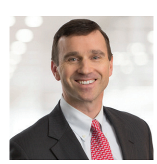
Morgan Stanley

INVESTMENT MANAGEMENT

2019 Market Outlook: Securitized

Positive Outlook for Securitized Supported by Strong Consumer Credit Conditions



GREGORY FINCK

Managing Director
Global Fixed Income Team

FIXED INCOME | GLOBAL FIXED INCOME TEAM

As the U.S. Federal Reserve (Fed) policy continues to shift from accommodative to neutral, we expect volatility in both rates and credit markets to remain high. Entering 2019, we maintain a positive fundamental outlook on most credit-oriented securitized assets as real estate and consumer credit conditions remain constructive. However, we have concerns that mark-to-market volatility could increase. We continue to have a more cautious view on agency mortgage-backed securities (MBS) due to supply-demand headwinds from the Fed winding down its $1.7 trillion MBS holdings and from potential reductions in bank holdings of agency MBS. We believe the securitized world is on track to begin 2019 offering higher yields than at the start of 2018, this is largely a function of higher interest rates and wider spreads across many sectors. Given our view of a more range-bound interest rate environment in 2019, we expect the cashflow yields of securitized assets to dominate returns, and we believe these yields offer compelling risk-adjusted opportunities.

DISPLAY 1
Outlook Summary

SECTOR	OUTLOOK	
U.S. Agency MBS	Negative	Cheapened in 2018, but still face supply headwinds
U.S. Non-Agency RMBS	Positive	Not as cheap as the past 10 years, but still a good value
European RMBS	Positive	Low mortgage rates are positive for home prices
U.S. CMBS	Mixed	Risk profiles vary substantially by specific securities
U.S. ABS	Positive	Consumer credit conditions remain healthy
European ABS	Neutral	Positive credit conditions but weaker relative value

Interest Rates and Fiscal Policy

In the U.S., rising interest rates and tightening Fed policy were the dominant themes for 2018. For 2019, we expect between two and four 25 basis-point rate hikes by the Fed, in addition to another interest rate hike in December 2018. Depending on economic conditions, we project terminal Fed Funds rates between 3% and 3.5%, and continued curve flattening with 10-year U.S. Treasury rates also ranging between 3% and 3.5%. We expect unemployment to remain low and wages to continue to rise, while broader gross domestic product (GDP) growth should taper due to global headwinds and the impact from higher rates. This forecast should bode well for credit- related securitized assets, as it implies healthy U.S. household and consumer credit conditions, while also keeping residential and commercial mortgage rates constrained and relatively low by historical standards.

We maintained a relatively short-duration positioning in 2018, due to a concern of rising rates. Although our concern about the impact from higher rates has largely been realized, we continue to maintain a shorter- duration positioning due to the flatness of the curve, which we believe provides minimal compensation for taking on longer duration risks.

In Europe and the U.K., we expect accommodative central bank policies to continue due to modest economic growth and uncertainty surrounding both Brexit and Italy. Although the European Central Bank (ECB) has announced the end of its asset-backed securities (ABS) purchase program, given their relatively low level of ABS purchases, we do not expect this change to have a material impact on European ABS valuations. Low interest rates have had a positive effect on home prices, consumer credit and general economic health across most of Europe, and we do not foresee these conditions to deteriorate any time soon. We expect modestly positive growth to continue within most of the eurozone, although, we believe the U.K. could experience a modest recession due to Brexit impacts.

Agency MBS

2018 was a difficult year for U.S. agency MBS, plagued by rising interest rates, extended durations, widened spreads, increased volatility and supply-demand headwinds resulting from the decline in Fed MBS purchases. Agency MBS, one of the most interest rate sensitive sectors within securitized markets, comprises the vast majority of the securitized world. Since these securities are largely characterized by fixed rate mortgages, mortgage prepayment speeds play a crucial role in determining the duration of these securities. As interest rates increased in 2018, the large majority of the mortgage market became out-of-the-money from a rate-based refinance perspective, and mortgage prepayment speeds slowed significantly. Considering the,rough year that agency MBS had in 2018, we believe that the majority of the damage from higher interest rates and rising volatility has now been realized for the sector, as interest rates are 70 to 100 basis points higher, MBS durations are now more than a year longer, interest rate volatility and mortgage option costs have increased, and nominal spreads to U.S. Treasuries have widened 20 to 30 basis points.[1] However, supply pressure from decreasing Fed purchases will continue into 2019, and possibly accelerate. The Fed began 2018 buying roughly $20 billion agency MBS per month and ended the year essentially making no new purchases.[2] The Fed's agency MBS holdings fell by more than $100 billion over the course of 2018, from $1.77 trillion to $1.67 trillion, and we expect the portfolio to shrink to a greater degree in 2019.[3] Despite our expectation for agency MBS spreads to widen further in 2019 as a function of weaker demand,

[1] Source: Citi YieldBook. Data as of November 29, 2018.

[2] Source: US Federal Reserve. Data as of November 2018.

[3] Source: US Federal Reserve. Data as of November 2018.

we still expect agency MBS to outperform U.S. Treasuries with the additional carry of agency MBS outweighing the impact from widening spreads. Within agency MBS, we continue to favor higher coupon MBS, which offer greater duration-adjusted carry, and have the potential to benefit from either a stable interest rate environment or a continued rising rate environment.

U.S. Housing Market Fundamentals and Non-Agency RMBS

In 2018, U.S. home prices rose roughly 5% to 6% for the seventh consecutive year, but the impact of rising home prices, in conjunction with rising interest rates, has begun to negatively impact home affordability. Going forward, we project U.S. home price appreciation to closely mirror U.S. economic growth and to be constrained by affordability.[4] Despite increasingly more challenging affordability, housing demand is still healthy due to a robust economy, and- a housing supply that is relatively low by historical standards. This favorable supply-demand dynamic leads us to project that U.S. home prices will rise between 3% to 4% in 2019.

Non-agency residential mortgage-backed securities (RMBS) should continue to perform well in 2019, although to a lesser degree than in recent years. Mortgage market conditions remain healthy with declining mortgage delinquency and default rates, reflecting the strength of the U.S. economy and upward trajectory of home prices. Spreads on non-agency RMBS have tightened significantly over the past several years, and material further spread tightening seems unlikely. We believe that non-agency RMBS still offers reasonably compelling risk-adjusted carry compared to other sectors, and performance in 2019 should largely be a function of cashflow-based returns, with little expectation of price appreciation. Over the past few years, we have reduced our non-agency RMBS holdings from our biggest overweight, to a moderate overweight, but we still remain positive on the sector.

European RMBS

Driven by a low mortgage rate environment and improving economic conditions, we believe that home price appreciation across most of Europe will continue into 2019. We particularly favor RMBS in areas which we believe to have the greatest potential for home price appreciation, especially Spain, Portugal, Ireland and Greece. We also like RMBS in the Netherlands, Germany and selectively in the U.K. Although we expect that home prices will soften in the U.K., we do not expect a material decline largely due to limited housing supply and low mortgage interest rates. Within U.K. RMBS, we have a strong bias towards very seasoned loans. These loans have the advantage of significant embedded home-price appreciation and are held by borrowers who have proven payment histories. Finally, we also favor countries with well-established mortgage lending laws, which facilitate reasonably swift repossession of properties in the event of defaults.

U.S. Commercial Real Estate (CMBS)

U.S. commercial real estate experienced a period of significant growth post crisis, however, prices have stabilized over the past two years and we expect prices to remain relatively flat in 2019. Commercial real estate conditions remain positive with high occupancy levels, rising rental rates and a healthy U.S. economy, but higher interest rates could provide a headwind in 2019. The commercial real estate market is a highly idiosyncratic sector, as credit quality can vary significantly between different asset classes and specific properties. We are generally constructive on the housing sector of commercial real estate, office buildings and distribution centers. We continue to have concerns about retail shopping centers, as the “Amazon effect” continues to impact how consumers shop and the viability of many brick-and-mortar shopping stores. We are also cautious regarding hotel valuations given the volatile nature of their earnings and valuations.

European Commercial Real Estate (CMBS)

We expect to see diverging trends in European commercial real estate markets, with many European cities becoming beneficiaries of Brexit-related locations, while London will likely suffer from over-building and weakened demand for office space. We have largely avoided U.K. commercial real estate exposure and have a cautious outlook for U.K. commercial mortgage-backed securities (CMBS) in 2019. Although supply of European CMBS remains limited given the dearth of securitizations over the past few years, and sourcing opportunities can be challenging, we remain generally positive on European commercial real estate.

Consumer Credit and ABS

Consumer credit continues to improve in the U.S. with low unemployment, rising wages, increased savings rates, and more conservative consumer debt levels. Credit card debt, auto loans and consumer loans have performed well, and we believe this positive dynamic will continue in 2019. Consumer ABS was one of the few sectors to experience spread tightening in 2018, causing relative value for consumer ABS to appear slightly less compelling than it was a year ago, but we remain positive from a fundamental credit perspective. We favor the relatively short-duration nature of consumer ABS, which limits risk exposure to a potential recessionary environment in 2020 or 2021.

European ABS spreads remain relatively tight, and offer less attractive relative value. Fundamental credit conditions appear generally positive, but vary by country based on lending laws and local economic conditions.

[4] Source: Bloomberg, S&P CoreLogic Case-Shiller US National Home Price. Data as of September 30, 2018.

Risk Considerations

Diversification does not eliminate the risk of loss.

There is no assurance that a Portfolio will achieve its investment objective. Portfolios are subject to market risk, which is the possibility that the market values of securities owned by the Portfolio will decline and may therefore be less than what you paid for them. Accordingly, you can lose money investing in this Portfolio. Please be aware that this Portfolio may be subject to certain additional risks.

Fixed income securities are subject to the ability of an issuer to make timely principal and interest payments (credit risk), changes in interest rates (interest rate risk), the creditworthiness of the issuer and general market liquidity (market risk). In the current rising interest rate environment, bond prices may fall and may result in periods of volatility and increased portfolio redemptions. **Longer-term securities** may be more sensitive to interest rate changes. In a declining interest rate environment, the portfolio may generate less income. Certain **U.S. government securities** purchased by the strategy, such as those issued by Fannie Mae and Freddie Mac, are not backed by the full faith and credit of the U.S. It is possible that these issuers will not have the funds to meet their payment obligations in the future. Public bank loans are subject to liquidity risk and the credit risks of lower-rated securities. **High-yield securities (junk bonds)** are lower-rated securities that may have a higher degree of credit and liquidity risk. **Mortgage- and asset-backed securities** are sensitive to early prepayment risk and a higher risk of default, and may be hard to value and difficult to sell **(liquidity risk)**. They are also subject to credit, market and interest rate risks. Investments in **foreign markets** entail special risks such as currency, political, economic and market risks. The risks of investing in **emerging market** countries are greater than the risks generally associated with foreign investments. **Derivative instruments** may disproportionately increase losses and have a significant impact on performance. They also may be subject to counterparty, liquidity, valuation, correlation, and market risks. **Restricted and illiquid securities** may be more difficult to sell and value than publicly traded securities (liquidity risk). Due to the possibility that prepayments will alter the cash flows on **collateralized mortgage obligations (CMOs)**, it is not possible to determine in advance their final maturity date or average life. In addition, if the collateral securing the CMOs or any third-party guarantees are insufficient to make payments, the portfolio could sustain a loss.

DISTRIBUTION

This communication is only intended for and will only be distributed to persons resident in jurisdictions where such distribution or availability would not be contrary to local laws or regulations.

United Kingdom: Morgan Stanley Investment Management Limited is authorised and regulated by the Financial Conduct Authority. Registered in England. Registered No. 1981121. Registered Office: 25 Cabot Square, Canary Wharf, London E14 4QA, authorised and regulated by the Financial Conduct Authority. **Dubai:** Morgan Stanley Investment Management Limited (Representative Office, Unit Precinct 3-7th Floor-Unit 701 and 702, Level 7, Gate Precinct Building 3, Dubai International Financial Centre, Dubai, 506501, United Arab Emirates. Telephone: +97 (0)14 709 7158). **Germany:** Morgan Stanley Investment Management Limited Niederlassung Deutschland Junghofstrasse 13-15 60311 Frankfurt Deutschland (Gattung: Zweigniederlassung (FDI) gem. § 53b KWG). **Italy:** Morgan Stanley Investment Management Limited, Milan Branch (Sede Secondaria di Milano) is a branch of Morgan Stanley Investment Management Limited, a company registered in the U.K., authorised and regulated by the Financial Conduct Authority (FCA), and whose registered office is at 25 Cabot Square, Canary Wharf, London, E14 4QA. Morgan Stanley Investment Management Limited Milan Branch (Sede Secondaria di Milano) with seat in Palazzo Serbelloni Corso Venezia, 16 20121 Milano, Italy, is registered in Italy with company number and VAT number 08829360968. **The Netherlands:** Morgan Stanley Investment Management, Rembrandt Tower, 11th Floor Amstelplein 1 1096HA, Netherlands. Telephone: 31 2-0462-1300. Morgan Stanley Investment Management is a branch office of Morgan Stanley Investment Management Limited. Morgan Stanley Investment Management Limited is authorised and regulated by the Financial Conduct Authority in the United Kingdom. **Switzerland:** Morgan Stanley & Co. International plc, London, Zurich BranchI Authorised and regulated by the Eidgenössische Finanzmarktaufsicht ("FINMA"). Registered with the Register of Commerce Zurich CHE-115.415.770. Registered Office: Beethovenstrasse 33, 8002 Zurich, Switzerland, Telephone +41 (0) 44 588 1000. Facsimile Fax: +41(0)44 588 1074.

Japan: For professional investors, this document is circulated or distributed for informational purposes only. For those who are not professional investors, this document is provided in relation to Morgan Stanley Investment Management (Japan) Co., Ltd. ("MSIMJ")'s business with respect to discretionary investment management agreements ("IMA") and investment advisory agreements ("IAA"). This is not for the purpose of a recommendation or solicitation of transactions or offers any particular financial instruments. Under an IMA, with respect to management of assets of a client, the client prescribes basic management policies in advance and commissions MSIMJ to make all investment decisions based on an analysis of the value, etc. of the securities, and MSIMJ accepts such commission. The client shall delegate to MSIMJ the authorities necessary for making investment. MSIMJ exercises the delegated authorities based on investment decisions of MSIMJ, and the client shall not make individual instructions. All investment profits and losses belong to the clients; principal is not guaranteed. Please consider the investment objectives and nature of risks before investing. As an investment advisory fee for an IAA or an IMA, the amount of assets subject to the contract multiplied by a certain rate (the upper limit is 2.16 percent per annum (including tax)) shall be incurred in proportion to the contract period. For some strategies, a contingency fee may be incurred in addition to the fee mentioned above. Indirect charges also may be incurred, such as brokerage commissions for incorporated securities. Since these charges and expenses are different depending on a contract and other factors, MSIMJ cannot present the rates, upper limits, etc. in advance. All clients should read the Documents Provided Prior to the Conclusion of a Contract carefully before executing an agreement. This document is disseminated in Japan by MSIMJ, Registered No. 410 (Director of Kanto Local Finance Bureau (Financial Instruments Firms)), Membership: The Investment Trusts Association, Japan, the Japan Investment Advisers Association and the Type II Financial Instruments Firms Association.

U.S.

A separately managed account may not be suitable for all investors. Separate accounts managed according to the Strategy include a number of securities and will not necessarily track the performance of any index. Please consider the investment objectives, risks and fees of the Strategy carefully before investing. A minimum asset level is required. For important information about the investment manager, please refer to Form ADV Part 2.

Please consider the investment objectives, risks, charges and expenses of the funds carefully before investing. The prospectuses contain this and other information about the funds. To obtain

a prospectus please download one at morganstanley.com/im or call 1-800-548-7786. Please read the prospectus carefully before investing.

Morgan Stanley Distribution, Inc. serves as the distributor for Morgan Stanley Funds.

NOT FDIC INSURED | OFFER NO BANK GUARANTEE | MAY LOSE VALUE | NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY | NOT A BANK DEPOSIT

Hong Kong: This document has been issued by Morgan Stanley Asia Limited for use in Hong Kong and shall only be made available to "professional investors" as defined under the Securities and Futures Ordinance of Hong Kong (Cap 571). The contents of this document have not been reviewed nor approved by any regulatory authority including the Securities and Futures Commission in Hong Kong. Accordingly, save where an exemption is available under the relevant law, this document shall not be issued, circulated, distributed, directed at, or made available to, the public in Hong Kong. **Singapore:** This document should not be considered to be the subject of an invitation for subscription or purchase, whether directly or indirectly, to the public or any member of the public in Singapore other than (i) to an institutional investor under section 304 of the Securities and Futures Act, Chapter 289 of Singapore ("SFA"), (ii) to a "relevant person" (which includes an accredited investor) pursuant to section 305 of the SFA, and such distribution is in accordance with the conditions specified in section 305 of the SFA; or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. **Australia:** This publication is disseminated in Australia by Morgan Stanley Investment Management (Australia) Pty Limited ACN: 122040037, AFSL No. 314182, which accept responsibility for its contents. This publication, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act.

IMPORTANT INFORMATION

EMEA: This marketing communication has been issued by Morgan Stanley Investment Management Limited ("MSIM"). Authorised and regulated by the Financial Conduct Authority. Registered in England No. 1981121. Registered Office: 25 Cabot Square, Canary Wharf, London E14 4QA.

There is no guarantee that any investment strategy will work under all market conditions, and each investor should evaluate their ability to invest for the long-term, especially during periods of downturn in the market. Prior to investing, investors should carefully review the strategy's/product's relevant offering document. There are important differences in how the strategy is carried out in each of the investment vehicles.

A separately managed account may not be suitable for all investors.

Separate accounts managed according to the Strategy include a number of securities and will not necessarily track the performance of any index. Please consider the investment objectives, risks and fees of the Strategy carefully before investing.

The views and opinions are those of the author or the investment team as of the date of preparation of this material and are subject to change at any time due to market or economic conditions and may not necessarily come to pass. Furthermore, the views will not be updated or otherwise revised to reflect information that subsequently becomes available or circumstances existing, or changes occurring, after the date of publication.

The views expressed do not reflect the opinions of all investment teams at Morgan Stanley Investment Management (MSIM) or the views of the firm as a whole, and may not be reflected in all the strategies and products that the Firm offers.

Forecasts and/or estimates provided herein are subject to change and may not actually come to pass. Information regarding expected market returns and market outlooks is based on the research, analysis and opinions of the authors. These conclusions are speculative in nature, may not come to pass and are not intended to predict the future performance of any specific Morgan Stanley Investment Management product.

Certain information herein is based on data obtained from third party sources believed to be reliable. However, we have not verified this information, and we make no representations whatsoever as to its accuracy or completeness.

This communication is not a product of Morgan Stanley's Research Department and should not be regarded as a research recommendation. The information contained herein has not been prepared in accordance with legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research.

This material is a general communication, which is not impartial and has been prepared solely for informational and educational purposes and does not constitute an offer or a recommendation to buy or sell any particular security or to adopt any specific investment strategy. All investments involve risks, including the possible loss of principal. The information herein has not been based on a consideration of any individual investor circumstances and is not investment advice, nor should it be construed in any way as tax, accounting, legal or regulatory advice. To that end, investors should seek independent legal and financial advice, including advice as to tax consequences, before making any investment decision.

Any index referred to herein is the intellectual property (including registered trademarks) of the applicable licensor. Any product based on an index is in no way sponsored, endorsed, sold or promoted by the applicable licensor and it shall not have any liability with respect thereto.

MSIM has not authorised financial intermediaries to use and to distribute this document, unless such use and distribution is made in accordance with applicable law and regulation. Additionally, financial intermediaries are required to satisfy themselves that the information in this document is suitable for any person to whom they provide this document in view of that person's circumstances and purpose. MSIM shall not be liable for, and accepts no liability for, the use or misuse of this document by any such financial intermediary.

This document may be translated into other languages. Where such a translation is made this English version remains definitive. If there are any discrepancies between the English version and any version of this document in another language, the English version shall prevail.

The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without MSIM's express written consent.

Morgan Stanley Investment Management is the asset management division of Morgan Stanley.

All information contained herein is proprietary and is protected under copyright law.

Explore our site at **www.morganstanley.com/im**

9438045_KC_1218 CRC 2338224 Exp. 12/31/2019 Lit-Link: ABS_OUTLOOK19