GIOA Update

Spring 2014

NEWS *from the* GOVERNMENT INVESTMENT OFFICERS ASSOCIATION

"If you build it, He will come."

Field of Dreams, 1989

LAURA B. GLENN, CFA, STATE OF GEORGIA

Over ten years ago, Rick Phillips had a dream of building an organization that's purpose was designing a conference around issues that were of concern to government investment officers. After talks with Wall Street firms and putting some of his own money at risk, the Government Investment Officers Association, or GIOA, was formed. The first conference was held in Las Vegas in 2005 with 150 attendees. I was present at the first conference which included topics such as agency callable bonds, the politics of public funds and a keynote lunch by Rick Santelli of CNBC. The first conference was a huge success! Build it, Rick Phillips did... and people now come from all over the country to attend each year. At this year's 10th conference, there were over 400 attendees representing state and local governments as well as regional and primary dealers. Rick and the rest of the board could not have done this without the support of our sponsors each year. A big Thank You to those firms that have partnered with us, many from the very beginning, to grow GIOA!

Build it, Rick Phillips did... and people now come from all over the country to attend [the GIOA Conference] **each year.**

Maurine Day – the oil to the machine we call GIOA. Her attention to every detail is the reason many of you say "this is the best conference I attend each year." Maurine does all the leg work of finding a spot for our conference each year and plans all the lunches, snacks and evening parties. The outdoor events are most attendees' favorites – it's quite nice to socialize with your peers in the fresh air of Las Vegas!

I also must give a shout out to all our presenters who have both educated and informed us over the years on the issues that matter most! Thank

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you for the time you put into your presentations to provide both timely and relevant information. A recent presenter even took the time to share his musical talent with us – who knew repo and Elvis had so much in common!

As we look to the 2015 conference (yes Maurine has already started the initial leg work!), I am excited about what lies ahead under the direction of our new president Mary Christine Jackman. I know Mary Christine is going to be an amazing leader for GIOA as we tackle issues such as money market fund reform and its' effects on LGIPs as well as the municipal advisor rule. And who knows, maybe even rising rates?

I have had both the honor and pleasure of serving as president of GIOA for the last 5 years. I have enjoyed this opportunity and I'm excited to take on the role of membership to continue to grow GIOA – hoping to get a few more folks from the South, Midwest and the Northeast! As a grassroots organization, I hope we all continue to build on the success of GIOA. Spread the word and see you in 2015!

The 11th Annual GIOA Conference will be held March 11-13, 2015 at the Monte Carlo Resort & Casino in Las Vegas, Nevada.

More information coming soon!

Addendum to GIOA 2014 Pre-conference presentation of "Repos/Counterparty Analysis"

KELLIE CRAINE, CITY OF SEATTLE

On page 4 of the presentation I brought up the issue of haircuts for the collateral underlying repo transactions. I suggested members consider increasing haircuts during times of market volatility. In the midst of the 2008 financial crisis, I witnessed dealers increasing haircuts for non-US Treasury collateral. If the Street makes a distinction between types of collateral, then we need to as well. While 102% overcollateralization appears standard, this haircut amount is not set in stone and may not be sufficient during another crisis.

Thanks to David Attanasio, from RBC Capital Markets, for pointing out that Bilateral Repo (meaning the investor settles DVP) provides much more flexibility for the investor to increase haircuts during periods of strife. With bilateral repo you can set your haircut the morning you enter your repo transaction and set other trade stipulations ("stips") if you feel the need; however, if it's a strong counterparty, you may have to accept a lower repo rate to use your stips. And a shout out to Erwin Williams from Wells Fargo Securities for walking me through various scenarios where higher haircuts are typically the norm.

Tri-party repo involves a third-party custodian and requires a pre-established schedule of "Eligible Securities" with pre-set haircuts an investor has chosen ahead of time for each asset type. If an investor decides to increase haircuts, the Tri-party "Schedule of Eligible Securities" must be updated to reflect the increased haircut amounts and signed by all involved parties. This takes time and is cumbersome.

Interestingly, subsequent to the 2008 Crisis, there has been a great deal of empirical research into the use of haircuts in the bilateral repo market versus the Tri-party repo market. The researchers found a great deal of evidence that haircuts increased significantly during the Crisis for bilateral repos, particularly those backed by non-traditional collateral (such as agency MBS and triple-A-rated securitized sub-prime debt structured as CLOs, CDOs, etc.). This makes sense because trade stips for bilateral repo can be made on the fly. The investor has the flexibility to adjust their haircuts for counterparty and/or collateral risk at the time of initiating the repo transactions. The bilateral repo market concerned the Fed because increasing haircuts became so onerous as to lock weakening counterparties out of the market.

Researchers found haircuts for Tri-party repo changed very little during the Crisis.

Researchers found haircuts for Tri-party repo changed very little during the Crisis. Instead, investors would just close out repo positions altogether if they became uncomfortable with a counterparty. In one paper I read, the researchers were mystified by the stable haircuts for Tri-party repo throughout the Crisis. I don't find it surprising at all. Very few investors want to take the time to revise a contract, much less during extreme market volatility when life becomes more stressful and uncertain. Either you like your counterparty or you don't. The Tri-party repo market gave the Fed indigestion, in part because when perception of a potential counterparty turned negative, Tri-party repo investors swiftly closed out of their positions and suspect counterparties were locked out of the market.

Both repo structures can result in the Fed's worst-case scenario of a "fire sale" – a counterparty failing because

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it has been abandoned by investors. And once the counterparty has been abandoned any remaining investors will stampede toward the exits to liquidate collateral as quickly as possible. If we should find ourselves in a fire sale, you will need much larger haircuts because bids could dissipate quickly, even for good collateral.

So what are appropriate haircuts?

It depends. Are you doing Tri-party, or bilateral repo? Are you doing overnight repo, or term? Are you using "traditional" collateral – such as treasuries and agency bullets with maturities within five-years? Or "non-traditional" collateral like corporate bonds, agency pass-throughs or cmos, or commercial paper? Here are some guidelines to consider and discuss with your broker-dealers:

- For Tri-party repo, take advantage of the "Schedule of Eligible Securities" to establish solid trade stipulations and haircuts at the time you establish your contract. For example, perhaps begin with more conservative haircuts than the generic 102%:
  - On-the-run Treasuries 102%.
  - Off-the-run Treasuries 103%.
  - Agency bullet collateral with maturities inside of five years 102.5% - 103%, longer than five years 103% - 104%.
  - Callable agencies with final maturities inside of five years 103.5% - 104%, longer maturities 105%, depending upon call structure and complexity.
  - Agency MBS pass-throughs 103% - 105% depending upon the type of collateral (15-year, 30-year are more traditional versus less traditional ARM collateral).
  - For Agency CMO stipulate type and set an appropriate haircut. For example, 105% for a PAC & other scheduled bonds.
  - If you term out your repo beyond one-month, add an extra point to your haircut for each successive monthly increase in the term of your repo. For example:
    - 30-day Tri-party backed by on-the-run Treasuries could have a haircut of 102%, 60-days 103%, 90-days 104%, 120-days 105%.
  - For term Tri-party repo the third-party custodian will manage the daily margin mark-to-market for you.
- For overnight bilateral repo consider stipulating max maturities and setting the following haircuts:
  - Treasuries & Agencies 102% - 103% with maturities less than five years.
  - Agency MBS pass-throughs 103% - 105% for 15- & 30-year fixed rate collateral
- For "term" bilateral repo increase your haircut by a point for every month of extension as in the above example for Tri-party term repo.
  - Note: **"bilateral" term-repo requires daily margin calls** to ensure sufficient collateral for daily mark-to-market. If you don't have the resources to call daily margin, then you may want to set higher haircuts at the outset in case there is unexpected volatility before the next time you mark-to-market your collateral.

There is not a right or wrong amount of collateral. And the above examples don't address risk of your counterparty. Whatever stips you decide upon, ensure the same haircuts apply for your securities lending program. Securities lending custodians may grumble over tightened stips for the repo you allow them to do because it will lower the fees they collect. Too bad. Only you have the best interest in protecting your portfolio from interest rate and counterparty credit risk.

We engage with Wall Street every day, so the more we trade the way they do, the better protected we'll be. Good luck out there!

Money Markets: Economic Uncertainty, Fed Insights, and New Treasury Supply

NANCY PRIOR, PRESIDENT, FIXED INCOME, FIDELITY INVESTMENTS
MICHAEL MORIN, CFA, DIRECTOR OF INSTITUTIONAL PORTFOLIO MANAGEMENT, FIDELITY INVESTMENTS
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"Frozenomics" or a deeper trend?

Concerns about the economy's health, insights into future Federal Reserve Board policy, and opportunities stemming from new Treasury supply influenced money market activity in February. The economy's true strength has become a focal point for both the Federal Reserve (Fed) and investors, after both January and February data came in weaker than expected. The heart of the discussion centers on whether the economy's weaker showing was "frozenomics" (i.e., weather-related) or an indication that the economy is indeed slowing. While always of strong interest to investors, information related to the labor and housing markets, as well as consumer activity, has taken on even greater importance.

Are the weaker-than-expected January and February economic data a reflection of "frozenomics" or a more substantial slowdown?

Global issues added to investors' concerns—with ongoing currency depreciation and capital outflows within certain emerging-market countries, and political upheaval in the Ukraine, leading the list of concerns. Emerging-market issues remained confined to certain countries rather than becoming widespread but have fueled volatility in U.S. financial markets.

The Fed: steady policy, barring significant changes in economy

Fed members made it clear that they would closely monitor economic developments. January's Federal Open Market Committee (FOMC) meeting minutes and Fed Chair Yellen's testimony before Congress reiterated that while not preset, the current pace of tapering would continue unless significant changes occurred in the Fed's economic outlook. In particular, the Fed was focused on the labor markets and inflation, as well as the effectiveness and cost of quantitative easing. Present policy calls for the Fed to reduce its combined purchases of longer-term U.S. Treasury and government agency mortgage-backed securities by $10 billion per meeting.

A statement by Chair Yellen provided new insight with respect to forward guidance. She noted that qualitative factors would also be used in evaluating the labor market and economy, acknowledging that the unemployment rate did not seem to accurately reflect the overall health of the labor market. The January FOMC minutes enhanced forward guidance with a discussion that put two hawkish FOMC members on record as saying they thought the Fed should move off its zero-interest-rate policy as early as the middle of 2015.

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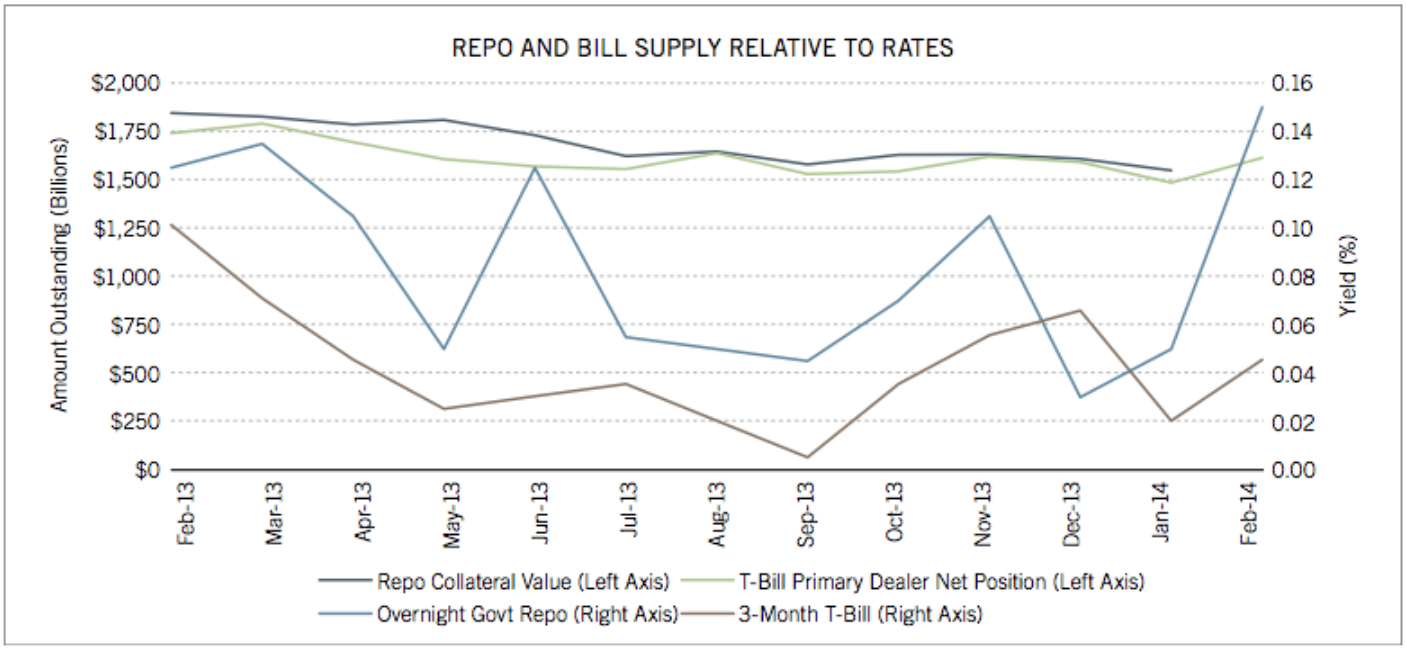
EXHIBIT 1: Diminishing repo supply offsets temporary increase in bill issuance.



Source: Bloomberg and Federal Reserve Bank of New York, as of Feb. 28, 2014. (Repo collateral value as of Jan. 31 2014.)

The Fed continues to taper at its current pace and states that while the level of tapering is not preset, significant changes would need to occur before adjustments are made; qualitative factors will also be considered to help accurately gauge the economy's strength.

Political agreement, new supply

An approaching federal debt limit was another influence on money markets, though the unusual lack of a standoff made the looming deadline a nonevent for market participants. In contrast to prior negotiations, Congress demonstrated political cooperation in February and agreed to suspend the federal debt ceiling, a move that allowed the Treasury to take care of heavy seasonal budget needs. The size of three- and six-month Treasury bill auctions were increased significantly, and the Treasury was also able to fund an anticipated seasonal cash shortage with cash management bills (CMBs).

A short-term debt tool, CMBs are often used at this time of year to accommodate the government's increased cash needs that result from early tax refunds.

The new supply reversed prior conditions in the Treasury bill market. Leading up to the debt-ceiling deadline, the Treasury dramatically cut the size of upcoming auctions to manage its remaining debt capacity. Conditions reversed when the debt ceiling was suspended. In addition to the CMBs, the Treasury auctioned record levels of three- and six-month Treasury bills to make up for the earlier reductions. With the new plentiful supply, yields took a short-lived surge higher (see Exhibit 1, above).

Unusually heavy Treasury bill issuance offered a brief trading opportunity but failed to push repo rates higher.

Spike in rates only temporary

Money market rates, including repurchase agreement (repo) rates rose higher, but the increase was short-lived.[1] Despite the boost in supply, repo rates returned to lower levels within a few days, surprising many. Investors had expected that dealers would have a large supply of collateral from the month's Treasury issuance that would be funded using the repo market. However, the supply of collateral in

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that market was contained and the amount of available cash was sufficient to return rates back to the low- to mid-single-digits. The repo market has shrunk over the past several quarters, as a result of the onset of financial deleveraging, bank regulatory reform, and lighter demand from low rates.

The Federal Reserve Bank of New York did, however, raise the rate offered on its overnight fixed-rate reverse repo facility, which continues in its test phase as part of a program to improve the Fed's management of short-term rates. The overnight rate was first increased from three basis points (bps) to four bps, and was raised again later in the month to five bps. The rate's increase surprised investors, who instead had expected the Fed to raise the limit for eligible counterparties from its $5 billion level. That increase eventually took place on March 5, 2014, bringing the limit to $7 billion.

Money market fund strategy

Fidelity's money market funds took full advantage of the temporary sharp rise in yields that resulted from the heavier supply of Treasury bills and CMBs. Our portfolio managers increased Treasury bill holdings significantly in both general purpose and government funds across a range of maturities. The rise in Treasury yields drove other money market yields higher. We took that opportunity to continue buying three- to four-month Japanese bank offerings; five- to seven-month high-quality, domestic bank holdings; and 18-month U.S. government agency floating-rate notes.

Going forward, we expect the economy's health to provide the overarching backdrop for the market's tone. Investors will keep a keen eye on economic data—particularly related to the labor and housing markets, and consumer activity—and try to glean insight from any further Fed comments.

ENDNOTES

[1] A repurchase agreement is an arrangement in which a seller of securities agrees to purchase those same securities back on a particular date in the future, paying the buyer a stated rate of interest. The seller engages in a "repurchase agreement" (or "repo") and the buyer in a "reverse repurchase agreement" ("reverse repo"). Repos are considered to be money market instruments and are a source of short-term funding for securities dealers.

We All Float On?

RYAN GRAF, VICE PRESIDENT
U.S. RATES STRATEGY, MESIROW FINANCIAL

Floating rate debt is where many investors' thoughts go when they think of how to insulate against rising rates. We would contend however that floaters carry a high risk of an extended period of low coupons. Our thinking is that the Fed seems set on mid-2015 at the earliest for its initial rate hike, and given their dovish leanings, we think the risks are skewed towards it actually being later rather than earlier. We believe that callable agency step-ups offer investors better protection against rising rates given their higher upfront coupons. Moreover, we view the additional risks that come with step-ups as being quite manageable. We explore these issues in more detail below.

Short Term Indices Pose a Problem

The nature of most floating rate debt is that it is tied to short term reset indices. For example, in 2013 and 2014, all GSE floater issuance was tied to indices which were either directly tied to Fed Funds or had 3m or shorter terms.

The problem we have with these short indices is that they are almost completely dependent on the Fed, and as long as the Fed remains on hold, they are all likely to remain at very low levels. Their dependence on the Fed has been borne out historically as short rates such as 3m bills and 1m/3m Libor have moved more or less in step with the fed funds target rate for the past several decades. In fact, since 1985, the correlations between 3m bills/1m Libor/3m Libor and Fed Funds on a monthly basis are over 99%.

GSE Floater Issuance by Reset Index: 2013-14

$bn	Amt Issued	% of Total
1m Libor	115.1	78%
3m Libor	18.8	13%
Bills	3.5	2%
Prime	7.2	5%
Fed Funds	2.6	2%
Total Libor	134.0	91%
Total Other	13.3	9%
Total	147.3	100%

Source: Mesirow Financial, Bloomberg; Data through 4/17/14; Issuance by FNMA, FHLMC, FHLB, FFCB; Numbers may not sum due to rounding.

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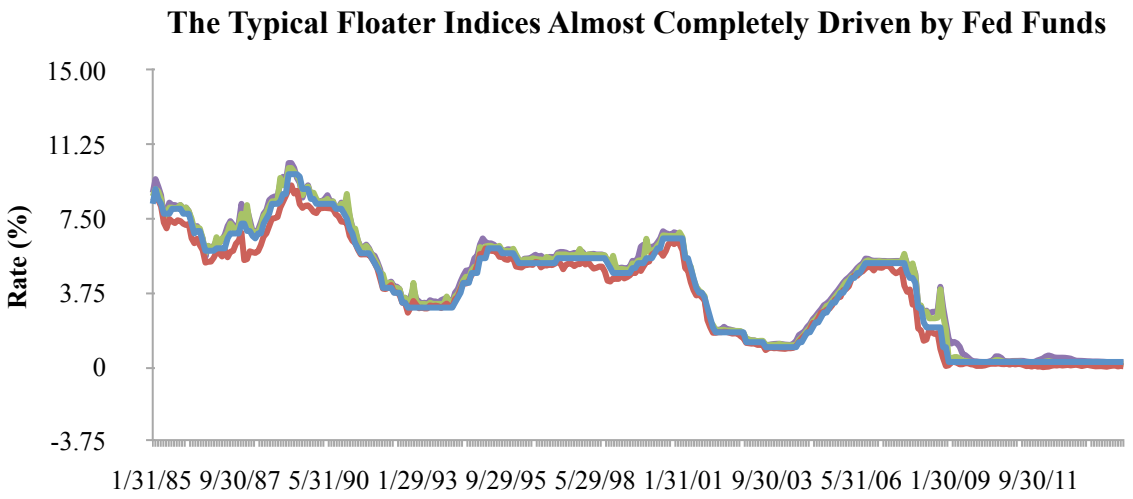
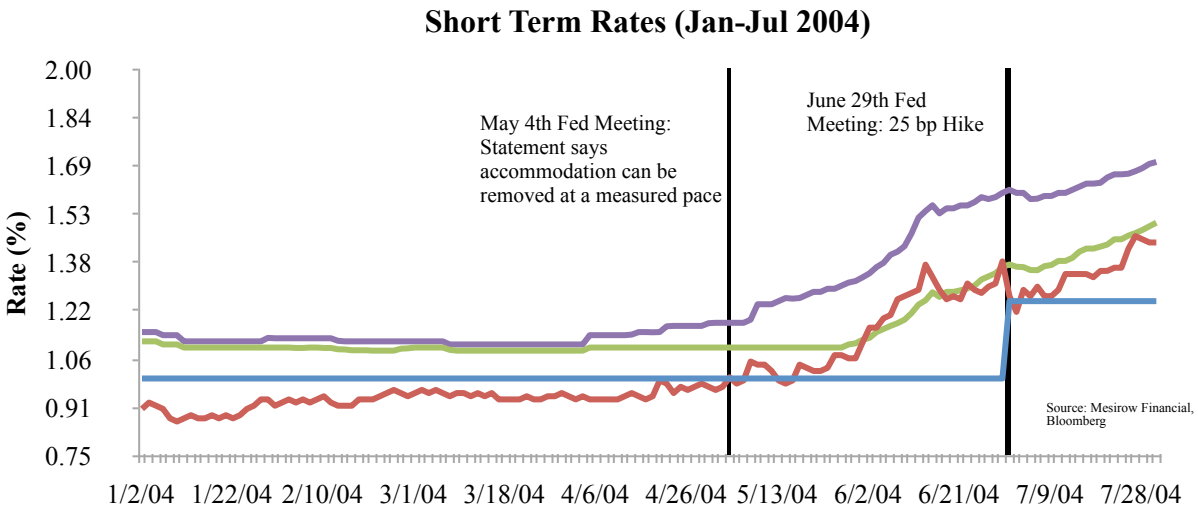
As further evidence, it's worth considering the last tightening episode in 2004. On May 4th of that year the Federal Reserve's statement said, "the Committee believes that policy accommodation can be removed at a pace that is likely to be measured." It was not until after this statement that short term rates began really increasing, and indeed, the first 25 bp rate hike came at the next meeting. We think a similar pattern is probable in the next cycle meaning short rates are unlikely to make a sustained move higher until just a handful of months prior to the first rate hike.



Step-ups as an Alternative to Floaters

The main take away from this look at the historical behavior of short term rates is that investors who buy floating rate debt could be in for an extended period of very low coupons if the Fed remains on hold as long as or longer than most expect. Now, if a floater investor's primary alternative is rolling short bills or discount notes, then the coupons offered by Libor based agency floaters may actually be attractive. However, for investors who are buying floaters primarily for protection against rising rates, we believe that callable agency step-ups are a better option.



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Why does this trade make sense?

The main idea here is that step-up structures are likely to out yield floaters. To start, the initial coupons of step-up structures are higher than floaters. For example, GSE floaters announced in 2014 have had an average initial coupon of ~0.13%. In contrast, 5yr and shorter step-ups issued over the same period have had average initial coupons of 0.96% with the lowest initial step-up coupon (0.25%) matching the highest floater coupon.

Another point in favor of step-ups is that the coupon schedule is fixed, and it often beats the floater coupons projected by the forwards. For example, consider a recently underwritten 4/6m (q) step-up. The initial coupon on this bond is 0.50% which is ~25 bp more than a similar maturity floater might yield. In addition, the future coupons on this bond outpace the floating rate coupons projected by the forwards as seen below. Step-up structures do vary substantially, but they offer investors the flexibility to precisely tailor the trade-off between present and future coupons to their liking.

Initial Coupon Comparison: 2014 YTD Issuance

		Step-ups by Maturity	
%	Floaters	<= 3yrs	<= 5yrs
Avg Initial Cpn	0.128	0.536	0.961
Max Initial Cpn	0.250	0.760	1.850
Min Initial Cpn	0.060	0.250	0.250

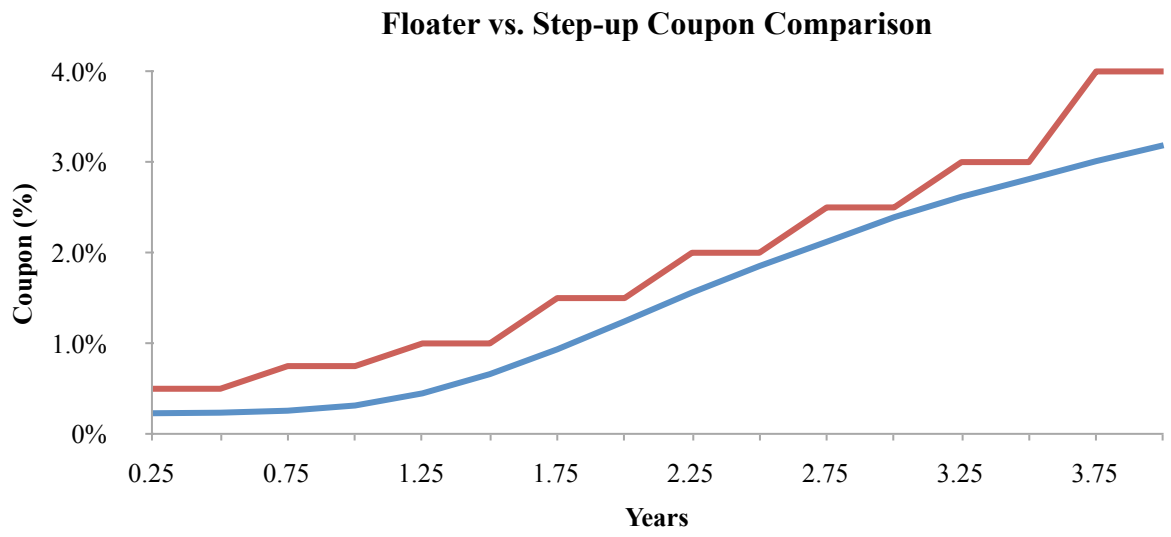
Source: Mesirow Financial, Bloomberg; Average is a weighted average; YTD is through 4/17

A Recently Issued Step-up	
Cusip	3130A1PC6
Structure	4nc6m (q)
Settle Date	4/30/14
Initial Coupon	0.50%
Intial Cpn Pick vs. Floaters	~25 bp
YTM	1.882%

Source: Mesirow Financial, Bloomberg

Step-up Risks Are Present But Very Manageable

Using callable step-ups as a means of protection against rising rates comes with risks. The traditional risk with buying a callable bond is that it gets called when rates fall and the investor has to replace it in a lower rate environment.



Source: Mesirow Financial, Bloomberg

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- As a floater alternative though, we do not view this risk as problematic. If rates fall or stay the same and the step-up gets called, then floater yields have probably also fallen or stayed the same.
- It's likely then that an investor would still be able to replace the called bond with another step-up structure that yields more than a floater alternative while continuing to offer a coupon profile that provides protection against rising rates.

The most likely way that the trade would suffer in our view is if the Fed starts hiking much earlier and/or more aggressively than the market is pricing.

- In this scenario, floater yields might rise faster than step-up coupons, but there is no guarantee. Even if the floater's coupons do rise faster, they still have to overcome the fact that the step-up had higher coupons for the early lives of the bonds.
- Ultimately, we view the risk of a much more aggressive Fed as quite minimal. For one thing, Fed purchases of Treasuries and MBS are likely to continue at least through October and probably through December if the current pace of tapering holds. From there, we think the Fed will take plenty of time to assess the state of the economy before moving rates.
- As of 4/21/14, the market is pricing in the first full rate hike for ~September 2015, but we think that the Yellen Fed's seemingly cautious approach to removing accommodation means the risks are skewed towards a later date for rate hikes. Consequently, we think step-ups should perform well versus floaters for quite some time.

On the Verge of a Capex Renaissance

ANETA MARKOWSKA
SOCIETE GENERALE

Business investment has consistently underperformed expectations for the past 2 years, but we believe this is about to change. There are many reasons to be bullish on the capex cycle which include the aging capital stock, rising capacity utilization rates, increasingly unattractive equity valuations which favor organic investment over stock buybacks, and receding policy uncertainty. Most importantly, business confidence surveys are showing an upswing in capex plans, and these indicators tend to lead business investment by about two quarters.

There is no question that capex growth in the US has been a major disappointment over the past two years. Total investment – which includes purchases of equipment, investment in structures and intellectual property – expanded by just 2.7% in 2013, after an already soft 5.1% in 2012. For reference, investment typically expands at around 7.5% during the expansionary phase of the business cycle. What makes the sluggish pace of investment even more surprising is that it is coming on the heels of an historic contraction in spending. The level of total capital investment declined by 20% during the 2008-2009 recession and it did not return to pre-crisis levels until Q4 2013.

Reversing the effects of aging

As a result of sluggish investment growth, the capital stock has expanded by just 1.0% annually over the past five years. This compares to a historic average of 2.6%, which includes the long period of underinvestment during the 1930s. The effects of underinvestment can be seen in the aging of the capital stock which may be the reason for the recent slowdown in productivity growth. As shown on chart 1, the average age of capital stock in the non-financial corporate sector has increased from 14 years in 2000 to 15.9 years in 2012. This makes today's capital stock older than at any point since 1964. And, given the long lags between investment and the average age, it is bound to increase further. If the US economy is to avoid a secular stagnation and to return to its historical productivity growth of 1.8%, then it is imperative that business investment accelerate notably from current levels.

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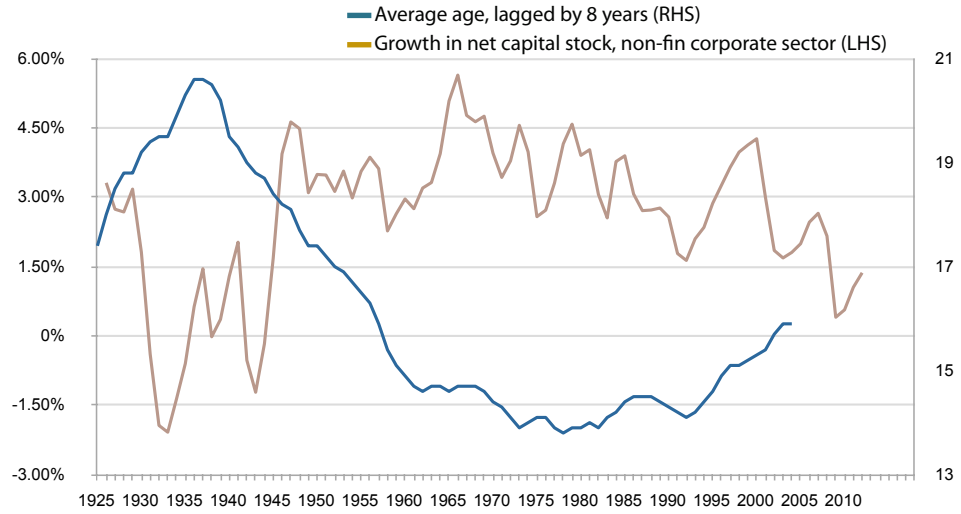
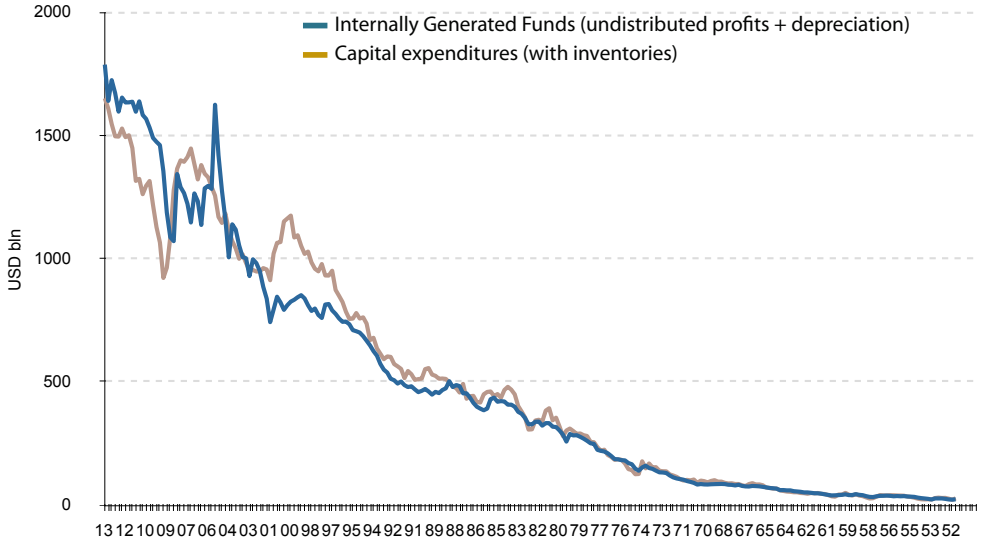
Chart 1: Capital stock is aging



Source: Haver Analytics, SG Cross Asset Research/Economics

Chart 2: Capex has lagged cash flow since 2008



Source: Haver Analytics, SG Cross Asset Research/Economics

A growing case for organic investment

Corporates certainly have the means to invest. The financing gap for the non-financial corporate sector has remained open since Q4 2008, i.e. capital expenditures have been running below the level of internal cash flow generation (see chart 2). Of course, this has proven to be a weak argument for a capex upswing. Instead, businesses have used their cash positions to buy back stock or to grow through acquisitions. This process, however, may be coming to an end. The ratio of the market value of equities to the replacement value of tangible assets (or the so-called Tobin Q ratio) has increased significantly in the past year and now stands at highest levels since 2000 (see chart 3). With equity values currently estimated at 25% above replacement value, expanding organically seems to make a lot more economic sense than expanding through acquisitions or stock buybacks. Indeed, the Duke Fuqua CFO survey asks a question regarding mergers and acquisitions, and in the latest survey the percentage of firms increasing this type of activity fell to just 27.3%, the lowest level since 2003. This suggests that we may be close to a tipping point in the capex cycle.

Capacity utilization as a driver of capex

Another explanation for the sluggish capex growth over the past two years lies in available capacity utilization data. While business investment correlates well with the level of cap-u, it correlates even better with changes in utilization rates. The rise in utilization rates stagnated from mid-2012 through the third quarter of 2013 (see chart 4). We suspect that this was an indirect effect of the fiscal contraction. Now that the bulk of that contraction is behind us, capacity utilization has begun to rise again. The current level of cap-u is consistent with investment growth rates in the range of 3-4%. However, the recent changes in utilization rates point to a capex growth rate of 6%, broadly in line with our forecast.

Less uncertainty, more confidence

Finally, a number of leading indicators of capex corroborate our bullish view on business equipment spending. The Business Roundtable CEO economic outlook index increased in Q1 to the highest level since Q1 2012. A capex diffusion index constructed from the same survey also increased sharply in Q1 and now stands at highest levels

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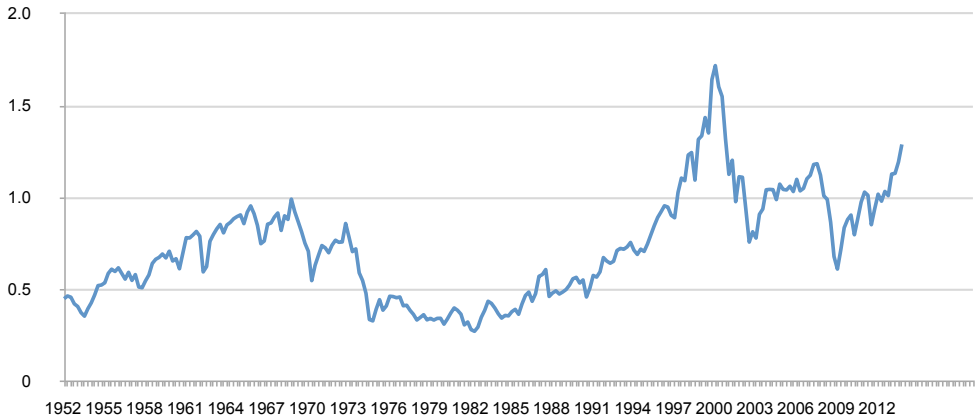
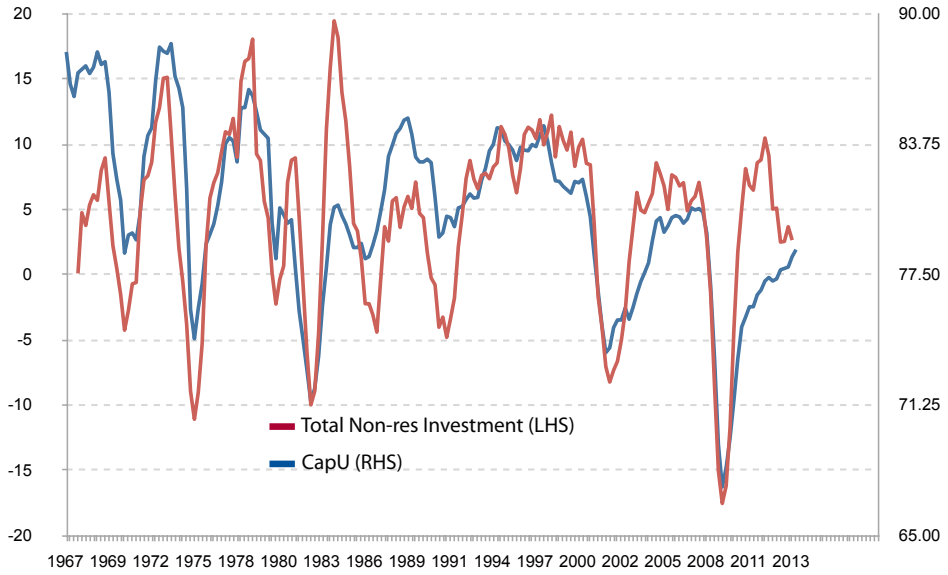
Chart 3: Stretched equity valuations favor organic investment



Source: Haver Analytics, SG Cross Asset Research/Economics

Chart 4: Capacity utilization rates point to faster capex growth



Source: Haver Analytics, SG Cross Asset Research/Economics

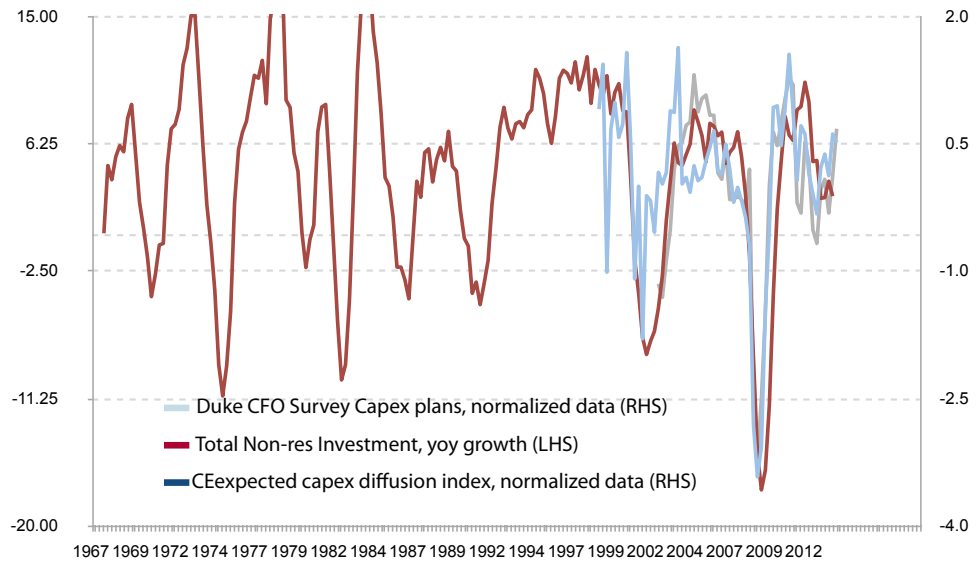
since mid 2011. The Duke Fuqua CFO survey also asks a question in regard to capital expenditure plans and that data tells a similar story (see chart 5).

The growing optimism among business leaders is probably related to a number of factors. The most important driver is their expectation of stronger top line growth. According to the Business Roundtable CEO survey, as of Q1 respondents predicted 2014 GDP growth of 2.4%, which is the strongest one-year forward forecast since 2011. Closely related to this upswing is the perception of economic policy and the associated uncertainty. The slowdown of 2012-2013 was largely a fiscal phenomenon. Uncertainty about government funding and the debt ceiling was an added drag on business sentiment. Now that policy uncertainty is fading, it is reinforcing expectations for better growth.

As highlighted in the paragraphs above, there is a strong fundamental case for an upswing in business investment. The capital stock is aging and badly needs a refresh. Corporate America is generating more than enough cash flow to finance not only current, but also higher rates of investment. Moreover, deploying that cash via acquisitions and stock buybacks is increasingly uneconomical. Meanwhile, capacity utilization is on the rise and also points to an acceleration in capital expenditures.

Lastly, various business surveys corroborate our bullish outlook and suggest that we are very close to an inflection point in the capex cycle.

Chart 5: Capex plans troughed in Q4 2012



Source: Haver Analytics, SG Cross Asset Research/Economics

FUN FACT$

- Adjusting for inflation, Warren Buffett was a millionaire by age 25.
- According to a study by Harvard professor David Wise and two colleagues, 46.1% of Americans die with less than $10,000 in assets.
- If you divide their net worths by their age, Carlos Slim and Bill Gates have each accumulated more than $100,000 in net worth for every hour they've been alive.
- As of January 2013, there are 16 people left in the world who were born in the 1800s, according to the Gerontology Research Group. With dividends reinvested, U.S. stocks have increased 28,000-fold during their lifetimes.

WHO KNEW?

Are The Days Numbered For The Broker-Dealer Repo Matched-Books?

JEFF KIDWELL, DIRECTOR, HEAD OF DIRECT REPO,™ AVM, LP AND III ASSOCIATES

The regulators (Federal Reserve, FDIC, and OCC) finalized the supplemental leverage ratio (SLR) caps for the 8 largest US banks Tuesday (BNY Mellon, Bank of America, Citigroup, Goldman Sachs, JPMorgan, Morgan Stanley, State Street, and Wells Fargo). These Systemically Important Financial Institutions ("SIFIs") will have to raise their leverage ratios to 5% for their bank holding companies and 6% for their insured subsidiaries as of January 1, 2018. The new rules may force these largest banks to hold another $68 billion in capital. The Fed's Tarullo indicates that he wants to go even further, signaling the central bank may boost the risk-based capital surcharge to a higher level. On Thursday, CNBC ran an article that likened the regulators' actions of the leverage caps, and the 3 pending uncertain requirements below as the "Four horsemen of the Apocalypse"

1. a surcharge for the largest global banks;
2. additional capital rules for banks that rely on short-term funding (which has been a pet project of Tarullo); and
3. a requirement for banks to hold much more long-term debt to make it easier for regulators to unwind them

The US regulators may need to fine-tune how these ratios are calculated to bring them in line with the international Basel III leverage standard (3%) to come in January 2018. Also of note in the new regulations is balance sheet netting (transactions in the same security type, in opposite directions for the same term, with the same counterparty) will no longer be allowed. In addition, regulators are looking at an average balance sheet at the banks, no longer allowing room for historical fluctuations by banks taking snapshots at month-ends or quarter- ends. This is all likely going to put another large dent in available balance sheet for repo at the largest banks, something which has dropped some 60% since 2007. Another concern that the Fixed Income market has is how these new leverage ratios will impact low-risk assets, such as US Treasuries and their issuance. The Fed has acknowledged the possibility that "it is possible that covered organizations' cost of holding low-risk, low-return assets could increase if it becomes the binding regulatory capital constraint" but that the Fed has a "flexible and diverse policy toolkit that can offset most, if not all, unwanted pressures that may develop" in the rate market as a result of SLR.

While this alone could lead to a further drastic balance sheet deleveraging at the top 8 banks, there may be worse news than that out there for Repo desks. I saw several articles last week, including a very strong one from Deutsche Bank, regarding Net Stable Funding Ratio ("NSFR"), which is destined to become the minimum leverage standard by January 1, 2018. NSFR, along with Liquidity Coverage Ratio (LCR) are the two landmark requirements of Basel III. They are expected to be applied to all banks worldwide, if they are engaged in international banking activities. The NSFR seeks to calculate the proportion of long-term assets (defined as 100% of loans longer than 1 year, 85% of loans to retail clients with a remaining life less than 1 year, 50% of loans to corporate clients with a remaining life less than 1 year, and 20% of government and corporate bonds) on the balance sheet which are funded by long-term, stable funding. Stable funding includes customer deposits, long-term wholesale funding, and equity issuance. Stable funding excludes short-term wholesale funding. The NSFR standard must be met in January 2018.

The LCR will gradually be implemented, starting from 2015 at around 60%. The implementation will be completed in 2019 and the final ratio could be higher than 100%. So, from a Repo perspective, the NSFR provides for different Available Stable Funding ("ASF") and Required Stable Funding ("RSF") weightings/factors depending on the maturity of the trade and securities and the counterparty type. The most damaging weighting suggested so far is the 50% RSF factor applied to Reverse Repos to non-banks, regardless of underlying asset type or repo transaction maturity. It could mean that for every $100mm overnight reverse repo in overnight gilts (or any AAA sovereign) from a leveraged account, there could be a requirement for the bank to have $50mm in stable longer-term funding against it

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(with no provision for offsetting repo with the same maturity, asset type, and counterparty). Risk.net says some banks have estimated that this could increase the cost of some repo transactions for those banks by 850%.

I have been maintaining in the AVM Repo Commentary and in conversations with many of you that the ultimate, larger goal of regulators through smaller, sector-oriented regulation proposals (such as Money Market Fund Reform, Triparty Repo Reform, Leverage Cap Ratios, etc.) may simply be to rein in the FSB's estimated $68 trillion in Shadow Banking (the multiple rehypothecation of the same securities, the excessive use of special purpose entity and structured investment vehicles, and the use of off-balance-sheet-funding-like lines of credit). It appears that the regulators' efforts, although on varied specific subjects, have been pretty well-coordinated. These Basel III proposals would go a long way to accomplishing that larger goal of reducing Shadow Banking. The regulators and G20 have focused on the 2007 financial crisis and specifically the liquidity crisis that Bear Stearns and Lehman Brothers (among others) suffered due to their over-reliance on short-term wholesale funding in the interbank lending market.

The dichotomous trend has gotten more prevalent, in my opinion, as I speak with broker-dealers who are trying to push their rapidly shrinking repo matched books out to longer maturities and trying to demonstrate longer term liquidity, by cajoling cash providers to go 6months-1year term. Much of this is because of new regulatory proposals that punish the broker-dealers for staying short-term (Basel III, Dodd-Frank, SLR, leverage caps, Triparty Repo Reform) and Fixed Income managers at the banks looking to allocate balance sheet only to the widest bid/offer spreads and terms. In addition, we've seen that many broker/dealers are also allocating their balance sheets to wider bid/offer spread products (such as corporate bonds, emerging markets, ABS, Private Label RMBS, etc.), and out of government securities, acknowledging that if they have shrinking balance sheets, but they would like to capture as much bid/offer spread as possible in what they have. It is possible, per a Deutsche Bank article recently, that bid/offer spreads, particularly for repo with maturities of Overnight to 3months could widen dramatically with the impact of SLR and Basel III. Meanwhile, on the other side of the coin, cash providers are being pushed by other regulatory proposals and internal investment policies to go as short a term as possible (Money Market Fund reform, Dodd- Frank, risk diversification), to maintain liquidity for their investors and to reduce their credit exposure to the broker-dealer community. So, you have cash providers looking for short-term repos and broker-dealers looking for long-term repos, which may ultimately push actual cash providers and collateral providers to speak with each other and transact repo with each other (preferably through AVM's Direct RepoTM product). For those who can't adapt to this environment or who have difficult-to-change investment policies, the available supply of liquidity and eligible counterparties could be dropping at an alarming rate.

If you would like to see some more information about Direct Repo™ check out our website **http://www.avmsolutions.com**. Remember that in Direct Repo™, AVM acts as introducing broker, not a principal, to end-user cash providers and collateral providers, pairing the two up to provide needed additional liquidity to the repo market. You can also give me a call or send me an email.

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