In other words, measure risk one to twelve months, thirteen to twenty-four, that type of thing. So you can also see how your bank's risk profile is changing through time. It can be done, but you have to be very careful about how you structure it. You have to be very smart about it.

Tim Ward: This is Tim again. The question gets to the point of, what do we expect? And what we do not expect is this will become a compliance exercise. This is a way to measure and monitor risk, so that you can manage your activities going forward with knowledge of what might happen and how it has an impact on your institution. So if it becomes in any way, through the exam process or otherwise, a compliance exercise, then it failed. We're looking at risk management; how you measure, monitor and manage, and that's a really important aspect. And as Marshall said and the questioner asked, if you're two years out with a lot of uncertainty about assumptions and activity, the static approach - continue as is but the rates change on us, what would be the impact to help us manage that - is just as valid and just as important as trying to have a dynamic balance sheet after 12 months based on what you don't even know will happen.

So it can't become a compliance exercise. It has to be a way to look at your institution and think about the impact of changes going forward.



Rochester: Just to follow up, I appreciate that comment. Just to follow up, right now we've got EVE limits and we've got 12 month NII, and we actually do a 2 to 3 year forecast, but there's no limits around that. Do you—I mean, and we use it as a management tool, it's not a compliance tool at all. Do we need to have limits around that, the two to three year forecast?

Kerri Corn: No, we're trying to build in flexibility in this based on who you are, where you're taking risk, what you think is appropriate. So no, based on what you just described, you're fine. You have a measurement, call it whatever you want, it's a measurement for management, it's beyond the one year limit you've established, that's fine. You don't have to make that a limit.

Rochester: Perfect, thank you.

Kerri Corn: Yeah, the whole idea of going out two years is just looking around the corner. If there's something—what Tim mentioned, if you're going to take a position or you have a strategy, if you like the two year point on the yield curve, where are you building in assets or liabilities? If it's not captured in the one year, maybe it gets captured better in the next year out. So again, we're asking for you to take into account who you are, where you're doing business and then what's the best approach to measure the risk from that. It's really that simple. So explain who you are and put the measurement in place that really captures that best. If you can explain it to your examining team, you're good to go.

Operator: All right, and with that being said, the phone queue is empty at this time. So I will turn things back over to Mr. Ward.

Tim Ward: Okay, we'll give the callers who might have a question just another couple of minutes because we did allot plenty of time for questions. So if you do have one, please feel free to call in now. Otherwise, I'm going to start summarizing. I really appreciate everybody participating today. Clearly this is an important issue, given the rate environment that we're in. It's an important issue because of the changes that are impacting all of you at thrift institutions. Not knowing what the OCC expectations are.

The purpose of this call, the purpose of meeting with your supervisory office or your exam team, is to better understand the OCC supervisory expectations. So we hope this is a catalyst for more questions, more inquiries by thrifts with the exam team, so that you can get up to speed on what you need to do by March 31<sup>st</sup> of next year.

The transcript from today's call, both audio and written, will be available. We try to turn that around fairly quickly, so hopefully by the end of next week it will be out and published. And if you do have questions, please feel free to contact your supervisory office and reach out to them quickly and ask. We're happy to help in any way possible. I'll go back to Don to see if we have any late callers?

- Operator: Yes Tim, Brooklyn, New York is back in the queue with an additional question. So let's welcome them back. Gabriel's location, go ahead please.
- Brooklyn: Yes, first of all, two questions. I think someone mentioned about the whole model. I know there's THC decisions which we have been a part of as—as part of a group with—when the OTS was looking to try to expand—you know, better expand their model. We have had access to their website. Is that going to be continued with the OCC?
- Tim Ward: The OTS model and the—
- Brooklyn: No, the THC model. THC to say Tom Ho's website, which he had the ability to do certain types of—other types of interest rate risk profiles, not using OTS assumptions necessarily. Using market assumptions. Will that be still, I guess, available to institutions?
- Tim Ward: So what I was going to describe, is that with the OCC, after you file the December 31<sup>st</sup> schedule CMR and get the output from that, there will be no other access in through the old OTS channels. To the extent that Tom Ho Company or some other vendor provides add-ons to the OTS model that you would like to use, it would have to be your institution contacting that vendor directly. It would not be through the OCC.
- Brooklyn: Okay, and the other main question I have was, in terms of back testing, what is really the—what the OCC is really looking for in terms of back testing, at least in terms of its—when bringing the data to its Alco or to risk committee. Is it really just documenting where the differences are and understanding that there's no way we could really have changed our assumptions? It's just something that, you know, was, like, a one time thing that we could not have even thought of, and that's really the whole purpose of the back testing? Besides of course, if there are legitimate reasons, changes, you see oh wow, we assume this and this actually happened and now we understand why it did happen and we could use this going forward. What is the—assuming that's not the case, but really the first part where an assumption that would not be—you wouldn't have assumed, is the whole purpose here just to alert Alco what your findings were?

Marshall Osborne: Yeah, really what is—the way I think about back testing, is that if you read the documentation around model risk processes, if you're thinking about a non-maturity deposit model or a prepayment speed model, that type of thing, which is typically what we look at for back testing. But is that you put the model—you come up with the model, you put it into place. You validate it, and then you use back testing systems to test the accuracy of that model going forward.

You would typically have a tolerance level of just what you described. Things happen, but overall, the model sort of is performing within your expectations. If it starts deviating significantly from your expectations, that's when you need to go back and sort of reassess, do you need to go back and kind of dig further back into the model. That's more of the classic, scientific, statistical, back testing type of process.

We also see institutions, when we say back test, they talk about variance from—in other words, if you would project earnings at risk over a 12 month period, month by month. Then during that 12 month projection period, you sort of see what are the actual results and how does that vary from your original projections. And coming up with an attribution of, okay, this is what we projected, this is what actually happened. What was the—you know, what caused the key differences in the two? Yeah, volume and rate—you know, variance analysis, that type of thing.

Brooklyn: Okay, so that's—it's really—for that purpose, just to alert management of what really differences are. And so—and to maybe further discuss how we could have—how could we better the modelling process and so on. So that's really the purpose.

Marshall Osborne: Exactly.

Kerri Corn: Right, you're on target.

Marshall Osborne: Yeah, exactly.

Brooklyn: Perfect, okay, I understand that. Thank you.

Kerri Corn: Thanks.

Operator: All right Tim, that's it for the questions on this end.

Tim Ward: Okay, so with that, I don't have anything else to summarize. So I'm going to say thank you to everybody for participating today. We

really appreciate it, and we look forward to your questions going forward. So Don, I'll turn it back to you. Thank you very much.

Operator: All right, thank you Tim for your excellent job as moderator, and thanks to our panel for the excellent presentation and for the thoughtful response to the questions that we received today. That will conclude today's Supervisory Expectations for Interest Rate Risk Management Teleconference, brought to you by the Office of the Comptroller of the Currency. We thank you for joining us, hope you enjoy the rest of your day and you may disconnect now.

[End of Recording]