CDIAC Webinar Transcript
Discussion of Public Investment Products Current and Future:
What Are They and Are They Risky?
November 6, 2013

This webinar series focuses on investment products. Historically low interest rates and the decline of certain familiar investment products, including debt issued by government sponsored enterprises such as FannieMae and FreddieMac, present new challenges for public fund managers who must prioritize the safety of their investments over liquidity and yield. Recognizing the complex choices investors must make in this environment, this webinar considers the opportunities to use several alternative investment products, including covered bonds, 144A securities, Yankee bonds, certificates of deposit (CDs), supranationals, and index notes.

Slide 1 - Discussion of Public Investment Products Current and Future: What Are They and Are They Risky?

Mark Campbell: Welcome everyone this is Mark Campbell executive director of CDIAC. Thank you for joining us here. We have of great panel today to speak to you about investor products.

Over the near term we certainly recognized that the low markets rates out there have encouraged investors to seek out yield wherever they can. And with that we are seeing some innovative responses that offer some challenges when you take a look at risk return analysis. We will focus today on a discussion of some of those new products as well as some of the existing products and speak to you about where they do fit in a public portfolio.

With that I'm going to run down a few housekeeping items to make sure we have everything covered. Hopefully you are able to access our website where you will find the PowerPoint slides in print fashion. CDIAC has, hopefully you know at this point, is an independent commission within the State Treasurers Office and its focus is local government debt and investment portfolios. We offer education programs and our webinar series is new to that, and has been a successful option for us to focus on hot topics and current events.

I'm going to run down a couple of housekeeping items. On your right panel if you have questions, you'll notice that there is a control panel box marked questions. Feel free to send questions and comments through the webinar. We will either address them through the speakers or send you a written response. Captioning is provided during the program. You can click on the link in the chat section on the bottom of the control panel. Lastly, we have a certificate of attendance that you can receive via the registration portal. We will send an email notice to participants at the end of the webinar to make sure that you're aware of that.

Polling Question 1 (02:34)

Okay, let's start it with a couple of polling questions to give us and our speakers and idea of who is listening.

The first question, ask you: Which type of agency do you represent? Okay, state or federal, city, county, school district, special district and private sector.

Looks like the majority of the listeners are with city, 33% with county, 38% with city, 7% from state and federal, and 7% from private sector.

Polling Question 2 (03:36)

Next question: Are you directly involved in the management of your agencies investment portfolio? Simple yes no responses. Looks like certainly the overwhelming majority of our listeners are involved in their agencies investment decisions.

Polling Question 3 (04:01)

The last question focuses on some of the items that we're going to cover: Do you have any of the following products in your investment portfolio: Covered bonds, 144a securities or Yankee bonds, CDs or CDARs, Supranationals, Index notes or your option, none of the above?

The results are in. About 18% of the group investing in covered bonds or 144a securities or Yankee bonds. 50% with CDs or CDARs, 44% indicate none of the above. Thank you, that helps us get oriented to our audience.

Slide 2 - Discussion of Public Investment Products Current and Future: What Are They and Are They Risky? (05:00)

Now I will introduce our panelist and turn it over. Our moderator today is John Johnson, Investment Officer of the County of San Bernardino. He has been with the county for nine years: First as the Assistant Investment Officer, and then as Chief for the past five years. He is a Series 7 registered representative for the past fifteen years.

Deborah Higgins, president of Higgins Capital Management. She has worked with public agencies for twenty-nine years and is an active member of CACTTC, CMTA and CSMFO. She has served three terms on CDIAC's Technical Advisory Committee and continues to work with CDIAC on educational issues. In 2007 she was appointed to serve as a member of the investment advisory committee for the City of San Diego and continues to serve as a member of that committee.

Todd Cuppia, Director, Senior Agency Strategist with Stifel. He came over to Stifel as part of the acquisition of Ryan Beck and Company in January 2007, and serves as a fixed income strategist. As a member of the strategies team, Todd helps clients manage their investment portfolios by providing portfolio analysis, custom strategies and market insights. He is an author of the agency's *Strategies Update* which is a monthly publication covering market development, portfolio strategies, and relative value strategies in the agencies sector. Prior to joining Stifel, Todd worked with Ryan Beck and Company as the depository analyst in the financial institutions strategies group.

And Martin (Marty) Cassell is the CEO and chief investment officer with Chandler Asset Management. He is responsible for defining, planning, and directing the company programs. Martin heads implementation of the firm's investment strategies and portfolio risk management. He designed the proprietary quantitative models that drive Chandler's investment process, establishing duration, structure, and asset allocation throughout the client portfolios.

Marty joined Chandler in 1991 from the City of San Diego where he managed a $1 billion fixed income portfolio. His investment career began in 1987 managing portfolios at World Savings and Loan.

With that I will turn it over to John (JJ) Johnson, our moderator today.

Slide 4 – Introduction (07:45)

>> John (JJ) Johnson: Thank you Mark. Good morning and welcome everyone. Before we get started I'd like to thank Mark, and Linda Louie, and Sandra Kent with CDIAC for doing a great job putting this together. The State Treasurer's Office and CDIAC has been a very good partner to local government agencies and managers, managing public funds in California. They bring to bear a number of resources that are very valuable to us.

If you don't often look at their website, there are a lot of good tools and resources on the website that we can use to help us manage public funds here in California. In the presentation today there are hyperlinks embedded in some of the slides and you can click on those and that will take you to some issue briefs that are pertinent to the conversation that we will be having today about some of the discussed items. Most importantly, everyone on this phone call should have the most updated version of the local agency investment guidelines saved to their desktop. As a manager, it's an invaluable resource to me as I am trading, a lot of good information about the code and the 53601 and the banking requirements that we need to meet in that document.

So why are we having this webinar? Well safety, liquidity and yield. Since the credit crisis we have all been managing in an extraordinary difficult environment. Money market reform, Federal Reserve actions, capital requirements changing, and is pushing the funding out the curve. All of these things and others downgrades by the rating agencies have reduced the inventory of money market instruments that we need to use to meet our liability matching needs for our portfolio. It is simply very, very difficult to find inventory thirteen months and in. Of course we all know that the yields are dismal. Looking out the curve when we're attempting to invest excess liquidity in order to add yield to our portfolio we are competing with the Federal Reserve Bank of the USA every time we go to bid driving interest rates down and gobbling up inventory. A bigger picture issue that we have to address is what is going to happen with Freddie Mac and Fannie Mae going forward? The inventory is being gobbled up by the central banks. They are issuing less and less, and the future of those institutions is questionable. We don't even know if they are going to be here.

So we’re going to talk about a number of things during this webinar that will help us maybe put together strategies that we can bring to bear now to help us mitigate some of these challenges. There are some options that may be new to some of us that may help us add safety, liquidity and yield going forward.

Without further ado, I would like to do now is turn the presentation over to Debbie Higgins. She will give us a brief overview of 53601.

Slide 5 – Permissible Investments under CA Code 53601 (11:30)

>>> Debbie Higgins: Good morning everyone. Welcome to the presentation.

Slide 6 – Permissible Investments (11:40)

I just want you guys to know that this will be brief on what we're doing from a permissible investment standpoint. I am not going to be reading the definitions so don’t fret on that. We want to make sure that we go through them quickly and have a chance to get to the meat of the presentation.

Slide 7 – LAIG Allowable Investment Table (11:55)

Basically what I would like to do is follow the LAIG Allowable Investment Table, and I'm going to maybe hit on some of the high points. If you'll notice here maximum maturity, I'm not going to be going over what the maximum maturities are, or the percentages, or minimum quality requirements. You can pull that up directly at a different time and get a fill for whether it's a B.A. at 180 and forty percent of the portfolio. We just want to hit the highlights.

Slide 8 – Local Agency Bonds (12:30)

The first one is local agency bonds. These are bonds that you issued yourself. The big question is can you buy them, and the answer is yes you can buy your own debt. What you have to ask yourself is the conflict of interest, and make sure you are covering it properly. If you're buying your own debt you need to consider the fact that when you're issuing debt, your goal as the CFO is to get the lowest possible yield to pay. While when you put on your investing hat, your goal is to get the highest possible yield. With that type of conflict of interest, if you are going to buy it make sure you back up your decision with documentation on why you did so.

Slide 9 – U.S. Treasury Obligations (13:15)

U.S. Treasury Obligations - Of course, the U.S. Treasury issues T Bills, notes and bonds. We are considered still the number one safe haven and we will be until we aren't. During the shutdown a couple of months ago you had China crying and calling for the de-Americanization of the world. As we move forward we have to make sure we keep our house in order.

Slide 10 – State Obligations- CA (13:45)

State obligations from California -You can buy state debt. The state of California is currently rated A1 by Moody's and A by S&P and the outlook currently is stable by both.

Slide 11 – State Obligations – Other States (14:00)

You are able to also buy other states, and there are some advantages and disadvantages. What you need to make sure is that you're doing due diligence on these because there are very different laws for every state and it is difficult to keep up with what is happening in each state if you're investing. So if you are going to be buying a Pennsylvania or a Virginia, you need to know the laws and how they differ and whether you're in line with California code.

Slide 12 – CA Local Agency Obligations (Bonds, Notes, Warrants, etc.) (14:33)

>>Martin (Marty) Cassell: It is important to understand the bond holder rights in these other state bonds which would be in the indentures and as Debbie mentioned they can be very different for different states and issuing entities. For example, a claim on assets or restrictions on levying taxes to support the bonds may be different from state to state.

>>Debbie: Excellent. Thank you. Also, California local agency obligations, you can go in and buy different entities. For example, a certificate of participation is a type of financing where you share lease revenues. Variable rate demand notes are another local agency obligation where they borrow funds that are payable on demand. There are various different entities that you can buy. There's one thing I can say is during the crisis, we did have some agencies that had issued variable rate demand notes and during the 2008 crisis, these interest rate levels hiked up to double digits. Therefore they ended up going in and changing their investment policy to enable themselves to buy VRDN so they could offset the increase in interest cost to them.

Slide 13 – U.S. Agency Obligation (15:50)

US agency obligations - You're talking about federal agency or government (GSE) obligations. Of course, we all know that in 2008 Fannie Mae and Freddie Mack were taken over. The bipartisan committee is out there and they are encouraging private capital support for winding down Fannie and Freddie with some type of back drop from the U.S. government. The currently allowable GSEs are the Federal Farm Credit Bank (FFCB), the Federal Home Loan Bank (FHLB), the Federal Home Loan Mortgage Corp. (FHLMC), the Federal National Mortgage Association (FNMA), AID, which is the Agency for International Development, TVA, that's the Tennessee Valley Authority, and the Private Export Funding Corp (PEFCO).

Slide 14 – Allowable GSE Websites (16:38)

What I did was provide you with those websites so you can go onto each one and take a look at how they are structured and how their charter is. Examples like PEFCO, how it's backed by the U.S. government and how they are all structured.

Slide 15 – Banker's Acceptances (16:58)

You can buy bankers acceptances. One of the things that BA is actually used for is to finance international trade. It is issued by nonfinancial firm and is guaranteed by the bank to make payment. If you or I should ship large quantities of goods or services you want to make sure you get your money. This is a way that you can facilitate it and we can actually invest in those types of instruments.

Slide 16 – Commercial Paper (CP) – Selected Agencies (17:26)

Commercial paper – When it says "Selected Agencies' it's basically talking to you entities that do not pool your money. The thing to recognize on commercial paper is it's a short-term unsecured promissory note from the issuer to pay. The first line of defense is your standalone credit strength of that issuer. As JJ was saying earlier, there are a lot of problems after the 2008 crisis with short term instruments. The overall CP market is about one trillion since stabilizing in 2010. At one point we were close to almost two trillion. The market has contracted sharply, and one of the things you need to look at is due to balance sheet constraints we're seeing more and more CP paper that is being issued under 144a. The opinion of the panelist here today is that 144a is not a permissible investment. So be aware of that when you are looking at the short term market.

Slide 17 – CP- Other Agencies (18:31)

Again, CP other agencies is when, like a county, they pool their money. They have higher percentage requirements etc.

Slide 18 – Negotiable CDs (18:41)

Negotiable CDs – Basically that's where you negotiate with a bank your rate and your terms. It tells you how much you can do. It does not currently exceed thirty percent. Keep in mind that AB 279 is going to limit those percentages. We will take a look at this later. I think JJ is going to cover that.

Slide 19 – CD Placement Services (19:05)

CD Placement Service- Again AB 279 goes into effect January 14, 2014 and we will cover this later in the webinar.

Slide 20 – Repo/Reverse Agreements (19:15)

Repo/Reverse Repo - This is basically where either you have money and you get collateral for a term or you have collateral and you receive money. Repos are a key product for investors looking for liquidity or actually looking for specific security.

Slide 22 – Reverse Repo Conditions (19:35)

There are specific conditions that must be met in doing reverse repo, be aware of it. You can find that in the LAIG under pages 64 and 65. Securities lending, like repo, is a type of secured financing, and does allow portfolios, where you have a large for portfolio, allow you to lend your securities out with a low risk environment to enhance the yield on your portfolios with lending those securities out.

Slide 23 – Medium Term Notes (20:08)

Medium term notes – Corporate medium term notes thirty percent rated "a" or better. The key here and where some of the dynamics changes and how you can buy Yankee bonds etc., is that it's issued by the corporations organized and operating within the U.S. or by a depository institution licensed by the U.S., or any state and operating within the U.S. Here in lies some of the conflict.

Slide 24 – Mutual Funds and Money Market Funds (20:38)

Mutual funds and money market funds - You can do those. The biggest thing for me to tell individuals is to pay attention to how they are structured. Look at how they enhance their yields and if the funds' investments and maturities are in compliance with the CA Code. Or if your IP is more restrictive, they've actually got to make sure they don't do anything that you can't do in your investment policy if you're going to look at mutual funds and money market funds.

Slide 25 – Bond Proceeds Accounts (21:12)

Bond proceeds - When you do an underwritten deal, there is a legal document and that legal document usually has a permissible investment section. That's what dictates how you invest those monies, not 53601. In the last couple of years, I see where a lot of the legal documents basically states that bond proceeds can be invested like you would your general fund.

Slide 26 – Collateralized Bank Deposits (21:41)

Collateralized Bank Deposits - That is where you go to your local bank and they collateralize the CDs for you. The requirement is at 120%.

Slide 27 – Mortgage Pass-Through or Asset Backed Securities (22:05)

Mortgage Pass-Through or Asset Backed Securities - This is a pool of investments. The biggest thing here is as you're looking at asset backs, the sponsors of asset back securities (ABS) are the originators of the loans and the receivables, and the names of those originators can really affect the deal performance through how they select their assets and servicing. The issuer and the sponsor do not necessarily have to be the same, so from a rating standpoint there is some confusion as to what are you looking for in the rating, so make sure that you are looking at the sponsors rating as well if you're looking to invest in these securities.

There are various ABS issuers out there. You have home equity, credit card, auto loans, equipment, student loan and airplane receivables. A lot of different asset backs are available.

Slide 28 – Bank/ Time Deposits (22:49)

When your looking at bank time deposits, this is your FDIC insured deposits. The key here for me is there is a subject matter expert at the FDIC in the insurance division, and he does pick up the phone. He will answer any question if you're looking at these FDIC insured CDs, and whether you have different entities at a city or district that would allow you to buy more of the name. You can find it under FDIC with the link that I showed you.

Slide 29 – County Pooled Investment Funds (23:24)

County Pooled Investments – They do not have a maximum specified percent. There is no minimum quality requirement to invest. County pools all have oversight committees and they do post their results for you to take a look at.

Slide 30 – Joint Powers Authority Pool (23:37)

JPA - There are specific guidelines that they have to meet in order to be a JPA that you can invest in. Make sure that if you're looking at any type of pool, that they meet the requirement.

Slide 31 – LAIF (23:53)

You have LAIF, the voluntary program that was created by Statute. There are some of the highlights on LAIF. Again it is very liquid, and be aware of that when you are looking at some these new funds that are out there which have 6 day requirements, etc. Know what you're investing in.

Slide 32 – Voluntary Investment Program Fund (24:13)

There is a Voluntary Investment Program Fund where you can deposit up to 200 million. From what I understand there are no participants in this program at the time, but I did provide you with a link.

Slide 33 – Resources and Contact Info (24:24)

The resources I thought I would give to you. You've got the LAIG, as JJ said earlier, this is crucial. It is a wealth of information. Make sure that you go in search and find topics that will be helpful to you. You have the Performance of LAIF and FDIC. If you have questions you can contact me.

Slide 34 – Disclaimer (24:47)

That should do it. I will turn it over to Marty so we can get to the meat of the presentation.

Slide 35 – What Investment Strategies are Prudent in the Current Interest Rate Environment? (24:55)

>> Todd Cuppia: Thank you and good morning everyone. This is Todd Cuppia and I'm pleased to be part of today's discussion. I'd like to start by thanking the CDIAC for inviting me to participate in this webinar today. I plan to begin the first portion of my presentation today by providing an overview of prudent bond portfolio strategies in the current interest rate environment, and some practical considerations in navigating a market that is likely to be characterized by a less accommodative fed. This raises some important questions about how to position the portfolio, ahead of these changing dynamics.

Slide 37 – Treasury Curve Comparison (25.32)

So to begin, at the beginning sort of speak, one of the best sources of information we have on the markets view of the economics landscape and the outlook for the future is treasury market. It is important to consider what it suggests in that regard, as you implement investment strategies. I included a chart of the current yield curve in the presentation and it compares where we are today to the beginning of this year.

In looking at the graph, you can see at a glance that the market has significantly increased its expectation for the timing of the eventual rise in the short-term policy rate, and ultimately the terminal rate for fed funds. As an example, to begin the year, the five-year treasury traded for a yield of seventy-five basis points approximately. At that time the market expected that fed funds would rise from the current twelve basis points or so to around 1.75% over a five year period. When you average those numbers together you get approximately that seventy-five basis points yield. As of a few minutes ago, at a 1.33 on the five-year, the market has priced an increase in the funds rate from that same twelve basis points starting level to an ending fed funds rate of about 3% over that same rolling five-year timeframe. This is a pretty significant increase for expectations of future economic growth.

It is my opinion that the market is still a little ahead of itself on this particular measure, but a prudent portfolio manager would naturally be more cautious about investment selection and duration positioning in this environment.

Slide 38 – Portfolio Strategies (27:24)

This balancing act like many things is easy to understand but difficult to implement. If we are too cautious and keep the portfolio duration too low relative to how quickly rates may rise the portfolio will produce less income. If we keep duration too long the portfolio may become vulnerable to investment losses. To provide one example in how one might approach this question would be to consider two portfolios. I will try to keep this simple.

The first portfolio has one bond in it. It’s just a one year treasury bond that yields eleven basis points and carries duration of 0.94. The second portfolio has two bonds in it. 60% of it is in a three month treasury bill that has five basis points, and 40% of the portfolio is in a two-year treasury bond that yields thirty basis points. The take away I’m trying to drive at with this particular example is that both of these portfolios have identical duration. They have the same or nearly similar relationship to changes in interest rates.

The second portfolio that contains the two year bond actually yields five basis points more. The reason why I thought it would be useful to mention this as an example, is that when we think that rates are going to go higher, our natural first thought is to reduce duration. Reduce risk and stay on the front end of the yield curve to potentially re-invest at higher rates in the future. However, with rates still extremely low by historical standards, it's worthwhile to consider strategies that increase the income generated by the portfolio, like this example of analyzing a bullet portfolio vs. a barbell portfolio, all while maintaining the mindset for a defensive posture with how you allocate your investments.

For those of you who may be interested, attached to the recommended readings for this presentation and included as a hyperlink, is a study I ran that looked at how bond portfolios in the one to five year maturity range have actually performed over the last 30 years, including periods of major increases in interest rates. I won’t bore you with the details, but the analysis makes suggestions based on the data tailored to your potential investment time horizons. With that I will pass it to the next speaker, which is Marty.

Slide 39 – Diversification (30:00)

>> Marty: One of Todd's points was about diversification, and I want to really touch on that. Talking about how it really is inclusive of the three basic benefits of public agency investing of safety, liquidity and yield. From a safety standpoint it reduces risks associated with a single issuer industry or asset class. For liquidity, it’s diversifying across the maturity curve to improve for adequate maturities to meet your cash needs, as well as holding a significant portion of the

portfolio and highly marketable securities. It is also a very important aspect of creating a diversified portfolio.

Slide 40 – Diversification cont. (30:42)

The idea of diversification is to hold securities that have different characteristics. Even with agency securities such as the housing entities of Fannie and Freddie, they may behave differently than other agencies such as from TVA or Farm Credit. They have different underlying characteristics that make up the support of those bonds. Diversification is a risk management tool that can reduce the risk of portfolio, but cannot eliminate it. A variety of securities can help to reduce the volatility of a return.

Not all types of securities will see their yields move in the same direction at the same magnitude or at the same time. Todd illustrated that a bit with his bullet vs. barbell discussion that would tie into that as well. The idea of diversification is to create a portfolio with the best combination of risk and expected returns. That combination will likely be different for different investors.

Slide 41 – Diversification cont. (31:50)

We talked about reducing risk, what risk is reduced? Systematic or market risk cannot be diversified. Systematic risk impacts all securities. Think of it as an aggregate change in the marketplace. Idiosyncratic risk can be diversified; idiosyncratic risk is isolated to a single issuer or industry. For example, with Fannie and Freddie as far as an industry, they are very tied to the housing industry so they may behave differently than a TVA that is more related to the utility industry. Of course, single issuers have seen and experienced how different issuers behave differently under different circumstances formally referred to as a vet risk. Diversification can give a portfolio the potential to provide a greater level of safety and reduce volatility of returns.

Slide 42 – Diversification cont. (32:56)

A well-diversified portfolio has the potential to provide a greater level of safety and reduce the volatility of returns. With that I will give it back to Todd to continue.

Slide 44 – Supranational Bonds (33:15)

>> Todd: The next topic is on Supranationals. I will attempt to provide a basic background on this sector of the market, with an example issuer of World Bank, IBRD, which stands for International Bank for Reconstruction and Development. I will also discuss the similarities and differences between supranational issuers and the more widely known U.S. government sponsored enterprises of Fannie Mae and Freddie Mac.

Slide 45 – Supranational Bonds cont. (33:41)

You can see on the slide that I have an abbreviated table that shows some of the basic differences between the two. As you are aware, Fannie and Freddie have helped the U.S. government in its policy objective of supporting the residential housing market and increasing the availability of affordable mortgages to Americans. In contrast, supranationals like the World Bank, are backed by multiple governments, and have a far wider range of objectives centered around and improving the economic wellbeing of people around the world.

Slide 46 – Supranational Bonds- Example (34:16)

A worthwhile place to start on this topic is to highlight one particular supranational issuer and described it in some detail with some additional color to help in the evaluation of the value in their debt securities.

Slide 47 – Supranational Bonds- Example cont. (34:30)

The IBRD was created in 1944 immediately following World War II to help rebuild a European landscape that was destroyed by years of war. The first loans, named the IBRD were specifically for the reconstruction of Western Europe and later Japan. Later in the organizations history the focus for lending shifted towards the goal of reducing global poverty. Currently, about 30% of the institutions lending activities support the Latin American and Caribbean Markets, with another 30% supporting Europe and Central Asia, with much of the balance allocated to East Asia and the Pacific.

The World Bank is funded by 188 separate sovereign shareholders and has maintained an AAA rating for over fifty years, which is a remarkable feet in and of itself, and is headquartered in Washington D.C. Over this time frame they have never needed to make a capital call on their sovereign shareholders. As of their most recent balance sheet date, the World Bank had subscriptions for over 223 billion in capital which is comprised of paying capital and callable capital, which I will elaborate on in just a moment.

The largest shareholder is the United States which has around 16% of the total subscribed capital. Japan's interest represents approximately 9% with China, Germany and France and the United Kingdom, each representing approximately 5%. Due to the fact the organizations largest shareholder is the United States, it tends to be referred to in the market as a Washington supranational. Other similar Washington supra’s would be the International Finance Corporation (IFC), which provides investment and advisory services to build out the private sector into developing economies. Also, the Inter-American Development Bank aims to reduce poverty in Latin America and Caribbean countries.

One of the driving reasons why supranational issuers like the firms I just mentioned are gaining increasing investor attention is because of the need for many market participants to maintain portfolios of highly liquid assets of very high credit quality. We all aware of the current mandate for the reduction of the retained portfolios at Fannie Mae and Freddie Mac as a result of their conservatorship, and the language in the preferred stock purchase agreements, and the need for finding alternatives as those two firms will have a smaller footprint in the market going forward. Adding to the demand for this type of paper is the fact that supranational bonds are given a 0% risk weight to financial institutions. This might not seem relevant to this particular group, but it is in the sense that the new regulatory environment for banks will continue to increase demand for short maturity, high-credit quality paper. Which translates into increased liquidity in the market in the whole, as more potential buyers will be willing to buy this paper in the secondary market in the event that bonds would need to be sold prior to maturity.

Going back to my example with World Bank, they are AAA rated and have a very conservative balance sheet which is what drives the value of the name, again considering the United States as its largest shareholder. To be more specific, the total amount of direct loans that can be made by IBRD can't exceed its statutory lending limit, which means that its gearing ratio is capped at a 1 to 1 relationship when you include the callable capital. Currently IBRD has only used about 60% of this statutory lending limit, which speaks to the conservative nature of its financial obligation.

Loans made by the World Bank have never been written off and the organization benefits from being a preferred creditor in the market. The reason I'm being this specific about World Bank in this type of an overview format is to highlight the conservative nature of their financial obligations as a stand-alone credit, which is then also importantly supported by the callable capital of some the world's largest economies, with the United States at the center. This callable capital can only be used to satisfy debt holder claims. Members are responsible for the full amount of their subscription regardless of the other countries ability to pay. Because of these specific dynamics, an additional call for capital would only be needed if the balance sheet of the World Bank took exceptional losses, which seems extremely unlikely given the current structure of their obligations which is what is used to justify their consistent AAA rating.

Similar to how the market used Fannie Mae and Freddie Mac, many market participants assume that the largest shareholders of the World Bank would support it with additional capital in the event of extreme financial distress. But ultimately any recourse in that scenario would be the institution itself under New York law. Specifically, the notes of IBRD are direct unsecured obligations ranking pari passu with all its other unsecured and unsubordinated obligations, very importantly, not the obligation of any government specifically.

Slide 48 – Supranational Bonds- Example cont. (40:31)

Speaking of their securities, I've included a chart that shows just how strongly the market views the credit of the World Bank relative to the perception of Fannie Mae credit risks, specifically. This chart shows the historical yield of a five year Fannie Mae benchmark and a World Bank bond are nearly perfectly correlated over this time frame. In fact the correlation is 98%. I specifically chose a five-year bond to keep my comments relevant to this group. If I included longer-term maturities this high correlation would have held over the course of the financial crisis when any weakness in spread correlation would have been very noticeable.

Slide 49 – Supranational Bonds (41:20)

Because of all of these variables I've mentioned, liquidity and the supranational market is very high and bid offer spreads are very tight. I’ve included a table of how many bonds IBRD has outstanding by year. You can see how heavily weighted their obligations are on the very front end of the yield curve. For those of you have access to a Bloomberg terminal, there is a function called DDIS, as in debt distribution, that the screen was taken from. If you have the terminal you can click on any of the individual years to see bonds at exclusive level to see what might be available in the secondary market.

World Bank is also very active in the primary markets allowing investors to customize terms on reverse inquiry. Callable notes and structured notes are available typically. The last thing I want to mention to this group is how some other states look at supranationals in their investment codes. In my research I have identified at least seven states that allow investment in their sector specifically in their code. As a specific example, Colorado may invest in securities of the World Bank, which I've mentioned in some detail, the Inter-American Development Bank, the Asian Development Bank, and also the African Development Bank.

Slide 50 – Supranational Bonds – Additional Considerations (42:56)

So with that, I will transition from supranationals to the discussion on Covered bonds and Yankee bonds.

Slide 51 – Covered Bonds (43:08)

To start off with covered bonds, what are they? The best way to look at covered bonds is similar to a regular corporate bond but with the additional security that is provided by a bankruptcy remote pool of collateral that is pledged solely for the use of investors in covered bonds. Because of this extra protection, covered bonds are said to have what is called a dual recourse obligation. Buyers of covered bonds have a claim on the issuing institution just like any other corporate bond, but also that dual recourse in the cover pool in the event that the issuer is unable to meet its financial obligation. If there are remaining obligations to investors after any liquidation of the cover pool, the covered bond investors generally would rank pari passu to other senior unsecured obligations. This is the main difference between traditional senior unsecured corporate obligations and covered bonds. Typically the cover pool which is what provides you with that high level of insurance are backed by mortgages, high quality mortgages, or public sector loans that are held on the balance sheet of the financial institution that issues the bonds. The bonds are also typically issued under rule 144A which will be touched on later in the webinar.

In any event, covered bonds represent just one of the many tools that are utilized by financial institutions to fund their balance sheet. Because of the additional investor protection that covered bonds have, they tend to carry less yield in senior unsecured obligations issued from the same institution with the same maturity profile. Because of this they also tend to be AAA rated by the major rating agencies.

Adding to the safety feature that covered bonds enjoy is the fact that issuing institutions have the legal and contractual obligation to maintain the quality and over collateralization of the cover pool. If there are any maturing loans or any nonperforming loans in the collateral pool they are required to be replaced with performing collateral. This whole process is audited by the major auditing firms and is done with a high level of transparency. Investors in covered bonds can actively manage their exposure to credit risk. Most issuers of covered bonds maintain very detailed investor relations websites that have a lot of good information on their covered bond programs as a whole, and also the individual collateral details that comprise their covered pools. All this information is easily viewed by the general public.

Slide 52 – Yankee Bonds (46:04)

Lastly, to finish this section of the presentation, I will briefly touch on Yankee bonds. The presentation materials contain a hyperlink to a CDIAC report that discusses some of these points in greater detail. In general, Yankee bonds are dollar-denominated debt securities that are issued by non-domestic issuers in the United States. They can be issued by corporations or sovereign governments. I have included an example of Yankee Bonds that was issued by Toyota Motor Credit Corporation.

Slide 53 – Yankee Bonds cont. (46:43)

We of all heard of Toyota Motor Company and the cars that they make, but the company is incorporated in Japan which would preclude them as permissible investments. However, Toyota Motor Credit Corp., which handles the financing in the U.S. for Toyota and Lexus, is domiciled in the U.S. This means that it would be permissible under most circumstances. In this sense where there are potential nuances to be aware of when looking at eligibility requirements, local agencies must be able to determine whether these notes meet all the appropriate criteria prior to any investment in the securities. The document that I referenced that is available by hyperlink features a handy table with resources to aid in this determination, and I would encourage you to take the time to familiarize yourself with what it says. With that, I can pass it to the next speaker for the next section.

Slide 54 – Private Placement: 144a (47:45)

>> JJ: Marty before we go forward, some folks have chimed in with questions and comments concerning supranationals. Being that they are not currently specifically noted in 53601 for purchase. It is the opinion of the panel that currently 53601 does not allow for supranational purchases. However, there are some agencies that have defined supranational bonds, the notes, as medium term notes, and the discount notes as permissible under the definition of an agency or instrumentality. However, just to let everyone know there is a lot of discussion across the state about adding supranationals to 53601. They are available for purchase by pensions in California as well as the State Treasury and they are acceptable collateral to back bank deposits. Just thought I would throw that note in since there were a number of comments generated. Go ahead Marty.

>> Marty: It goes back to one of those gray areas in code. With regards to medium term notes, the thing to look at there is the organizing operated and who the entity is; being that it is owned by 188 different countries. I understand they are headquartered in New York and are under New York law, which is certainly favorable for it, but again it is not clear and that’s not the same situation for all the supranationals. Under the agency definition, I don't believe that they would qualify there because they're not specifically a GSE under that agency definition. Certainly, they have a lot of positive features and as the agency market is shrinking they may provide a very good investment alternative to government agency securities. Some clarification in code would certainly help and make investors feel more comfortable about that.

So I will move on unless there is any other comment about that to private placement 144a portion of the presentation.

Slide 55 – Private Placement: 144a (50:39)

CDIAC has a really good issue brief that they recently published, and on this page of the presentation there is that link 144a securities is a link to that issue brief, that I would encourage everyone to read. It is very helpful. Some important features to consider with 144a private placement securities is that they're not registered with the SEC. They do not have the same disclosure requirements that registered securities have, and because of those things, the lower liquidity limited buying universe for them. They may offer higher yields than registered securities. The only entities are permitted to buy 144a securities are specifically put forward in a definition under the SEC 144a rules. Those are called Qualified Institutional Buyers, or referred to as QIBS.

Slide 56– Private Placement: 144a (51:51)

There is a hot link to the SEC website or the copy of the definition from the SEC website as to who is a qualified institutional buyer. Generally they are large institutional organizations with at least 100 million in investable securities. In those definitions public agencies that invest for the benefit of their employees are pretty clearly defined in that rule. It's not so clear, and does not specifically call out, how the rule applies to entities that are not investing or public agencies entities that are not investing for the benefit of their employees.

Importantly, the QIB rule applies to the entity that would own the security and not who is making the transaction. For example, investment advisors are defined as QIBS; however, the entity that will own the securities is required to be a QIB as well. Even though investment advisors are called out there, it’s not the case that they could buy 144a paper for any one of their clients. The client itself or the underlying entity has to be a QIB.

Slide 57 – Private Placement: 144a cont. (53:19)

There are two primary instances brought to the SEC that have attempted to clarify the status of local agencies not investing for the benefit of its employees. One is the Alaska Sovereign Wealth Fund. It is discussed in the CDIAC brief, and here the SEC stated that although it is not organized as an entity, that it’s specifically listed, and they determined that it may be treated as a QIB. It is a specific ruling to them only.

The other main case or circumstance that has come up is with the Florida State Board of Administration and the states local agency investment pool that they ran. They repeatedly tried to get a similar opinion from the SEC, but the SEC never responded and never gave them that opinion. They turned to outside legal counsel for opinions from them and request for them to try to pursue that, and the outside legal counsels came to the conclusion that they were not a QIB under the current definition. They have proposed changes to the definition to specifically include that, and it has not occurred as of this time.

What happened is they purchased 144a paper that failed in 2009, and the SEC subpoenaed documents from the Florida Board. Eventually they dropped the investigation in 2010 with no action taken. Again, there was no conclusive information that investors can rely on to how the SEC would view public entities investing in private placement 144a paper. So ultimately an entity that is considering 144a paper really should get a legal opinion in order to at least have some confidence and reassurance that there would be no action taken by the SEC, particularly if something went wrong with that.

Debbie is going to follow and she has a couple of examples of 144a papers to review.

Slide 58 – What's the Difference? (55:45)

>> Debbie: Okay, what we wanted to do was to take a minute and take a look at two different entities that look pretty similar and then explain what you should look for when you are looking to invest and why it may not be a good idea. I basically found some BellSouth to April 2014 and some BellSouth to September 2014. But under securities information here in lies the key. Under the BellSouth that I am pointing to this is a private placement - U.S. Country, USD 144a, here is your rating. And then it's a billion dollar deal size. So I think this is where we are beginning to get- in the old days- these 144a were small deals, so it was pretty obvious that there might be liquidity constraints and concerns about the name. But when you have BellSouth issuing a billion 144a and then issuing a billion and a half regular global U.S. senior unsecured debts, then you start getting confused. There are a lot of entities that have gone to legal counsel and said, "Here's a billion and a half, a billion, why can't I buy this issue?" It becomes an opinion from your attorney.

Slide 59 – What's the Big Deal? (57:07)

As Marty was saying earlier there is a QIB list. The only place where public agencies are referenced is under plan, as in "pension plan" for the benefit of an employee. A general fund buying is not really in the benefit of the employee. I think the problem lies in what happens if something goes wrong.

For example, in Florida where they had several deals fail and then the SEC had no enforcement action against the entities that probably sold those to Florida. As a broker dealer, when you are coming to me and saying look at the BellSouth 144A and the underwritten deal, it does not qualify. And I know until something goes wrong it looks like a great deal, but then if you happen to buy an entity that's maybe issuing 350 and then there are problems, then we have to come back to whether it's a permissible investment and who's at fault. For me, if it looks like a duck, quacks like a duck, walks like a duck, it's a duck. That is the opinion that we have on the 144a that we have here. It's not a problem until it is a problem.

Slide 60 – AB 279 – Insured Deposits Offered Through Placement Services (58:33)

JJ will talk about AB 279.

>> JJ: Thank you Debbie. AB 279 was recently signed into law and is effective next year and makes changes to 53601.8 and 53635.8 which were the code sections that were added in 2006 to allow for the purchase of CDARs, which stands for Certificate of Deposit Accounts Registry service. There is a hyperlink on one of the slides to the CDIAC website issue brief on those, so I am not going to go into too great of detail on CDARs. But let me give you a little bit of background about how this came about.

After Lehman collapsed, the FDIC came out with a number of acronym programs to assist the banks in keeping deposits on the books. The temporary liquidity guarantee program and the transaction account guarantee program allowed for FDIC insurance on basically unlimited balances. Both of those programs have since expired. And although the large money center banks due to the flood of liquidity in the world, do not want money (other words in some cases are charging you to hold dollars in their banks), the local banks and the small regional banks that you may be doing business with, those deposits were important to them. And they were important to the local community in terms of bringing in deposits that maybe available for lending in your local area.

The market responded to the expiration of tag by creating products that instead were based on a pooling agreement that is administered by a placement agency that only uses CDs. They responded with a product that uses NOW accounts and DDA like deposits. It wasn't clear under the code that these products were available.

Slide 61 – AB 279 – Effective January 1, 2014 (01:01:15)

What does this do? Until January 1, 2017, there is an end date that we may or may not continue the program, but it removes the term certificate of deposit from those code sections and changes it to deposits. It also limits the amount of funds that an agency may place in anyone private sector entity that assists in the placement of deposits.

Slide 62 – AB 279 – Effective January 1, 2014 cont. (01:01:50)

Okay, it clarifies that other types of FDIC or NCUA (National Credit Union Association) insured deposits placed by a private sector placement service, are eligible for purchase under those code sections. It also limits – and this is a little tricky – it limits local agency investment to 10% of portfolio balance per private sector placement entity, other words, per vendor for non-CD placement deposit. These 279 deposits have more liquidity features, but they are subject to a 10% per private sector placement entity limitation. The law excludes CDARs from that 10%. It also limits the total investment to 30% of deposits placed by private sector placement entities.

Slide 63 – AB 279 – Effective January 1, 2014 cont. (01:02:58)

Okay, so what are the benefits? Well, safety. The rating agencies have chimed in and stated that the credit risk is to FDIC, so that is good, or in case of a credit union deposit, NCUA. That offers safety to local agencies who are concerned about whether they should go to the credit markets or look at a bank deposit.

This gives you the ability to invest in amounts over $250,000 like CDARs and gives you some additional liquidity benefits because instead of being backed by CDs, and having a stated term, they had better liquidity features, maybe six withdrawals a month, or a withdrawal available once a week, for example. They vary per vendor. To my knowledge, there are two active vendors operating in the state of California in marketing these programs.

Yield, the returns are competitive. If you're lucky you might be able to get thirty basis points on a one year deposit. If you're looking at treasuries and agencies you're looking at returns there much less. Some of these accounts are offering competitive returns. Yes it may be only fifteen to twenty-five basis points, but given the liquidity features this is attractive. And another advantage it may be placed with local selected depository institution. That’s the term that’s used in the code. That’s your local bank. You may be able to replace those deposits that you may have had to pull when the tag program expired.

Slide 64 – AB 279 – Effective January 1, 2014 cont. (01:04:53)

What are the risks? We talked about the credit risks being the FDIC, but there are administrative risks with these programs. This applies to CDARs as well as the AB 279 more liquid options. The administrative risks - risk that the placement service and selected depository institution does not simultaneously exchange the agency's funds, your deposits, with all the other participating banks to ensure that all of your deposit is 100% FDIC insured at all times.

Workout risk - when you enter into one of these agreements, your money is potentially being spread across the country. You need to have an understanding of what makes up your agencies deposits. How many institutions are being pooled to provide you with FDIC insurance, for example on your twenty million dollar deposit? There is a possibility that one or two or five of those institutions may get into trouble and go into receivership. Yes they're FDIC insured, but it may take some time for you to get your money back.

Also, there's duplication risk. What duplication risk refers to is that if you have multiple deposits with multiple vendors, you may not have 100% FDIC insurance on your entire deposit. Also, consider liquidity risk. There is an additional liquidity features being offered with the 279 eligible deposits. However, they are not liquid every day. If you're running a rated pool, rating agencies will consider this to be a liquidity limited product.

Slide 65 – AB 279 – Effective January 1, 2014 cont. (01:07:05)

Things to consider when you're using a deposit placement service: you must make sure that all of your exposure limits are not exceeded. Some of these are rather tricky. One thing alluded to earlier; Debbie mentioned that if you are purchasing Yankee CDs or negotiable CDs, which are marketable institutional products with secondary liquidity, a very different product, the code combines those purchases with the purchases of CDARs, so it may limit your ability to buy either. You need to be aware of that 30% limit is in combination with negotiable CDs and Yankee CDs that you may own.

All of the other bank deposit code sections apply. You need to make sure that your meeting your net worth and shareholder limits that apply under 53638 and any potential conflicts of interest under 53637. You may consider taking a very conservative approach and looking through just the local bank where you have your deposit, but through the participating banks that are making up the deposit if you have someone on your local board that is also on the board of directors at one of those participating banks. That could cause an issue, so you need to be aware of those things.

And also the Title 12 requirements under the 53635.2 Again, these are banking relationships that require additional back-office administration. You may need to set up ACH wiring agreements and so forth. There's a little bit of administration and due diligence that will need to be done with these accounts. The advantage again, is an additional liquidity option that we may have that will help us mitigate some of the loss of the short-term instruments that are in the money market realm under thirteen months.

At this time, I would like to turn the presentation back over to Todd and he will talk to us about floating-rate securities.

Slide 66 – Floating Rate Securities (01:09:41)

>> Todd: Thanks for that, and just before I get into floating rate securities, I'd like to loop back to a question that came into the panel about some additional information on supranationals. Specifically, what asset class would I suggest that they belong to as they sit between a sovereign issue, and an agent issue, and a corporate issue? It would be my opinion that they would sort of belong to a category that has yet to be defined. I wouldn't think that they are strictly an agency security because of the fact that there are number of different backers to a number of the supranational issuers. You couldn't classify them as corporate bond or a medium-term note program. So I would think logically, it would make some sense to categorize them into their own unique categories. That way it would not detract from portfolio allocations and those other sectors that have a lot of unique characteristics that make them attractive to this group, primarily the liquidity aspect of that market that I attempted to stress in my previous comments, as well as the high credit quality of those instruments that I tried to address in those previous comments. I just wanted to make sure that everyone was aware that these securities are not currently available for purchase under the 53601. JJ mentioned that there was a state wide discussion about adding these to code.

I wanted to address that quickly prior to jumping into my next set of slides which I will be speaking about floating-rate notes. What they are and what are some of things to be aware of when evaluating their suitability for the investment portfolio.

Slide 67 – Floating Rate Securities (01:12:02)

At the most basic level, a floating-rate bonds features a coupon payment that can change based upon movements in an index. The simplest example is a pure floating-rate bonds that resets at some predefined positive spread to an index, like Fed funds for instance, or three month libor, or one month libor, a similar index. These types of bonds are very common, and can be a nice short duration investment that allows the amount of coupon interest on the security to reset higher if interest rates increase. Not all floating-rate notes are this simple. Certainly you can make the case that the vast majority of floating-rate notes fall into the simple category where they're simply a very straightforward formula that defines what the coupon can be.

Based upon market convention there are limits that preclude the coupon from going below zero (i.e. having a zero coupon or a negative coupon). But as I said, not all floating-rates are this simple, and many would not be suitable investments for a variety of reasons. I will highlight one such investment as an example and some variables to look out for.

Slide 68 – Floating Rate Securities (01:13:47)

For this example I highlighted a range accrual bond. You can see the Bloomberg description with an arrow pointing to that label on the description page. So with this particular bond, if you were to click through to Bloomberg to the additional information tab, you could find the formula that defines the coupon. So this particular example pays a fixed-rate coupon of 4% in this case, but that 4% fixed-rate coupon is subject to three month libor staying below a certain level. So if you look on the description page you can see that it pays a 4% coupon subject to six month libor being below 4%. I have the arrow pointing to that feature on the page.

So importantly, what you need to consider when you looking at this bond is when this was issued a 4% coupon was significantly above where a more plain vanilla structure would print. Just like anything else there are additional risks that come with that potential return. The largest risk and most important risk to focus on is that if rates were to rise, and the index would stay above that 4% rate, the coupon on the bond would become zero. Quite literally the bond would have no return of interest. It would also be at the same time a very long-duration instrument.

If this were to happen, meaning that the range is broken, the coupon would become zero and the market value would likely drop dramatically in the market just simply because the bond is not providing any interest income whatsoever. It goes without saying that this situation would need to be avoided at all costs and these types of floating-rate notes would not be suitable for investment. This is just one particular example. There are others that you should probably be aware of as well as you look through potential investment alternatives.

This bond that I highlighted was a range accrual. There are other securities that are typically referred to as inverse floaters, so unlike the very simple floating-rate coupon that increases with interest rates; an inverse floater would do the exact opposite. You're compounding the potential for negative returns on bonds and there are number of examples from California's past about why you might want to try to avoid some of those more esoteric securities to get a potential above market return. When you look at the safety, liquidity and yield, these have the potential for a higher yield, but would be completely at odds with the other two more important considerations as you build your portfolio.

If you paid attention to the news today, you may have seen that there was an announcement from the treasury that they're going to begin to auction pure floating-rate bonds. They said that there would be ten to fifteen billion coming in January 2014 that would float at three month treasury bill average. This is a market that I think will likely grow in size considering that the treasury is out there issuing these types of bonds.

I think at this point the plan was to open up for questions.

Slide 71 – Questions (01:17:59)

>> JJ: Yes, this completes the slide presentations and we have about ten minutes left if anyone would like to ask a question to the panel, please type in that question and we'll ask the panel to answer. If we have more questions than we can answer, we will be able to get back to you at a later date.

>> Marty: I will go back to the supranational question for a moment and I would agree with Todd that it seems like a good opportunity to expand code under the safety, liquidity, and yield tenant. They have good transparency, highly rated, and they have a reasonably sized market. That really does make for a good opportunity for expansion of code and it seems logical that it would have its own asset category and not try to lump it in with agencies or corporates or one of the others. It has enough unique characteristics that its own asset category probably makes the most sense.

>> Mark: JJ, this is Mark again. I'm not seeing any other questions coming in at this time. Are there any other comments the panelist want to add or contribute to at this point? We're closely monitoring, we may have a question.

>>JJ: We do have a question. The question is where do you see libor rates going in the next ten years with way the U.S. economy currently is?

>> Todd: I will jump in and say that it is our view here at Stifel, and obviously this is an opinion, that the market is sort of gotten a little bit of head of itself in forecasting increases in libor. It would be our opinion, that that level stays a little bit lower for longer than is currently anticipated. To your point of how high that rate might ultimately go, the academic research and our research here at Stifel suggests that the equilibrium rate for Fed funds as a proxy for short-

term policy rates is probably in the 4% range over a longer term, and probably a little bit closer to 3 1/2 given the current realities. But as you might expect over the next ten years, you will see libor from the floor where it's at now, rise to maybe 3 or 4% over the next couple years with maybe the five or ten year part of that short-term rate would be a little bit less clear, and you will need to see a little more day that before I can give you an intelligent answer on that question.

>> JJ: Thank you Todd. The next test question is for you. The question is I have owned covered bonds in the past. However, most of what I see is issued by Canadian banks, backed by Canadian mortgages. Are there any covered bonds that are backed by American mortgages?

>> Todd: Currently I am not aware of any. I am aware of two issues and I think they both matured that were issued by United States domiciled banks. There was a Bank of America covered bonds and also a Washington Mutual covered bond that had was later assumed by J.P. Morgan when that deal happened a few years back. The word would be that the covered bond market is in its natient stages in the U.S. and we have all been talking about these different investment alternatives for the obvious elephant in the room. Fannie and Freddie are declining at the rate of 15% per year so all of these different alternatives are meant to sort of bridge that gap so to speak to the extent that the private market and mortgages start to generate steam as the economy improves. Covered bonds might be a reasonable outlet for mortgage issuers to securitize those assets. Currently I think the market is extremely small and is likely to grow over time.

>> JJ: Thank you Todd. The next question is for the entire panel. The question is recognizing that the county pool has a fiduciary duty to all of its participants; some bond counsels have opined that investing in the dead of one of the pools participant’s debt issues can be problematic. For example, one California County invests in private placements of several of its school districts; can anyone on the panel comment?

>> Marty: I guess it would point out there are two issues there. One is the 144a private placement issue that we talked about. The other is to refer to the issue paper that CDIAC did on buying one’s own municipal paper, which I think would apply in the case of the county buying the school district. The same issues there would apply and raises several questions of conflict of interest and intent.

>> Debbie: I agree. I think the key there is the different hats you’re wearing; an issuer trying to get the least costs and the investor trying to get the highest yield. If you can document it, why this particular deal works for you that is the only way I could look at that.

>> Marty: That could also create some political problems for the county especially if there are a number of school districts or entities in that county, in terms of fairness. Other words if you would buy one, you may be perceived to have to buy them all. As a manager it is your duty to

make sure that your following safety, liquidity and yield, making sure that the that you are buying the best available investments for your pool. And of course school districts or other agencies may be participants in the pool, as well as your buying their debt. Our pools are operating pools. Our main purpose is to pay bills and make sure that the funds are available when the entities need their funds.

>> JJ: Okay folks I do not see any other questions being posted. I think this has been a very educational and informative webinar. I want to thank everyone for participating, and again I would like to thank CDIAC for hosting. Hopefully this has brought up some questions about certain investments and again creates some discussion across the state and hopefully this is provided some folks with some good ideas on how to mitigate the challenges that we face in this market. Are there any other comments from the panel?

>> Debbie: I appreciate everybody's time.

>> Mark: JJ, this is Mark. I will close and thank you, Debbie, Marty and Todd for speaking today on our webinar. I want to again follow-up JJ's comments and refer all of those still listening to CDIACs website where the slides are available, as well as some of the associated publications both resources that CDIACs have produced, as well as some of those the speakers have offered.

With reference to upcoming webinars and seminars, we are putting together our 2014 educational program; we are expecting to do something on Swaps in January and on debt side, a topic that is near and dear to our interests, on disclosure. I want to make sure everybody is on the listserve. If not, go to the website and make sure you get signed up and you will get notice on our upcoming education programs, as well as our monthly publication *the debt line* which references publications and research publications that we have released. With that if there are no other comments, I want to thank everybody for participating and look forward to you being a part of our future education program. Thank you all.