

1/11/12 CDIAC Webinar Market Outlook 2012 Transcript

Slide 1 CDIAC Introduction Slides

I want to welcome everyone to CDIAC's Webinar, Municipal Market Outlook 2012. I am Mark Campbell the Executive Director of CDIAC

CDIAC has three basic programs: education which is what you are participating in today, our research unit, which provides research on debt and investment practices of local governments and, our data unit which has a database and collects debt issuance data from all public issuers as we are statutorily required to do.

Our webinar program that complements our classroom-based training, allows us to provide more topical discussions of municipal market finance issues and allow us to address the more technical aspects of market debt, administration and investment practices governments That being said, I am going to move very quickly into the presentation as we have got a lot of content to cover along with three excellent speakers with us today.

Slide 2

However, before I introduce the speakers, so let us cover some housekeeping issues. For those of you that have participated in webinars before and are familiar with the feedback the button on the top right hand of your screen's tool bar has a feedback button and allows you to provide feedback during the presentation with regards to the pace and volume and it also allows us to moderate the program. On the left-hand side of your screen at the top there is a question and answer function (Q&A) that provides you the participant an opportunity to direct questions directly to the speakers, although your questions will not be visible by other participants the speakers will try and address them in the flow of their presentation as much as possible. However, if they are not able to address it during the presentations, they will be handled at the end.

Slide 3-4

Let me introduce the speakers now. Chris Mier is the Chief Strategist and a Director of Loop Capital Analytical Services Division. Chris has been responsible for building two proprietary option valuation models, as well as an econometric model for forecasting SIFMA municipal bond volume and other variables of interest. He provides analytics and commentary on the economy monetary policy and a variety of public finance issues. Prior to joining Loop Capital Markets, Chris was an Institutional Portfolio Manager in the Municipal Bond Department at MFS Investment Management and Scudder Kemper Investments.

Slide 5

With Chris Miers is Cadmus Hicks. Mr. Hicks is a Managing Director of Nuveen Investments, where he serves as an investment strategist and supports the firm's municipal bond funds and accounts. He is responsible for analysis of the company's performance and reports on developments within the municipal market. Mr. Hicks has written extensively on a broad array of topics from, tax policy regarding municipal bonds, regulation of the municipal market, credit issues, attribution analysis, and investment strategies for individuals.

Slide 6

Finally, Joe Janczyk is the president of Empire Economics, where he focuses on providing economic advice to the public sector on real estate development. Over the past 25 years, Dr. Janczyk has prepared market absorption studies for more than 500 planned communities and businesses. These studies provide California counties, cities, school districts and others to finance over 12 billion in capital improvement projects.

So with those introductions, I am going to turn it over immediately to Chris as the first speaker.

Slide 1 Chris Mier's Presentation Slides 1-11

Mark, thank you very much for the introduction; hopefully everyone can hear me well. We are going to talk briefly about municipal volume, some of the unusual activities from last year and what we expect for 2012. We will also touch on the regulatory environment, valuation issues of municipal bonds, particularly as they relate to issuer problems and concerns. Then, we will cover market conditions, the registrant levels, credit cycles, and a couple overall concerns I have about the marketplace.

So once again, thanks CDIAC for the invitation to be here and we will forge right ahead here with our first slide.

Slide 2

With respect to volume, it is interesting that so often Congress will describe municipal bond volume as being something that's out of control. As indicated on this slide the blue lines here (blue columns) are in fact inflation-adjusted volume since 2001. You will notice that in 2011 inflation-adjusted volume was below 2001.

Now, if you look at the last typical year being 2010, the compounded annual growth rate of municipal volume was 2.7%. Now, that's actually at or slightly below the real growth rate trend of Gross Domestic Product (GDP). As we all know, and being in the industry there is not an explosion of municipal bond volume, nor is there by and large excessive leverage in the system, and we don't anticipate that will be the case going forward. We have a significantly lower volume than we had last year And the moderate growth that we expect to see, combined with some fairly significant infrastructure needs, tells me that the drop in volume in 2011, is likely to be short-lived.

Slide 3

In terms of what we see in volume we use our built up econometric forecasting model that we have used for six or seven years that focuses on quarterly tax receipts, 10 year treasury's , five-year ratios between municipal bonds and treasury's, and the 2-30 year treasury yield spreads. These are all very important variables in determining the volume of municipal issuance on a year going forward basis. This model that we built was accurate plus or minus 5% for the last seven year period.

Obviously, last year we were way wrong so what happened? There was a political huge fear factor, where many billions of bonds were pulled off the market as both elected officials and non-elected officials and staff decided to postpone infrastructure spending and infrastructure

financing. So these fears were caused by the political environment. The concerns about municipal credit and the criticism of the marketplace, which were a regular feature of CNBC and other media news sources. In addition, there were a few other smaller factors, like the reduction in funding volume of \$9 billion and there was the removal of the Build American Bond program (BAB's) in 2011. By and large, the big reduction we saw was purely a function of this political fear factor.

That being said, our number for 2012, is \$350 billion. Typically what we have seen more recently or until 2011, were \$400 billion, \$410, or \$420 billion, so this is a reduction in volume and what I am hearing from other folks in the market place is they are expecting around \$300 billion in volume for 2012. Although we think that number is a little bit too low, we are looking for \$350 billion and the reason relates to our next slide.

Slide 4

On this slide we are illustrating a new issue volume, on a three year moving average basis to smooth out the volatility. This is the big gap we saw in 2011.

We believe that because of things like what the American Society of Civil Engineers have said, with respect to US infrastructure needs, specifically that we are way behind in keeping up with the needs and are falling further behind and in this political dynamic we will have what we call a "decay" rate. We felt the full brunt of it in 2011; however we think that about half this dynamic will go away during 2012.

This is our forecast as seen here, moving back toward normal with about 50% of the remaining deficiency in the following year. We are kind of moving closer and closer to the wall by 50% increments. In three or four years, what you will find is your basically back to where you were before. Which we think is very appropriate to the volume of municipal bonds that is really needed to maintain existing infrastructure, plus put a dent in new infrastructure that is needed.

Slide 5

Regulatory issues have become the forefront in the marketplace for the last several years and that is certainly not going to change in 2012. In my opinion, what you are seeing is very aggressive attacks on tax exemption.

There have been a number of studies by the US Treasury Department and The Congressional Budget Office that consist of individual groups of staffers on congressional hill that have looked at the cost of the tax exemptions and there are not too many contingencies in favor of municipal bonds right now in Washington. This includes both on the Republican side and on the Democratic side of the political arena. So I think it is a very big concern in the marketplace. The estimated amount or the size of the estimation of the cost of the tax exemption (and Cadmus has actually written on this), is estimated between \$10 billion and \$30 billion on an annual basis. This is what the Congressional Budget Office and the U.S. Treasury say that the US government forgoes in tax collections from having tax-exempt municipal bonds.

Now, the interesting thing is we have some very big academics like Peturber from Massachusetts Institute of Technology (MIT), who is in charge of The National Bureau of

Economic Research weigh in on this number, which is at the lower end of the scale. Regardless of whose number you choose, the bottom line is these numbers or these assessments of the cost are in reality anywhere from a $\frac{1}{4}$ to $\frac{3}{4}$ of a percent of the annual budget. The budget is \$4 trillion a year, so even at 30 billion a year you are talking three quarters of one percent. Specifically my point is there's enough numbers out there so I am not going to provide another forecast of what the right number is, but I am going to say that I think it is a red herring, because the real argument is the value of the program in and of itself, and that at \$10 billion is de minimis and \$30 billion certainly is not enough to cause Congress to want to eliminate the tax exemption, if they fully value the benefits of the municipal bond market. In addition the Security & Exchange Commission (SEC) is looking at the timing and the content of issuer's disclosures, both in the primary and secondary markets. In the market we have a lot of financial advisory work being done by the SEC, and there are new requirements that are going to come on top of the financial advisory industry. There's also consideration of the repeal of the tower amendment, which prohibits the SEC and the Municipal Securities Rulemaking Board (MSRB) from requiring issuers to give them pre-sale documentation, like in the corporate bond market.

Now what does this all add up to? If you even ignore the tax-exempt threat, which is a big threat that adds up to additional costs for you issuers and some of the costs are going to be borne by broker-dealers because the supply of bonds that issuers provide to some degree is inelastic. Therefore, there is a cost shifting that can go on to where it will cost the issuer more money and it will cost the broker-dealer more money at a time when broker-dealers have already announced layoffs. So, this is not a great time for the industry and is something that we all should be very careful about and watch very closely.

Slide 6

We value municipal bonds based on five components. The reason we do that is because looking at one thing at a time really doesn't give you a good understanding of: Are municipal bonds cheap? Or are they rich? It is important for issuers and for buyers/investors to understand, what the evaluation metrics currently are.

On this slide on the upper left-hand chart, here you see a 10 year municipal bond and a 10 year treasury ratio. You see over here, that the 10 year municipal bond to treasury ratio is very high relative to certain recent experiences. Now, that would indicate cheapness on the municipal bond, but on the other hand the flight to quality really accounts for the richness of treasuries. The fact that municipal bonds appear to be cheap compared to treasuries is just because the treasuries are in this flight to quality, so to me, it is a statistic or metric right now that it has a little bit less validity than it normally does.

Moving to the right of the slide, which is my absolute favorite metric, is the 30 year municipal bond minus core Consumer Price Index (CPI) on a year-over-year basis. The basic premise is that investors should not buy municipal yields when inflation yields are significantly low in relationship to the long-run relationship to municipal yields. So as shown here is the average difference between the 20 year municipal yield and the year-over-year core CPI level. As indicated here is where we are right now and you will notice that we have only been down this low three times in the past indicating that this is a rare occurrence. Therefore, there is a concern that any retail demand is not going to be as strong in 2012, as it has been in the past because of this type of dynamic.

Moving over to the left-hand side of the slide, again we have a 10year municipal versus the corporate ratio. This is more of an institutional barometer and what it tells you is that municipal yields are very low in relationship to corporate yields. Again it is just another Barometer of richness and you can see we are richer than last we were in this general neighborhood in 2008.

The thing that we all have to worry about in this marketplace is competing products that would steal demand from municipal bonds and we are concerned. All of us think about liquidity and about issuer's capacity to sell their bonds when they need to sell their bonds.

Here we have the municipal yield that we subtract the S&P 500. If the ratio we compare it to, the S&P 500 dividend in the basic theory is that it represents a competitor to the municipal market. If dividend yields and their ratios are high that is a threat to the retail investment or purchasing of municipal bonds. So we look at this and we see that, yes in fact the ratio is low, however the S&P 500 dividends are attractive compared to municipal yields in a general sense. This could represent a threat to the municipal retail participation on new issue deals as we move through 2012.

The final graph illustrates the relation between municipal yields to mortgage rates. It is a cheap barometer and shows that municipal yields basically are above the 30 year mortgage rates. This implies that you can borrow a 30 year mortgage level and invest in municipal bonds profitably. Well the problem with that is that mortgage rates are being heavily and deliberately influenced by the Federal Reserve and that they are artificially low, so the symmetric once again doesn't have as much validity as it usually does.

Slide 7

That contributes to a viewpoint I have which is that there is a temporary window to finance. In essence a period of time where interest rates are low and, a time when liquidity is not great but is still fairly reasonable and there is some level of retail demand. We have seen a number of weeks in a row that retail increasing purchases of open-end mutual funds. Municipal yields have shared the same flight to quality phenomenon that the treasury market has had and if you start to see problems abate like in Europe and concerns about China and growth in that US, you could see roughly a 75 to 125 basis point selloff in municipal bonds fairly quickly. Note you can see how quickly we came down in the spring, when the economy was looking pretty weak and again you see how quickly we came down in the fall, when Europe started re-ignite once again. All of that can be reversed and I think it is a very attractive time for issuers to be issuing bonds.

Slide 8

Now where are we in the credit cycle? In my opinion the states have substantially gone through their credit cycle. We have gone from a systemic nature of the credit problem to a credit specific problem.

I am from the State of Illinois and although we certainly have serious issues within our state, there are also some serious issues in the State of California. By and large, most states have done a very good job of trying to enclose the pension problem and the budgetary problem,

and in general they have managed that relatively well although challenges remain. I think the focus in the municipal market particularly on the buyer side is going to be on local credits. Local level credits are the last to really get “hit in the jaw” with credit problems.

As you all know, finances really trickle downhill from the federal government, to the state government, and then to local governments. With real estate valuations being what they are, and kind of working their way into the property tax system, local governments are getting hit hard. Their cycle is later than the states and is more volatile than the therefore more likely to last longer than the states cycle. Unfortunately, I think one outcome of this is that you are going to see municipal bonds getting more media attention, as was the case in 2010, as there will be more local credit issues on CNBC and other places relative to the states focus that there had been in years past.

Slide 9

Market conditions, sometimes are good and sometimes not so good. What I want to show on this slide here is the volatility of the “bid wanted”. These are retail and institutional firms that sell through the “bid wanted” process in the secondary market. You can see on any given day there are wide swings, which indicates that customers or owners of municipal bonds have to go to the market to sell or purchase in ways that test the markets ability to provide the necessary liquidity. The amplitude is much less than during previous times but the one big concern to watch out for is the effects of downsizing among the large municipal broker-dealers. Will this affect municipal market liquidity? Some broker-dealers have already announced cutbacks, so will it make it more difficult in the marketplace for issuers to function and for institutional and retail investors.

Slide 10

Here are a couple of ominous threats as I wrap up my part of the presentation. Yields are low. This is certainly not a scientific thought process, but they could go lower. They are not going to go to zero or below. They are pretty low right now, at about three and half percent in the 30 year area, yet on the other hand we know how rapidly they can rise. We know they are benefiting from flights to quality from the treasury market and people are coming in and buying municipal bonds themselves because they are a higher quality asset category. I think the issue here is that yields are probably more likely to go up than they are to go down. However, I see greater than any recent year a threat from an alternative investment, such as dividend paying stocks. For example, you can get 5.6% dividend on Altria of Philip Morris stock that may not be your preferred stock purchase, but the point I am trying to make is that many stocks including General Electric (GE) are yielding higher than significantly long portions of municipal yield curve. GE dividend yield is 3.3%, which is higher than or as high as the AAA - 20 year on the Municipal Market Data (MMD) curve. In addition, dividends are taxed advantage like municipal bonds, not as much but they get the 15% rate. From a municipal perspective I am worried about this. I think it is important that we keep retail investors involved and it is equally important that we make sure retail investors understands the benefits of municipal bonds.

As I mentioned previously, I am concerned that there's going to be a flurry of bad news, such as Jefferson County, Central Falls (which is not in bankruptcy), Harrisburg where there is an ongoing issue, and new precedents established in some of these bankruptcies that we have

seen. I believe there is likely to be several more of these that crop up during the course of this year and the media will be tempted to say it is a trend, and of course bad news impacts markets and liquidity.

So, with that I will turn it over to the next speaker. Thank you so much for your attention.

Slide 11

Loop Capital Disclaimer

Our next speaker is Cadmus Hicks

Slide 1 Cadmus Hicks Presentation Slides 1-18

Welcome everyone today I want to cover two topics; the effects of the great recession on state and local governments, and the various proposals that were alluded to earlier by the previous speaker Chris Mier for limiting or eliminating the ability of state and local governments to issue tax-exempt debt.

Regarding, the credit conditions and the municipal market, I will specifically focus on those factors that cause differences in the performance of state and local economies, and the fiscal condition of state and local governments.

Slide 2

One of the differentiating factors was the composition of the labor force prior to the recession. Here on this slide we show the percentage of the labor force in the US and in three focus states, being California, Nevada and Florida as a percentage of the total labor force that was in the construction industry. We'll start with the percentages in June of 2005, which was before we had the decline in housing activity. Then, we look at what happened after the market bust in housing and we see that in June of 2005, in all three of the states that we focused on, had a higher percentage of the total labor force involved in construction, specifically residential home building. We also see in the case of two of three states, we have lower unemployment rates than the nation as a whole. Unfortunately, the one exception was the State of California. In addition, note that after the housing bubble burst, all three states had higher unemployment rates than the US average rate, and two of the states, California and Nevada had a lower proportion of their labor force working in the construction industry in 2011.

Slide 3

On this slide, the next differential I want you to note is the timing of changes and the effect of the recession on state revenues versus local revenues. In fact, you can see on this slide that in late 2008, and early 2009, as we look at quarterly tax receipts, and the year-over-year change in tax receipts for the states dropped sharply. However, during this same period local tax revenues indicated by the green line were continuing to rise.

Slide 4

One of the reasons and it is probably obvious to most people who participating in this webinar today, as to why there was this differential in the timing. States depend heavily on income taxes and state taxes which respond immediately to changes in consumer spending, changes in employment, and changes in capital gain and proprietor's income. Local governments on the other hand rely more on property taxes and property taxes that do not respond so quickly to changes in the economy because of the time it takes for property to be reassessed in value.

Many local governments in other states can increase the levy rates to compensate, to some extent, for the declines in property values and this difference in timing is one of the reasons why a common response of many states to the shortfalls in revenue, has been to increase the responsibilities of local governments. Furthermore, since the states were impacted first they were immediately trying to shift some of their fiscal problems onto local governments, which were still generally receiving healthy growth in their revenues. However, since the beginning of 2010, we can see local revenues have been pretty much stagnant, with state revenues finally starting to recover.

Now focusing here on this slide state revenues are a lot more volatile than changes in gross domestic product (GDP). You see that the gross domestic product is indicated by the green line, the total revenues of states from their major sources of taxes indicated by this blue line and the red line shows the revenue that states derived from the income tax. You can see that the income tax is especially a volatile source of revenue for the states and one of the reasons for this high volatility is that many states have the progressive income tax rate schedules so that those with higher levels of income pay a higher tax rate.

Slide 5

This slide shows data from the Internal Revenue Service (IRS) and depicts the change in tax revenue from different categories of taxpayer based on the adjusted gross income that they report. You can see higher levels of adjusted income correspond to sharp declines in overall tax revenues from this group in the calendar year 2007, (before the recession) and calendar year 2009, at the height of the recession bonuses, capital gains, dividend income, interest earned on bank deposits and proprietors income, all constituted a large proportion of the income of those who are especially affluent. These are all economically sensitive taxes and the greater the states reliance on income tax, and the higher the income taxpayers pay under progressive taxes, the greater the volatility of the state's revenue will likely be.

Slide 6

This next slide we now look at local tax revenue. Here you can see the line that represents the zero mark and note it really did not have a decline in year-over-year local tax revenues until we got to the first quarter of 2010. The blue dotted line in this graph represents house prices based on the Case-Shiller Home Price Index. Those prices peaked in April of 2006. The green line indicates the declines in general taxes of local governments, which was actually little bit more than three years after the peak in housing prices. And the purple line indicates the changes in property taxes.

Slide 7

On this slide, we look at how state and local tax revenues have compared over different periods of time. In the top two lines, we are looking at tax revenue in the most recent four quarters. These are the four quarters ending in September 2011, and how that compares to the four quarters ended in September 2010. As you can see state tax revenue is bouncing back rather nicely at 8.5% in total revenue, personal income tax once again more volatile up 13.2%, sales tax up 5%, but local tax revenue has kind of stagnated in the last year. It is actually down 3/10 of a percent. If we look at where revenues were two years ago, as the recession was just beginning, we see that the states have not yet caught up. The total revenues are down about 2% from where they were in the four quarters ended in September 2008. Local tax revenues as I have indicated before, has had a nice growth and actually they are still 9.3% higher than they were in 2008.

Slide 8

I would like to turn attention to the issue of the threats to tax exemption. There are various proposals out there for limiting or eliminating the issuance of tax exempt bonds which have been circulating over the last two years. Instead of trying to detail the individual proposals, I would like to note that they fall into four broad categories. The first is to eliminate the ability to issue tax-exempt bonds and provide no federal support to lower the borrowing costs of municipal issuers. The second is to let issuers sell taxable bonds that give the investor a credit on his or her federal income tax liability and regarding this, I will not say much because efforts to create tax credit bonds have been attempted several times and they have never really generated a good market and have been unsuccessful. The third, is to let issuers sell taxable bonds and have the government pay a subsidy to the issuers which is what happened with the Build America Bond Program (BAB's). The fourth, which was incorporated into President Obama's recent budget proposal, was to limit the tax benefit that taxpayers in higher tax brackets enjoy from owning tax-exempt municipal bonds. The motivation behind all four of these proposals is the theory that tax-exempt yields are higher relative to taxable yields than they would need to be, if all the holders of tax-exempt bonds were in the highest income tax brackets. The idea is that if tax-exempts are yielding 85% of taxable, which implies you breakeven if you are in the 15% bracket. However, you can have somebody taking the benefit of being in a 35% tax bracket and there are much more savings from the federal income tax to the taxpayer in the upper income bracket, then apparent savings to the municipal issuers, but I am going to dispute the logic behind this theory a little bit later. The three main points I would like to make as we talk about the threats to tax exemption are:

1. The federal government needs to collect a rather high rate on taxable municipal bonds in order to keep the cost of the subsidies or the cost of the tax credits from exceeding the benefits that would be received by the issuers.
2. When you hear about the various estimates of the tax expenditures that are associated with the use of tax exempt financing as Chris alluded to the range of estimates. You realize that those tax expenditures do not equate to higher federal tax revenues if tax exemption were eliminated going forward.
3. I think it is important to keep in mind that tax exempt bonds do not compete with fully taxable investments, but with tax deferred and tax-advantaged vehicles.

Thus, it's irrelevant to estimate how much money the federal government would receive if everyone who owned tax exempt bond instead held fully taxable bonds. Rather, we should be estimating how much the federal government would receive if these owners of tax-exempt bond switch to tax-deferred and tax-advantaged investments. When one adopts the latter

approach, the so-called inefficiencies of the tax-exempt market disappear.

Looking at the slide, I want to refer to the analysis that was done by the US Treasury Department in May of last year, where they looked at the experience of BABs, so this became sort of an experiment for them to draw conclusions from. They found the total number of BABs issued was \$181 billion and the average maturity of the BABs was 14 years, whereas the average maturity of tax-exempt bonds that were sold as part of the same issue, by the same issuers on the same date, was only about eight years. There is definitely a benefit to issuers to use BABs for longer maturities rather than shorter maturities, because in longer maturities the tax-exempt yields seem to be higher relative to tax yields. They concluded that on 30 year bonds, this is where you had the highest tax-exempt yields relative to taxable issuers of BABs. About 84 basis points (bp) were saved on average. Additionally, they found the average tax-exempt yield would have been 477, yet the average yield on the BABs 604, and after the federal subsidy of 35%, the net cost was just 393, which is where they saved the 84 bp.

Slide 9

We see on this graph which is where the US Treasury did their report from that the savings were greatest on the long end of the curve. In fact, when you get to the shorter maturities you find it was actually a negative savings. It was actually costing the issuers more than to issue BABs instead of the tax-exempt bonds. They did the analysis to show where the savings to the issuers was greatest.

Slide 10

They concluded that the issuers saved about \$20 billion in borrowing costs, the present value of all the savings over the future years. They made the statement that that these saving are considerably greater than the net cost to the federal government of the BABs program. Interestingly, throughout the report they don't actually give any estimate of the net cost to the federal government. They don't actually calculate what the net tax revenue the federal government received as a result of the issuance of these taxable bonds.

Slide 11

I thought, well what kind of tax revenue? What tax rate do they have to collect, in order for the savings of the issues on 30 year bonds to equal the net cost to the treasury. The tax rate I came up with was about 21%. So, they need to get a 21% effective tax rate on these taxable BAB securities.

Slide 12

You might think, will suppose they just lower the subsidy rate. Well if they just lower the subsidy rate from 35% to 28 or 15% that also lowers the savings to issuers. In order for the cost of the treasury to equal the savings of issuers, you still always need to get the 21% tax rate from the holders of the taxable BABs. Technically speaking, you might get it from people who used to hold tax-exempt, but are now holding taxable bonds or some other type of investment.

Slide 13

What is relevant is the study that was also referred to by Chris, was the study by James Porterba and Arturo Verdugo that looks at the actual investments that holders of tax-exempt bonds have and how have they allocated their investable assets? They found that they had 18% of their total investments in tax-exempt bonds and only 6% in taxable bonds. Now, the obvious conclusion is that if tax exemption were no longer available to the investor, it is not likely that they would increase the holding taxable bonds from 6% to 24% (18+6%). Just think in terms of the likely behavior of investors, you would not expect much tax revenue increasing as you would see them having more in tax-deferred investments and more in equities which of course are tax-advantaged investments than they have in taxable bonds. That's a fundamental issue that tax-exempt bonds are competing with these other categories of investments that have tax benefits, either deferral or some type of advantageous treatment such as dividends and capital gains.

Slide 14

Porterba and Verdugo said that if all these investors in a certain year bought taxable bonds instead of tax-exempt, federal revenues would be increased by about \$14 billion. If they went into equities, the federal revenues would be increased by about \$9 billion. If they went into investments that match the existing asset allocation, only about an \$8 billion increase in federal revenues. The key point is that the estimates of tax expenditures are not a statement of how much revenue the federal government really could expect to receive. For one thing, those estimates assume that all the existing municipal bonds suddenly became taxable. In other words, they are doing an analysis saying, if instead of issuing the tax-exempt bonds you originally issue them as taxable this is the revenue we'd be getting. Also, in that analysis they are assuming if you are issuing as taxable investments years ago, they would have had a higher interest rate. This is because they wouldn't have had the advantage of tax exemption. So, all these assumptions require you to restructure what happened historically, mitigate against taking the tax expenditures as an estimate of tax revenues, and you have to do it retroactively while retroactively increasing the interest rate on the municipal bonds. For that to happen, you have to assume that everyone who holds tax-exempt just bought a taxable bond in its place rather than going to some other type of investment.

Slide 15

We find that the actual ownership of corporate bonds, which are of course fully taxable, is largely dependent on investors. Institutional investors who are in a tax-advantaged position because they can defer taxes or have some other benefits like pension plans, life insurance companies, foreign investors. In fact, this is also the pattern that we saw when BABs were being issued. They were not being bought by retail investors, who previously held tax-exempt bonds, but they were going overseas or they were going into pension plans. Actually, if you look at the Congressional Budget Office's estimates of tax expenditures, one of the loopholes they would like to close is the benefit of life insurance tax treatment and annuities.

Slide 16

If we were to go to a world where only BABs could be sold and no tax-exempt bond, there would be a collateral benefit that we had with BABs that we would no longer have. This is

because BABs reduce the volume of tax-exempt bonds being sold. All tax-exempt issuers had some benefit because there was obviously less supply in the market so they had lower interest rates. You wouldn't have the kind of collateral benefit if we only had BABs.

Slide 17 & 18

This slide shows us the proposal by President Obama and in the interest of time I'm just going to mention the brief outline of his proposal, and the idea that the administration does not want people in high tax brackets to have an extraordinary benefit from the exclusion of municipal interest income from taxation. So, what they basically do is they have to calculate your regular tax liability, and then you add back the total amount of your deductions and exclusions to something called the adjustable tax income. When you've added back, you then will subtract your regular taxable income and you will subtract out only 28% of your deductions and exclusions. It makes it as if the taxpayer who might be in a 35% tax bracket is only going to get the benefit they would have if he or she were in a 28% bracket. In the rest of the slide we can see the individual numbers and calculations. The bottom line is for somebody in the 35% bracket, this rule would cause tax-exempt bonds to be effectively taxed at a 7% rate. The 7% rate is the difference between a 35% and the 28%. This is a different approach it doesn't eliminate tax exemption; it reduces the benefit of tax exemption for higher income taxpayers.

With that, I think it will turn it over to the next speaker, thank you for your participation.

Slide 1 - Joe Janczyk Presentation (Slides 1-19)

Hello. This is Joseph Janczyk with Empire Economics. I'm pleased to have this opportunity to share with you my perspective on the recent and expected economic conditions underlying local government bond issues with a focus on land secured and the general obligation bonds.

Slide 2

Our main theme is what are the prospects for your local economy? I will build on the prior presentations and then take it down specifically to your local area. We will see if the prospects are sunny, hazy or shadowy. What is an overall economic framework for evaluating the forthcoming real estate recovery? What economic metrics reflect the rate of recovery specifically for your local economy?

Slide 3

An overview of our topics are first what has been the primary economic factor underlying the housing price changes during the past 120 years. Next, how is the recent housing market bubble driven by financial factors an aberration from historical norms? What re-adjustments are now required? What are the near-term prospects for real estate recovery and housing price appreciation? Next, how does the timing of recovery for local economies vary? What economic metric can be used to gauge the specific economic conditions in your jurisdiction? Finally, what are the prospects for local municipal financings for 2012 with a focus on land secured and the general obligation bonds?

Slide 4

Our first question is what have been the primary economic factor underlying housing price changes during the past 120 years? What we have on the bottom of the graph are the time periods from 1890 to 2011. On the vertical part of the graph we have a benchmark for how prices have changed adjusting for inflation. The green rectangle within the graph shows the area where housing prices after adjustments for inflation are at equilibrium. Starting at the left hand side of the graph, we can see that the housing market was in equilibrium. Then when we get to the time period of World War I to World War II, housing prices were depressed for various reasons. Starting in 1945 and going forward we can see that housing prices adjusted for inflation remained at an equilibrium level. That is until the early 2000's when housing prices relative to their equilibrium benchmark more than doubled, with the index shown at the upper right at 200. This is what we have as a historically unprecedented event for housing prices adjusted for inflation that doubled in a very short time period. Following that was the price implosion and now we are back to the equilibrium level.

Slide 5

Topic two, how is the recent housing market bubble driven by financial factors an aberration from the historical norms and what readjustments are now required? On the bottom axis we have the time period from 2000 to 2011. On the vertical axis we have housing prices. Within the graph we have two sets of lines. Starting with the green line what we have is the representation of what housing prices should have actually done, if households had to document their incomes and use conventional financing techniques. The green line represents where housing prices should have been. When we look at the orange line, we can see starting at the left hand side of the graph, which is in line with where prices should be based on housing incomes. Then the divergences start and that shows the actual prices rose above where they should have been. The reason why we were able to go above the affordable levels is that households were qualified with undocumented incomes and using teaser rates. Once those artificial financing factors evaporated, we see the red dotted line with the housing prices imploding and now coming back to an equilibrium level. So currently, housing prices are affordable and mortgage rates are favorable, the key challenge we have is a high level of unemployment which doesn't give us enough demand.

Slide 6

The re-adjustments required due to the implosion of the housing price bubble means that we have to go from the artificial financing factors back to employment. So, first we have the enormous scope of the price bubble. We are talking about the purchase of a home, the largest expenditure of a household, where they use one third of annual income is for mortgage payments and the mortgage payments are made over a 30 year period. Impacted were purchases of new or existing homes, which were purchased at artificially high prices. Also impacted were homes that were not sold but were refinanced. Since the higher loan amounts were based on artificial equity. Following the arrow we see now that the market has been readjusted from artificial financing to employment. Homeowners with negative equity are having delinquencies and foreclosures. Many will lose their homes to homeowners that are employed and have sufficient incomes. So effectively, millions of decisions, perhaps tens of millions of decisions that were based upon these artificial financing factors are now being realigned to employment factors that are the historical norm.

Slide 7

Three, what are the near-term prospects for real estate recovery of housing price appreciation? This slide and the next two will put together a T graphic that will serve as our model for gauging the economic recovery in your local jurisdiction. In our graph here we have the time period of 1988- 2015, and on the vertical axis we have the change in housing prices from year to year. Starting on the left side we can see price appreciation in the late 1980's and declines during the recession of the early to mid-1990's. Then price appreciation returning and then price appreciation exploding to levels of 20% to 30% based on the price bubble. Following that we have significant price declines. Then shown by the caption, we have low interest rates and tax incentives that give us a short run blip, but then there's the readjustment that occurs. Then off to the far right is the normal adjustment factor.

Slide 8

The second part of the graph shows the same time period. On the bottom axis, on the right-hand side, we now have changes in employment. Changes year-by-year within the graph, we have three colors for our lines. The green color line means that employment based on the change for that year is now attaining a new aggregate peak level. We see that in the late 1980s, also the late 1990's and in the early to mid-2000 and finally out in 2015. When the line is red, it means that we are losing jobs and that there are job losses because of the recession. Then when the line is yellow that means that we are recovering the jobs that we lost during the recession.

Slide 9

We will then combine the two prior graphs to get the final graph here. On the bottom axis is the same time period 1988 to 2015. On a vertical axis, on the left-hand side is the change in housing prices. On the vertical axis, on the right-hand side is the change in employment. So within the graph, what we see on the left-hand side is in the late 80s, when employment growth was strong as shown by the green line, and price appreciation is shown by the bar was very significant even though mortgage rates at that time were some 10%. Moving to the right, the early to mid-1990's we see the economic recession and the red line accompanied by price declines. The blue bar goes below the zero axis and then we moved to the recovery. The yellow part of the line shows how prices stabilize and then begin to increase. Next, we have new peak levels of employment growth as shown by the green line and strong price appreciation. The next segment of the graph shows the early to middle 2000's. We have employment growth setting new peak levels, but not very strong employment growth relative to the amount of price appreciation of some 20 to 30% a year. The next segment we have the great recession with prices imploding and also a short run effect of the tax incentives for purchasing homes that dissipated once those went away. As we move to the far right, we see the yellow line showing a recovery of jobs and prices starting to move ahead. This model will serve for our analysis for your local area, as a framework as to what the recovery will be like over the next several years.

Slide 10

What are housing prices expected to be over the next five years? For that, we take a look at a consensus forecast. The consensus forecast represents 109 top-rated economists, real estate forecasters from investment banks and academic institutions. This here is the averaging of

the 109 forecast. For 2012, we expect prices to stay stable. 2013 prices to go up by 1.75%. Between 2014- 2016 price increases of about 3% and then starting in 2017 and beyond we have prices rises by 3.75% a year

Slide 11

This following graph shows an example of the consensus forecast.

Slide 12

Topic four, how does the timing of recoveries for local economies like yours vary? What economic metric can you use to gauge the economic conditions in your jurisdiction? An observation that we made since the summer of 2009, the city of Irvine in Orange County has had 15 new residential projects enter the marketplace and achieve sales of more than 1800 new homes. The question posed is, why is there such a strong level of demand for new homes in the city of Irvine despite the difficult times we are having nationally and for California? After a significant amount of research and numerous economic statistics the conclusion was that the primary metric for gauging vitality of the local economy is the city's unemployment rate. Specifically for a city with a relatively low unemployment rate its features are the following; a higher proportion of the city's population is employed, employment supports a strong level of housing demand, most of the households have positive equity levels and the value of raw land is positive which is beneficial to new development.

Slide 13

So let's look further at this metric and how it affects your particular local jurisdiction. On this graph, on the bottom we have different geographic areas and on the vertical axis we have the level of unemployment. Within the graph, we start with California, which has an unemployment rate of 11.3%. If we break down California by Orange County, we see that it has a relatively lower unemployment rate of 8.1%, whereas Riverside County has a somewhat higher unemployment rate of 12.8%. So within California, we see variations at the county level.

Slide 14

On this slide, we fill in for each of the counties various cities. So, starting at the left-hand side of the graph, we have Orange County with 8.1%. We see that certain areas like foothill Ranch, Irvine and Laguna Niguel have lower unemployment rates and other areas like Anaheim and Santa Anna have significantly higher unemployment rates. For Riverside County a similar pattern, with Temecula having a relatively low unemployment rate and other areas like San Jacinto and Homeland having relatively high unemployment rates. So, we see this great disparity of unemployment rates currently to take us beyond the overall average.

Slide 15

So, factors reflecting economic conditions for local economies, Empire Economics has provided a file to CDIAC with recent employment rates for all the cities in California. With this value, you can look up the unemployment rate for your city. Compare that rate to California's unemployment rate of 11.3%. Then compare that to the county you are in and to other cities in

the county. While I believe the unemployment rate is the best indicator, it is the typical caveat on the bottom that there could be other extenuating factors that override it. So please interpret it accordingly.

Slide 16

The final topic, what are the prospects for local municipal financings for 2012, with a focus on land secured and general obligation bonds. For land secured bonds, employment is going to be a driving force as we need more demand for homes at affordable prices with mortgage rates favorable. We need to have a higher level of demand and more people employed.

For outstanding bond issues, there is a strong potential for refinancing as you saw in the prior presentations. The potential is based upon the low rates that are in the market presently and the issues for qualifying for that depending on their call dates. For the sale of new bonds for existing CFD's, those have been primarily for projects with homes that have been built and occupied, so they are strong credits. For new Community Facilities District (CFD) formations that are now forming and want to sell their bonds in the next 2 to 4 years, and we see some of those in the coastal areas such as Orange County and San Francisco. Some very good news recently was a bond issue for the San Mateo area outside of San Francisco. The underwriter Stone & Youngberg LLC, was able to sell CFD bonds on completely undeveloped property with no vertical construction. We expected more issues like that to occur in those areas that have low unemployment rates. Next, we also see CFD's for services. Historically CFDs have been used primarily for infrastructure, but we are seeing an emerging trend were CFD'S are now being used to pay for services either for a project area or for citywide.

Slide 17

For general obligation bonds that depend on assessed values. The driving forces are price of appreciation and new developments. For existing properties, we have the annual escalator of 2% a year. We have resale's that have a higher assessed value (AV). The pre-bubble properties have a very significant jump in their AV, when they are resold. The bubble properties and post bubble properties because there's assessed values have already been adjusted have only a minimal change. For properties that are not resold, we have the potential for property upward adjustments. New development that's great, it creates additional value for new infrastructure and new construction activity.

Slide 18

Concluding remarks, the housing market is now readjusting from the price bubble that was driven by artificial financing factors to employment growth as the primary factor underlying housing price changes. In addition, California as a whole is in an adjustment process that will take several years due to the economic recession, high unemployment along with high levels of shadow inventory. During this adjustment period prices will be stable, soft and the amount of new development will be relatively low. The rates of recovery will vary substantially by cities, since each has its own unique set of factors, the composition of its economic base, whether it's a manufacturing services, the amount of shadow inventory from its own price bubble. Finally, to gauge the relative rate of recovery in your local economy a useful metric is the unemployment rate. Since this synthesizes the specific economic conditions in your jurisdiction. Please refer to the excel file for more information on the recent unemployment

rates in your city that is made available on CDIAC's website.

Slide 19

Finally, I will leave this slide with you for your entertainment. On the left-hand side are six quotes. Three of them were made before the Great Depression and three of them were made before the recent great recession. On the right-hand side are the people who made those. See if you can match these up. It's quite an interesting process to look at the thoughts before the great depression and the thoughts before the great recession and see what we've learned about the economy and financial markets since then.

Thank you. That concludes my presentation.

I want to thank Chris, Cadmus and Joe for their presentations. I think we have one question posed to Joe. Joe, if you can't access it I will read it for you.

Question:

Is how much does size matter when looking to refund a CFD bond in the current market?

I'm an economist, not an investment banker. So it would be best to refer that to an investment banker, but I believe typically the size of the bond issue is normally two or three million or higher.

Question:

The second part of the question was the typical minimum coupon reduction where it makes sense to refund a CFD bond in the current market?

Again I am not an investment banker, but what I understand is the most critical factor for looking at a refund would be some call dates on the existing outstanding bonds.

We have a few more minutes, if any of the listeners want to pose a question for the speakers we can take that now. In the meantime, I'm going to make mention of an upcoming webinar that CDIAC will host on February 15. It is an investment focused webinar titled Duration Calculation: What does it matter to you? We will give a few more minutes here before the close of the webinar to allow questions to come in.

Question:

We've got a question on how to obtain the Empire economics file? We have got that information available through Joe and have made it available on our website. Also, I want to make mention of the fact that we are going to mail out surveys today to all those listening. We ask you to fill those out and give us direction on how to improve our webinar programming, in addition to any technical problems that you may have experienced in this process. If you need a certificate of attendance please e-mail us at CDIAC_Education@treasurer.ca.gov and we will get that out to you. Our classroom-based training program has a new schedule has been posted to the website for the spring. I encourage you to take a look at that.

I don't see any other questions at this point. So again I want to thank Chris, Cadmus and Joe

for their presentations. This is our first opportunity to do something like an economic forecast and I enjoyed the presentations and the experience here.

Mark thank you so much for the opportunity.

Thank you, Mark.

All right we will close out the webinar now. Thank you for your participation.