Bond and MBS Returns review and Opportunities – 11/26/2022

With all the volatility in markets, chaos in Fixed Income, hung corporate bond deals, etc., I thought that this would be a good time to review how other assets are doing, and segue into bond market opportunities.

Spoiler alert – it is a good time to tee up funds for distressed investing. March 2020 was also such a time, but the opportunity lasted 2 weeks before the Fed bailed out everything that was leveragable (except for Non-Agency Legacy MBS), and PE-types with cash ready gobbled up most of the distressed/cheap bonds.

Being ready to invest is necessary. Like in 2020, any opportunity that is created by a deleveraging won't last long – there is too much money sloshing around from QE.

First let's review what's happened to date.

Summary of recent performance – benchmarks and other assets

This is an update of a similar table I had in my Note to Clients in March 2020. (RP = Risk Parity). The cause of the March 2020 Crisis is analyzed in the March 2020 newsletter.

Ticker	Name	Strategy/Type	Nov22 (to 11/14)	Oct 2022	YTD 2022		RP Crisis (2/28/20 - 3/23/20)	Mar 2020	4/2020-12/2020		St Dev 4/2020 - 10/2022
SPY	SPDR S&P 500 ETF TRUST	Equity Benchmark	3.5%	8.1%	5.9%		-24.3%	-12.5%	46.9%		6.1%
QQQ	INVESCO QQQ TRUST SERIES 1	Equity Benchmark	3.9%	4.0%	-10.5%		-17.0%	-7.3%	65.6%		7.1%
AGG	BARCLAYS AGG ETD	Bond Benchmark	1.7%	-1.3%	-17.0%		-2.9%	-0.5%	4.2%		1.6%
IEI	ISHARES 3-7 YEAR TREASURY BO	Bond Benchmark	1.2%	-0.5%	-13.3%		2.1%	2.5%	0.6%		1.2%
TLT	ISHARES 20+ YEAR TREASURY BO	Bond Benchmark	1.7%	-6.0%	-37.1%		7.0%	6.4%	-3.3%		3.9%
MBB	ISHARES MBS ETF	Bond Benchmark	2.2%	-1.1%	-15.9%		-0.5%	1.1%	1.4%		1.5%
LQD	ISHARES IBOXX INVESTMENT GRA	Bond Benchmark	3.2%	-0.8%	-23.3%		-13.0%	-6.3%	14.4%		3.0%
HYG	ISHARES IBOXX HIGH YLD CORP	Bond Benchmark	1.4%	3.4%	-9.1%		-19.9%	-10.0%	18.2%		3.4%
SPBDALB	S&P/LSTA Levered Loan Price Index	Bond Benchmark	0.6%	0.3%	-4.2%		-19.9%	-13.0%	16.1%		2.8%
MITT	AG MORTGAGE INVESTMENT TRUST	MBS REIT	12.9%	19.5%	-34.1%		-81.2%	-81.7%	8.7%		21.0%
RWT	REDWOOD TRUST INC	MBS REIT	7.0%	24.2%	-5.4%		-74.5%	-69.6%	82.9%		18.3%
EFC	ELLINGTON FINANCIAL INC	MBS REIT	8.2%	19.0%	9.1%		-67.5%	-64.6%	177.3%		20.5%
RITM	RITHM CAPITAL CORP (was NRZ)	MBS REIT	6.7%	19.2%	0.1%		-66.0%	-67.8%	111.0%		16.4%
WMC	WESTERN ASSET MORTGAGE CAPIT	MBS REIT	-23.9%	-3.6%	-60.4%		-65.0%	-77.1%	48.5%		22.1%
MFA	MFA FINANCIAL INC	MBS REIT	10.5%	28.0%	-21.5%		-62.7%	-78.6%	160.6%		20.3%
CIM	CHIMERA INVESTMENT CORP	MBS REIT	-1.0%	29.3%	-20.0%		-56.5%	-51.5%	23.5%		15.9%
NLY	ANNALY CAPITAL MANAGEMENT IN	MBS REIT	15.1%	8.1%	-31.7%		-46.4%	-40.3%	82.3%		11.9%
AGNC	AGNC INVESTMENT CORP	MBS REIT	15.9%	-0.9%	-36.1%		-38.7%	-37.1%	59.3%		11.1%
FNMA	FANNIE MAE	Levered MBS	-11.5%	-2.3%	-78.7%		-50.6%	-38.6%	50.3%		20.9%
WE	WEWORK INC-CL A	CMBS REIT	18.1%	-3.0%	-75.0%						11.3%
SLG	SL GREEN REALTY CORP	CMBS REIT	4.4%	-0.4%	-27.7%		-47.6%	-44.7%	50.1%		14.3%
VNQ	VANGUARD REAL ESTATE ETF	Real Estate	3.2%	3.5%	2.8%		-34.3%	-19.4%	25.7%		6.7%
PRRSX	PIMCO REALESTATEREALRET-I	Real Estate	4.4%	5.0%	8.0%		-38.0%	-22.4%	32.5%		7.8%
LADR	LADDER CAPITAL CORP-REIT	CMBS REIT	2.9%	19.1%	24.4%		-72.5%	-68.2%	120.8%		19.0%
BAM	BROOKFIELD ASSET MANAGE-CL A	Real Estate	16.2%	-3.1%	-1.5%		-44.8%	-26.2%	41.3%		11.0%
BDKAX	BRADDOCK MULTI-STRAT INC-A	MBS Fund	-0.5%	-1.9%	-4.6%		-67.7%	-51.2%	45.3%		9.8%
IOFIX	ALPHACENTRIC INCOME OPP-I	MBS Fund	-0.9%	-1.8%	-10.1%		-42.2%	-38.0%	40.1%		7.6%
DMO	WESTERN ASSET MORT DEF OPP	MBS Fund	3.7%	-3.5%	-11.1%		-32.6%	-34.1%	20.3%		7.5%
DPFNX	DEER PARK TTL RTRN CRED-I	MBS Fund	0.0%	-1.9%	-3.5%		-19.2%	-15.8%	17.5%		3.2%
SEMMX	SEMPER MBS TOTAL RETURN-INST	MBS Fund	-0.6%	-3.0%	-7.1%		-16.2%	-22.2%	17.3%		

ANGLX	ANGEL OAK MULTI-STR INC-A	MBS Fund	0.3%	-2.4%	-8.8%	-13.9%	-13.6%	12.2%	
PIMIX	PIMCO INCOME FUND-INS	Fixed Income Fund	1.9%	0.2%	-8.3%	-12.4%	-8.0%	14.6%	
VSCFX	VOYA SECURITIZED CREDIT-P	MBS Fund	-0.7%	-1.5%	-2.2%	-13.8%	-14.7%	13.3%	
BA	BOEING CO/THE	Equities	23.5%	17.7%	-33.4%	-61.6%	-45.8%	43.5%	16.1%
GE	GENERAL ELECTRIC CO	Equities	11.4%	25.7%	-9.4%	-43.8%	-26.9%	36.6%	13.1%
BRK/A	BERKSHIRE HATHAWAY INC-CL A	Equities	5.4%	9.5%	28.0%	-22.4%	-12.0%	27.9%	7.0%
AAPL	APPLE INC	Equities	-2.0%	11.0%	16.8%	-17.9%	-7.0%	110.0%	9.6%
MSFT	MICROSOFT CORP	Equities	4.8%	-0.3%	5.9%	-16.1%	-2.7%	42.1%	7.0%
AMZN	AMAZON.COM INC	Equities	-2.7%	-9.3%	-37.1%	1.0%	3.5%	67.0%	10.6%
GOOG	ALPHABET INC-CL C	Equities	2.3%	-1.5%	8.1%	-21.1%	-13.2%	50.7%	8.4%
NVDA	NVIDIA CORP	Equities	21.9%	11.2%	3.5%	-21.2%	-2.4%	98.3%	14.7%
AMD	ADVANCED MICRO DEVICES	Equities	24.7%	-5.2%	-34.5%	-8.4%	0.0%	101.6%	16.8%
SOFI	SOFI TECHNOLOGIES INC	Equities	9.8%	11.5%	-56.3%				28.4%
SFTBY	SOFTBANK GROUP CORP-UNSP ADR	Equities	0.0%	27.5%	-43.9%	-31.3%	-22.9%	119.9%	11.9%
TSLA	TESLA INC	Equities	-14.8%	-14.2%	-3.3%	-35.0%	-21.6%	573.3%	23.4%
CVNA	CARVANA CO	Equities	-24.5%	-33.3%	-94.4%	-56.8%	-33.6%	334.8%	25.3%
PLTR	PALANTIR TECHNOLOGIES INC-A	Equities	-7.0%	8.1%	-62.7%				38.7%
CCL	CARNIVAL CORP	Equities	17.3%	28.9%	-58.2%	-64.1%	-60.6%	64.5%	21.2%
AMC	AMC ENTERTAINMENT HLDS-CL A	Equities	17.1%	-4.4%	406.9%	-49.3%	-49.2%	-32.9%	103.5%
C	CITIGROUP INC	Bank	9.1%	10.1%	-21.1%	-44.2%	-33.6%	51.4%	12.4%
WFC	WELLS FARGO & CO	Bank	3.9%	14.3%	57.1%	-38.2%	-29.7%	8.2%	11.1%
BAC	BANK OF AMERICA CORP	Bank	5.7%	19.3%	23.3%	-36.1%	-25.0%	45.6%	10.0%
MS	MORGAN STANLEY	Bank	11.0%	5.0%	27.0%	-38.2%	-24.5%	106.2%	10.1%
GS	GOLDMAN SACHS GROUP INC	Bank	12.3%	17.6%	35.6%	-32.8%	-23.0%	73.6%	10.1%
BLK	BLACKROCK INC	Bank	16.0%	17.4%	-6.7%	-28.8%	-4.3%	67.0%	9.0%
SIVB	SVB FINANCIAL GROUP	Bank	-2.9%	-31.2%	-40.4%	-31.2%	-27.4%	156.7%	13.8%
APO	APOLLO GLOBAL MANAGEMENT INC	Private Equity	14.8%	19.1%	19.5%	-42.9%	-19.6%	50.9%	12.9%
CG	CARLYLE GROUP INC/THE	Private Equity	4.0%	9.4%	-5.9%	-36.0%	-23.9%	49.4%	12.3%
KKR	KKR & CO INC	Private Equity	13.0%	13.1%	22.2%	-35.3%	-17.9%	74.7%	11.6%
BX	BLACKSTONE INC	Private Equity	14.1%	9.9%	52.7%	-33.1%	-15.4%	45.7%	11.2%

Basically, this table allows one to easily identify levered assets, via the large declines in the RP Crisis columns, the high recoveries in the 4/2020-12/2020 columns, and the high Standard Deviation of monthly returns in the final column.

It should be noted that assets that are purchased by levered investors, such as various tech stocks, will exhibit high volatility, similar to that to explicitly levered companies, like REITs.

Levered assets are the ones that will decline the most when the markets crash, and will recover the fastest in response to central bank support.

The 4/2020-12/2020 column shows the extent of recovery of the losses after Fed bailout in 2020, most of which occurred in April 2020.

Distressed Opportunities

A number of assets have already in price due to the Fed raising rates. In bonds, most of the declines are from higher rates and based on duration of the bonds, but also from some spread widening as sellers dominate buyers. Gambles on future earnings, like tech stocks, have fallen the most, as higher discount rates reduce their Present Values.

However, the magnitude of their declines is also a function of the exit of the leverage that supported sky-high P/E ratios, as high funding costs create negative carry for such assets that do not cashflow. A prime example (no pun intended) is Amazon, whose PE ratio has declined from 800+ to a mere 100 now.

While current yields and declining prices on many assets might be tempting, I believe it is too early to buy them. The "all clear" for these might be sounded once the Fed is done raising rates. With inflation high, and Powell demonstrating determination to raise rates until inflation subsides, this might take some more time, unless he blinks. That the inflation is mostly supply driven is also reason to believe that inflation might not subside that easily, even if there is demand destruction caused by rising rates. The bottom line: we'll let the Fed and/or inflation to tell us when they are done.

While we wait for a peak in rates, the other even more powerful force that will create the opportunity to buy assets at distressed prices is deleveraging. Large parts of the markets, especially UST markets, are dependent on leverage and are owned by leveraged entities. The asset owners that provide the most systematic risk, and thus will lead to the broad distressed asset opportunities are Quant investors, including Risk Parity firms, that deploy large amounts of leverage, borrowed globally, and who invest algorithmically, using computers to execute trades, usually in the middle of the night, in futures markets.

Risk Parity especially owns large quantities of US Treasuries with leverage, increasing the risk of USTs to match the risk of Equities. Rebalancing by such firms between asset classes can set off massive dislocations, since banks are not in a position to provide liquidity in scale anymore after Basel III and the Volcker Rule.

This is exactly what happened in March 2020, creating the dislocations and distressed opportunities then. I'd recommend reading my post-mortem of March 2020 again. I will be attempting to monitor this and anticipate it.

Non Agency MBS – Legacy

I've been commenting on Legacy Non-Agency bonds and their performance for the past 10 years, as they are the majority of the holdings I manage. Many of them have become absurdly cheap, with changes in marks greater than what the cashflow durations would imply, with high income rates even with slow prepayments, and a lot of upside from positive convexity. To scale up investments in this sector takes time, as most bonds have gotten fragmented due to manager allocations to their sub-accounts. This market structure means that they do not often come out in size, but have to be accumulated piece meal. However, there are a number of levered accounts that own these without fragmentation, and in the event of a sudden selloff like in 2020 could face margin calls, which could result in sizeable liquidations.

This is a sector (maybe the only one) that was not bailed out by the Fed in 2020, and currently prices are already lower than the levels that they declined to in March 2020 when REITS were forced to sell such bonds.

Using the bonds in our portfolio to indicate where things stand, the Fixed Rate legacy Non-Agency bonds are averaging 14.5% Income (Oct 22 income annualized), with a range from 0.27% to 198% (one bond had 12% income for the month)! The floating rate bonds have an average income rate of 12.7% annualized, with a minimum of 1.5% and a max of 29.7%.

These are all Senior bonds with low LTVs and loss rates, not leveraged derivatives or subordinated bonds. If rates rise more, the marks could decline more, so we are currently not adding any, but they are already very attractive.

There are plenty of NA Legacy bonds that don't have such high income, so one cannot just buy this sector and expect to get these levels of Income. Work and research needs to be conducted to select the attractive High Income bonds in the sector.

Non Agency MBS – RMBS 2.0 senior bonds

This sector is finally getting interesting as well. For most of the 2010s, it has been what I call Low Income MBS. Created post GFC, these loans are mostly well underwritten, with low LTVs, and good subordination. Most of the senior bonds are AAA rated. As a result, they traded well, often at a small spread pickup to Agency MBS, about -2 points to Agency MBS benchmarks in price, 2% to 3% yields. Most senior bonds offerings from Jan 3, 2022, were at prices above par eg 3-3.5% cpn at $100-16 to $103 range.

Today, such bonds are in the $80s, reflecting duration moves, with yields at slow speeds in the 5%s, about 4 to 5 points back of Agency MBS benchmarks. In March/April 2020, they did sell off by less than 10 points, from say $108 to $99, not really levels where I cared. (Based on dealer offerings I have from that period).

These are bonds best suited for levered investors, and were purchased by them in 2020, and not the stuff I would normally own. But in a selloff, they could cheapen even more, at which point, they would be great to purchase for a flip bet on a bailout releveraging and decline in rates, as levered investors will always be able to use them, and many long only money managers will buy some to try and beat the AGG with some more spread/yield than Agency MBS.

Non-Agency MBS – RMBS 2.0 levered credit

These are also getting interesting. I did the first Texas real estate risk study of the 1980s Dallas real estate market in 1989 or 1990 when I was at Morgan Stanley restructuring blown up thrifts, (beating the rating agencies by a couple of years) and that analysis allowed me/MS clients to understand how far down the capital stack losses could go in RMBS. I've been researching, trading and personally investing in MBS subs with this framework since the 1990s. This trade has offered great opportunities many times, for example after the dot-com bust, and the GFC as well. It's important to buy these at the right dollar prices, and to also own many line items so as to be diversified – they are credit levered trades exposed to MBS defaults.

I've thought MBS credit was too rich since about 2012, and have not owned any credit-levered bonds since then. (QE made MBS portfolio managers reach for 'yield' when rates were low, so many fixed income funds and MBS hedge funds are heavily invested in subs (that constantly underperform any time there is volatility). (See my competitor analysis in newletters, and here too, and white papers). It's also pretty easy to figure out which funds are heavy in subs from the table above).

RMBS 2.0 deals have both better underwriting than in the past, as well as good credit enhancement (CE) ratios, so in an adverse credit environment with high unemployment are less likely to have the same level of defaults and losses as pre-GFC deals. But liquidity-driven widening does not discriminate.

Subs come in 2 broad flavors – bottom of the stack, and 'mezzanine' bonds that are just below the seniors.

Mezz bonds historically trade very close to senior bonds. However, their spreads to seniors are already widening, and they are now getting interesting at about 10 points cheap to seniors, but the implied prepayment speeds are still too high and implied durations are still too short relative to cashflow durations. But some more deleveraging and these will be over 10% income/yield even with slow speeds. I don't expect losses on these, but they could get downgraded and widen as the lower bonds get wiped out. I want more convexity and price loss protection from even lower discount prices.

RMBS 2.0 Subs lower in the capital stack will likely take losses, even with low LTVS on the loans, as job losses will lead to DQs, and cumulative bank fees and advancing costs will cause bond severities even if the foreclosed house

sells for greater than the low-LTV loan amount (more as the housing markets slow and time to sell increases). I have experienced this in the past in specific subs I have owned, so I am wary. So far, the resi real estate market has not recognized that high rates lead to lower prices, so these subs in turn are still too high. But there is a price where these will make sense (as they become "credit IOs"), but I doubt we get to those prices without some help from Risk Parity deleveraging and a crash in housing.

In March 2020, these declined by 20% to 60%, only to bounce back once the Fed re-established leverage. A number of portfolio AON sales were purchased by PE firms who had the dry powder.

Something I am tracking.

Agency Subs – Credit Risk Transfer (CRT) bonds

Historically, FNMA and Freddie Mac (GSEs – Government Sponsored Entities) used to provide mortgage insurance for MBS deals, converting loans to Agency MBS bonds with their insurance 'wrap'. However, they were also the world's largest 'hedge funds' (FNMA balance sheet in 2006 was $843B), buying Agency MBS for the portfolios and funding them with 'Agency' callable debt. Over a decade, as they grew, they kept pushing the boundaries of what they would insure, wrapping riskier types of loans that previously went into Non-Agency, Home Equity or ABS structures and markets.

In the GFC, the expansion of their mandate came to bite them, and they went bankrupt under the weight of credit losses ($59B losses in 2008, while handing out bonuses!). As a result of bailouts and conservatorship, FHFA required them to share credit risk with private investors. In 2012, Credit Risk Transfer ("CRT") bonds and market were created. FNMA's CRT bond programs are labelled CAS; Freddie's CRTs are STACRS. They are forms of synthetic securitizations, sharing credit risk with the GSEs, and having a loss-taking capital structure based on the performance of reference pools. Different slices of the capital structure have different ratings, and trade at different prices and spreads. Since 2012, this has been the majority of MBS credit issuance, dwarfing the RMBS 2.0 subs market. Most hedge funds and many MBS funds are invested in CRT bonds.

In March 2020, prices on these dropped precipitously, between 15% to 40%, rebounding in weeks once Powell cut rates, did QE, and bought out the Agency MBS market, helped by Biden's fiscal stimulus as well.

Currently, they are going down in price as credit widens, but a deleveraging could bring opportunities.

Non-Agency MBS – Legacy Subs

There are almost no legacy Prime and Alt-A subs left – they were wiped out in the GFC. Subprime subs got locked out due to their structure, and are the dominant part of the subprime MBS market, but have been priced very high due to "yield-seeking" demand from MBS funds, and have been either low income or high loss taking for the past decade, depending on their location in the capital stack.

In a deleveraging selloff, IF these get to low enough dollar prices, they might be worth a portfolio allocation. Each bond is unique, you have to read the docs, so this would not be a broad beta-capturing sector trade.

During the GFC, we did what I call 'document arb', since all these bonds got treated the same in the market, and there were good ones and bad ones that prospectus reading, as well as our proprietary MBS income tools, would identify. During dot-com, CMBS credit also benefitted from doc-arb analysis.

Agency MBS

Lots of buyers of this stuff, as yields rise with rates. Lots of Fixed Income managers on TV talking it up about how attractive Fixed Income is.

Are Agency MBS cheap? FNCL 5.5s are 100-16, 5.3% yield. FNCL 2s are $81, 4.1% yield/3 cpr. Many coupons have price discounts greater than average life, my rule of thumb for positive convexity in MBS, making them attractive to money managers as UST substitutes with a pickup in yield.

There is a huge overhang of MBS on the Fed's balance sheet, that, if it sold, will not find buyers without leverage from QE. So, either the Fed does not sell MBS, MBS rates and yields go even higher if the Fed sells, dropping MBS prices further, or MBS QE gets substituted back to UST QE which will resupply leverage (ie Fed buys USTs to sell MBS).

When Janet Yellen embarked on MBS QT from 2017 to 2019, MBS OAS spreads widened 30 bps. But when Clinton cut T-Bill issuance in 1997, spreads widened by over 100 bps.

USTs fall into this same category – the risk from QT is too high to own these, in my opinion.

Here are the SOMA holdings:

https://www.newyorkfed.org/data-and-statistics/data-visualization/system-open-market-account-portfolio

and MBS holdings. Over $2T are 3s and lower. Markets can barely absorb a $50B sale, forget $2T.

https://www.newyorkfed.org/data-and-statistics/data-visualization/system-open-market-account-portfolio

The ETFs of the MBS Index certainly do not reflect the true float in the MBS market as most of the low coupons are owned by the Fed and don't freely trade. I have no idea who would want to buy the low coupon, very long duration MBS that the Fed owns once the money managers have fully indexed, if the Fed tries to sell them.

MBS derivatives

I've traded MBS and invested in MBS derivatives since 1995, and trained a lot of successful MBS investors in their use in portfolio construction since the early 1990s in MBS research and Risk Controlled Arb, at both Nomura and Morgan Stanley.

Our portfolio currently only holds a few derivatives – less than 10% of the portfolio. We typically use them to manage overall portfolio duration, with IOs (Interest Only) being negative duration, and IIOs (Inverse IOs) being very long positive duration. We sold most of our derivatives when COVID hit, due to uncertainty of legislation regarding delinquencies and buyouts, and prepayment risk from the Fed cutting rates.

The ones we have left tend to prepay slowly for a variety of reasons, and were not as exposed to risk as the ones we sold. (Some were also too small to bother selling – our returns from purchase on many of these were well over 100%, and now have a negative basis). We own Agency, CMBS, and Non-Agency derivatives, IOs and Inverse IOs.

The weighted average October Income on our remaining IO portfolio is 17% annualized, but the line item mean is 23% annualized, with a min of -59% annualized income and max of 517% annualized income. For the IIOs, similarly, the range is wide – 13.7% weighted average annualized income, -109% min, 363% max. Marks are also all over the place, driven by models that reflect cohort behavior, and not reflecting individual bond ideosyncracies and cashflow performance. Some IO marks are up, Non agency IO marks are down, CMBS IO marks are down, and IIO marks are down.

Earlier this year, I wrote a piece about how it was too early to invest in IOs then, as negative carry was still high, due to lags between interest rates and home sales/prepayments. Over the past few months, speeds have slowed on many IOs.

Given that I think that Powell will not be able to have much impact on supply driven inflation (which will subside on its own in good time), rates could stay high for a while. I would recommend legging back into derivatives, with the caveat that these are risky with idiosyncratic risk, high bid-offer spreads, and not suitable for all clients. They need numerous line items to be diversified.

I also like CMBS IOs that could extend, although I prefer older deals with higher coupons, so they are shorter to start with but are more levered to extension, and have some asset price appreciation over the past 5-8 years built in already, reducing defaults.

MBS REITs

Once there is a selloff, the quick and easy way to get MBS exposure is through REIT equity and REIT preferred stock.

It is important to remember that MBS REITs are a great business for founders to become Billionaires, but are in of themselves not great investments over time or even a cycle. There are some that have generated negative total returns since inception in the 1990s, while their founders have gotten very rich.

In general, if you understand when they issue stock to buy assets, and when they sell assets, you can understand why. Very generally, I think of them as Buy High, Sell Low strategies. Since they always run at max leverage as their retail buyers are attracted by high dividend yields, they are forced to sell when the markets decline due to margin calls, and issue stock and debt to buy more bonds when prices are stable (usually high). Not an ideal strategy to compound capital!

As the table above shows, once a bailout was in place in April 2020, some REITs had terrific performance from 4/2020-12/2020 due to their leverage. REITs should be treated as trades, and maybe even placeholders to deploy cash while bonds are being purchased one at a time. Don't forget to sell them.

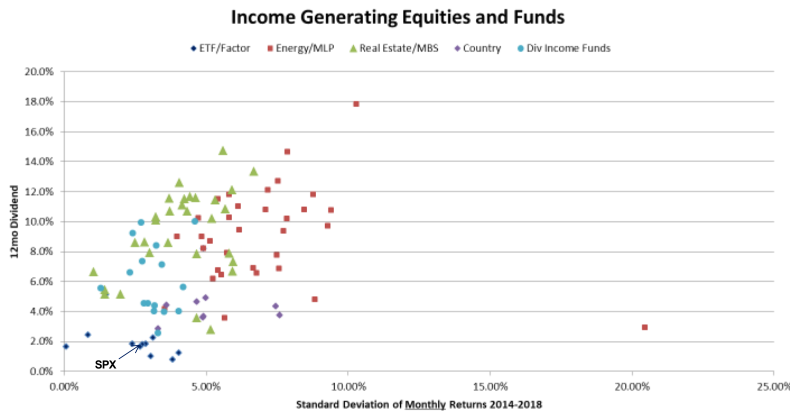
I researched REITS a few years ago, and have some that I prefer over others. One thing I would not buy is a REIT ETF.

Like all bond managers, REITs are not equal, and their returns exhibit risk-return traits that do not change much over time. This is a function of the in-general stickiness of investors in bonds and the inertia of bond portfolio managers who stick with their style and beliefs, whether in funds or REITs.

There is a portfolio of REITs (on an efficient frontier) that can easily outperform the REIT ETFs, if one wants to hold REITs for longer periods of time. I've modelled such portfolios, if interested.

Income from Dividends

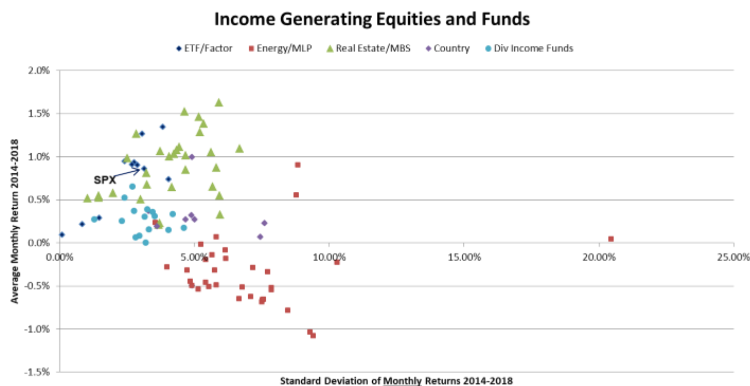
exposed to price/return risk – standard deviations of returns are high



MBS Mantra, LLC 23

But, Risky Total Returns

average monthly returns 2014-2018



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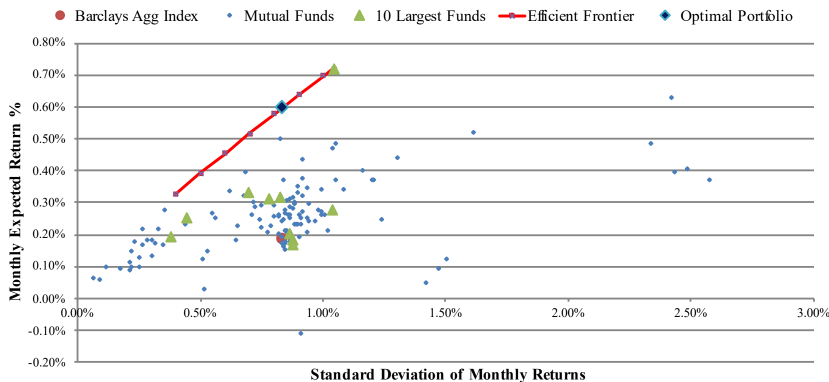
<u>Bond funds – especially Closed End</u>

Bond funds exhibit stable risk-reward styles over time, as I mentioned above, due to the stickiness of their consultant-driven pension investors. The graph below, of 100+ funds, all over $1B in AUM, all benchmarked to the AGG or intermediate bonds, shows that there is no real competition between them to improve performance or

match the risk of their benchmark. The Jackson Pollack splatterplot below led me to create an efficient frontier and an optimal portfolio.

Outperforming the Barclays Agg Index using Portfolios of Fixed Income Funds

Monthly Return for 100+Agg-style Funds 2012 to 2017



Source: Bloomberg, MBS Mantra, LLC

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Some of these managers have closed-end funds that could get interesting in a deleveraging liquidity event, as indiscriminate selling can often lead to a significant (10%+) NAV discount – whereas most of the time they trade at an NAV premium, leading to a nice value roundtrip in addition to price change from recovery.

The implicit statement I am making is that manager style dominates the market in bonds (and REITs), so Fixed Income fund and manager selection requires some work and research. Some are good, others not so much.

I've been tracking the optimal portfolio above for years out of sample. It easily and consistently outperforms the AGG, and I can offer this as a product to MFOs, pension plans, foundations, and consultants that want a bond anchor.

Consultants should be investing in a portfolio of fixed income, and not 1 single fixed income manager or fund for their 60/40 portfolios, and quite frankly, some of these funds should be put out of their misery.

Also, there is no reason to ever own the AGG ETF. It's easy to do better.

CLOs – levered loans and CLO Equity

In March 2020, AAA CLO spreads had widened to over +500, with prices in the $80s. Spreads actually doubled on one day in March 2020, with panic selling. The announcement of TALF led to a recovery.

Currently prices have only declined to the mid $90s. There is a large universe of banks and asset managers looking to grab the AAA tranches of CLOs anytime they widen, as is the case today. Senior bonds went down a few points, and were snagged up, recovering about half of the widening.

Banks currently own large blocks (~$40+B) of hung debt from PE deals, that were caught up in the rise of rates. These are now offered at discounts which will lead to ~$500B in losses for banks. In spite of discounts, this debt has not cleared, with the banks being unwilling so far to hit the bids that are on offer. A number of other firms have already raised distressed debt funds to buy this debt. Banks will eventually succumb, but in the meantime, the levered buyout activity of PE firms has slowed down, in turn slowing down CLO issuance due to lack of feedstock for levered debt CLOs.

CLO subs are likely to get downgraded and widen as their loan holdings get downgraded. Structural triggers could divert cashflows to protect senior bonds.

Over the past decade, loan covenants have progressively gotten weaker. As a result, not all loans are equally protected, and CLOs are likely to have a mix of collateral quality. In addition, with P/E ratios in the equity markets having risen over the past decade thanks to QE, underlying taken over companies that generate the levered loan debt that is the collateral for CLOs have also gotten riskier, making recent debt riskier than seasoned debt.

Without hung deals clearing from bank balance sheets, CLO spreads will likely continue to widen, and CLO equity will become riskier.

Capital will probably transition to asset backed deals, where there is hard collateral.

CMBS

Yields on these have increased and are now in the vicinity of 5.5% to 6% for seniors, and 6.5% to 7% for seasoned IG mezz paper. These are worth leveraging in my opinion, especially the very short ones.

Spreads are around +150 for seniors of all WALs, still tighter than mid-April 2020 after TALF 2.0, when they were about +170-180. Prior to the TALF announcement, they had widened significantly, with many REITS having gotten margin calls. Many bonds, subs especially, declined by 30-40 points. A bond that was offered (not necessarily traded) at $65 on 3/24/2020 is now marked in the $90s.

Most CMBS have a number of headwinds – questionable office occupancy due to a range of 'return to work' decisions by corporations, malls continuing with their problems since the advent of Amazon, etc.

In multifamily, I am already hearing of significant declines in new deal prices, as cap rates have risen, and inflation has increased their operating costs, along with lower occupancy assumptions. This results in lower net income projections, which when combined by higher cap rates suggests 20-40% declines in NPV. There are political/legal headwinds for multifamilies as well, with some adverse court rulings related to recoveries of non-paid rent due to COVID.

With refinancings of deals with maturing debt getting more costly, this will likely lead to transition to special servicing for a lot of loans, with loan modifications for properties that get into trouble, from both lowering of coupons as well as maturity extensions. RE with bridge lending will certainly have issues.

High end properties in some cities as well as retail spending in their local economies were heavily supported by 'crypto bros' spending their wealth. Slowdowns should be expected in such regions. Miami will be likely be one of them, with rumors of developers having taking deposits in crypto. It'll be interesting to see if some of these properties get completed.

A lot of CMBS REITs and property-based private equity transactions are likely to be over marked. If the world delevers again, this sector has a lot further to fall.

This will make CMBS IOs very interesting, as they were post dot-com. CMBS Subs have a ways to go before they should be invested in.

ABS – autos

A lot of auto deals, especially subprime auto deals, were originated with LTVs greater than 100%, as a lot of product was sold by rolling over the prior loan into the new loan.

This sector has widened, but there is demand due to their short WALs and duration. While the deals have excess spread, and lots of subordination for senior bonds, the subs are at risk in an economic downturn, and in a deleveraging should be a lot wider than where they are currently trading.

Another TALF will make this sector very interesting, as the seniors are usually safe.

There are other structured finance sectors, and within each sector listed above there are sub-sectors that have more nuanced investment risks and theses. But hopefully this high level view gives some perspective on what the risks are, and when it is time to invest in some of these sectors.

Regards, Samir Shah

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