What should investors be aware of regarding Fannie and Freddie MBS and the UMBS initiative?

The GSEs are rolling out fungible mortgage backed securities to replace their independent ones. While the initial logistics of the transition might seem daunting at first, once everything is in place, the move should boost liquidity and eliminate price disparities between the two issuers.

Executive summary

- The Single Uniform Mortgage-Backed Securities Market initiative (UMBS) will allow investors to freely trade Fannie Mae and Freddie Mac MBS in a fungible form.
- The intent is to eliminate pricing disparities between the two agencies and enhance liquidity in To-Be-Announced (TBA) markets.
- This will align payment delays, naming conventions, and prepayment rates across Fannie and Freddie MBS.
- Both GSEs will continue to exist in isolation; they will continue to be guarantors, but they are going to contribute to the same ticker.
- This is a step on the path to likely future GSE reform (and an initiative to allow multiple guarantors in the housing finance system)

Fannie Mae and Freddie Mac are fairly similar in terms of their mandate and underwriting criteria. Nonetheless, Fannie Mae has had more traction in the market due to its slightly more diverse servicer composition, and from a TBA trade perspective it has been a more liquid vehicle to use when investors needed a tactical basis expression.

The TBA market is designed to operate so that originators can hedge out their books and many of the larger servicers and originators participation in Fannie’s program self-perpetuated the liquidity advantage relative to Freddie TBA. See Figure One.

Figure Two shows differences in prepayments. While there is not a significant difference in speeds as of the date indicated, when rates were lower, Freddie speeds increased more than Fannie. In general, based on index composition [Bloomberg Barclays MBS Index], Freddie-issued MBS has slightly worse negative convexity than Fannie Mae securities.

That can be attributed to the servicer compositions. While there is some variance in collateral, it is something that the market was able to take in stride; when the GSEs had larger balance sheets, they were able to interact with the market if there were disruptions between Fannie and Freddie swaps. Oftentimes Freddie would enter the market and buy back pricing misalignments to correct the situation.

Contributor:
Scott Agi: Sector Head—MBS & Rates

Please note certain information in this presentation constitutes forward-looking statements. Due to various risks, uncertainties and assumptions made in our analysis, actual events or results or the actual performance of the markets covered by this presentation report may differ materially from those described. The information herein reflect our current views only, are subject to change, and are not intended to be promissory or relied upon by the reader. There can be no certainty that events will turn out as we have opined herein.
What should investors be aware of regarding Fannie and Freddie MBS and the UMBS initiative?

In general, Freddie Mac securities typically trade “on top” of Fannie’s because of the delay difference. Investors receive cash on the 15th day of the month as opposed to the 25th with Fannie Mae. That allows an investor to reinvest those cash flows for 10 days. When money market rates are higher, that can potentially be lucrative. Generally, when Freddie was trading behind Fannie, it was considered a dislocation.

Exchange logistics

It can be confusing to have Freddie Mac be the guarantor of a bond with a Fannie Mae label—Figure Three helps to clarify the situation. The table illustrates the characteristics of original Fannie pools, original Freddie pools, the new exchangeable pools, as well as what will be the new issuance of UMBS. Note the Freddie MBS column. It shows that there will be a difference in payment delay, which is 45 days versus 55 days for Fannie. Freddie Gold investors will be able to exchange, but if they do not, they will lose their TBA deliverability when the TBA market effectively goes away once liquidity starts to dry up. It is still posted on the screens, but fewer and fewer dealers will be making active markets over time.

The entire agency MBS market will be moving to UMBS. There will be no new issuance of Freddie Mac securities and the existing float will continue to erode over time. So ultimately there will not be an active TBA market, which will likely force investors to exchange.

There is already a mirror security established for every Freddie Mac pool in the market; more than 70,000 securities all recreated with new CUSIPs and new tickers and available on Bloomberg. There will, however, be a change in the naming conventions.
What should investors be aware of regarding Fannie and Freddie MBS and the UMBS initiative?

June 2019

FIGURE 3: CHANGES IN SECURITY ATTRIBUTES

<table>
<thead>
<tr>
<th>Attribute</th>
<th>FNMA MBS Pool</th>
<th>FRE MBS Pool</th>
<th>FRE Uniform MBS Pool</th>
<th>FNMA Uniform MBS Pool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment delay</td>
<td>55 days</td>
<td>45 days</td>
<td>55 days</td>
<td>55 days</td>
</tr>
<tr>
<td>Issuer</td>
<td>Fannie Mae</td>
<td>Fannie Mae</td>
<td>Fannie Mae</td>
<td>Fannie Mae</td>
</tr>
<tr>
<td>Conversion of legacy pools to UMBS?</td>
<td>Not necessary – they are fungible</td>
<td>Yes – Exchange is optional</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Prefix &amp; pool numbers</td>
<td>6 Character pool number with prefix – CO4846</td>
<td>3 character prefix + 6-char pool number CL AB4321</td>
<td>_ To follow FNMA pool convention _ Allotted pool numbers from Q-Z _ Mirror Pools to begin with Z</td>
<td>_ Continue existing FNMA Pool convention _ Allotted pool numbers from A-I, M</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attribute</th>
<th>FNMA TBA</th>
<th>FRE TBA</th>
<th>New Uniform MBS TBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBA deliverable criteria</td>
<td>Legacy FNMA securities</td>
<td>Legacy FRE securities</td>
<td>_ Legacy FNMA pools _ FNMA-issues Uniform MBS _ FRE-issued Uniform MBS _ Legacy FRE securities exchanged for mirror securities</td>
</tr>
<tr>
<td>TBA CUSIP</td>
<td>Start with '01F'</td>
<td>Starts with '02R'</td>
<td>To start with '01F'</td>
</tr>
</tbody>
</table>


There are two ways to exchange. One is to trade directly with dealers and the other is to trade directly with Freddie Mac. The latter is done through TradeWeb. DWS thinks it makes more sense to use the TradeWeb-direct-to-Freddie path which allows for free of-payment delivery and T+1 settlement. Investors buy and sell the security at the same dollar price. We also believe it is much “cleaner” to exchange directly with Freddie because there are no additional costs. Dealers can technically charge you, they may not but if they are capacity strained on a particular day they could seek some form of compensation.

Regardless of which facility is used, no accounting impact is expected on the exchange itself. So even though there would have been a slight difference in the price due to the difference in delay, it is not expected to be a taxable event and should not have any impact on book yields. (Note: Each investor should check with their accounting or finance group on taxable impact.)

Float Compensation

The float compensation is the difference in delay between the 45- and the 55-day payment. Freddie Mac is issuing weekly table listing all outstanding CUSIPs and what the corresponding float compensation is worth. They are using an even OAS methodology in Bloomberg’s model to calculate the compensation, although there is some discussion of using various other models to verify the calculation. The float is expected to be transparent; it will be on a schedule and once investors execute the exchange, they will receive a wire with a one-time compensation.

Investors should speak with their accountants and auditors to determine the best practice for handling this compensation. Various options that are being explored include it being embedded in the cost, treated as a one-time miscellaneous income or “smoothed out” through the amortization schedule.
UMBS Motives

To understand the motive for the UMBS initiative, look at Figure Four which shows the divergence of these swaps over time. When the market was at some of the lowest in terms of rates, investors saw the greatest dispersion in pricing between the two agencies.

Figure Five gives an idea of the size of the float between Fannie and Freddie. Across some of the higher coupons that have not been produced in some time, there is very little float in Freddie MBS. This promoted more periodic short squeezes as larger accounts were able to capitalize on the markets. Fannie and Freddie took note of this but acknowledged that they no longer had adequate balance sheet, which prompted a resolution to consolidate efforts. Going forward, the two GSEs will continue to exist in isolation as guarantors, but they are going to contribute to the same ticker, post-UMBS implementation to improve liquidity.

Freddie has accepted feedback from investors over the past several years, and DWS was engaged in conversations with the agencies early on. The individuals in charge of this program on both sides are very informed investors with broad industry experience. They were open to investor feedback to gain a better understanding of client concerns and considerations related to this initiative.

DWS thinks this initiative will help the market from a liquidity standpoint. We also see a benefit in terms of a cost savings when it comes to REMICs and Supers, because they are likely going to be competing for business (additional details later in the report.)

Finally, in terms of the time to turnover, Figure Five illustrates how much higher the trading volumes were in Fannie. Over the past year it has been as much as 20:1 in favor of Fannie versus Freddie. Most investors just bypassed Freddie as an index sub-sector, and on the TBA side opted for the improved liquidity with Fannie Mae.

FIGURE 4: FG/FN SWAP HAS COMPRESSED IN RECENT YEARS

Source: Bloomberg data comparing April levels from 2012–2018.
What should investors be aware of regarding Fannie and Freddie MBS and the UMBS initiative?

June 2019

---

**FIGURE 5: SIZE AND TURNOVER TIMES**

**Estimated size of FNCL and FGLMC float**

<table>
<thead>
<tr>
<th>Coupon</th>
<th>Estimated FNCL TBA Float ($bn)</th>
<th>Estimated FGLMC TBA Float ($bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>3</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>3.5</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>4</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>4.5</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

**Estimated time to turnover TBA float**

<table>
<thead>
<tr>
<th>Coupon</th>
<th>Estimated days to turn over FNCL Float</th>
<th>Estimated days to turn over FGLMC Float</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>3.5</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>4</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>4.5</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Note: Float is defined as the outstanding balance of pools for each coupon held by the Federal Reserve, those in CMOs, and specific pools.


---

**REMICs and supers**

As far as most people are concerned, REMIC is just a fancy word for collateralized mortgage obligations (CMOs). The way a FNMA REMIC is currently constructed, an investor can either pledge Fannie Mae pools, including megs which are a consolidation of pre-existing Fannie Mae pools, or create a “re-remic,” which is a new CMO comprised of pre-existing CMOs.

Post single security implementation, investors can use UMBS pools and Supers (Supers are essentially replacing Megas) and use any exchangeable Freddie collateral (mirror securities), and/or any REMICs that were created from the same collateral. The only difference is that an investor would not be allowed to use legacy Freddie securities. Therefore legacy Freddie becomes non-TBA deliverable and non-REMIC eligible as far as anything that includes UMBS.

An investor can technically still create a REMIC from a 100 percent legacy Freddie. (DWS does not foresee much of that occurring.) The float is going to continue to disintegrate and start to lose liquidity. That said, both Fannie and Freddie would be able to create a REMIC and compete for business. Right now, they charge approximately five or six “ticks” just to create a REMIC, so when a dealer wants to open a shelf they have to absorb this upfront cost. It is perceived that the fees will drop down to as low as one or two ticks once they compete for business. DWS believes these changes should improve the spreads available to the end investors.

**Conclusion—index consequences**

In regard to the index, there are likely to be some differences between the three primary providers – Bank of American/Merrill Lynch, ICE, and Bloomberg Barclays Indices. Focusing on the more predominant Bloomberg Barclays Index, it has been expressed there will be a legacy Freddie Mac “bucket,” a Fannie Mae “bucket,” and a new UMBS “bucket.”

In terms of what was included in the index, BBG/Barclays is going to consolidate both 45- and 55-day issuance to determine the $1 billion criteria. This was done to avoid market noise on a month-over-month basis in some of the higher coupons, especially on some of the more seasoned vintages where it was really close to the $1 billion threshold. To help encourage exchanges, the exchange compensation will not be included in the index returns. If an investor did all of its exchanges and was managed to the Barclays index, that float compensation is essentially free alpha.

---

Please note certain information in this presentation constitutes forward-looking statements. Due to various risks, uncertainties and assumptions made in our analysis, actual events or results or the actual performance of the markets covered by this presentation report may differ materially from those described. The information herein reflect our current views only, are subject to change, and are not intended to be promissory or relied upon by the reader. There can be no certainty that events will turn out as we have opined herein.
Managing the UMBS debut

Below is the UMBS timeline through the end of June. In essence the market is already “open,” as investors can transact in June settled TBA live on the screens. In early trading, DWS is not seeing any major disruptions. When it was first posted, we did see Freddie TBA prices spike higher, but the market settled in and rebalanced to fair value across the coupon stack.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2019</td>
<td>Forward trading of UMBS begins (June settle TBA)</td>
</tr>
<tr>
<td>April 19, 2019</td>
<td>UMBS guarantor seller/servicer contracts available</td>
</tr>
<tr>
<td>May 7, 2019</td>
<td>Exchange portal opens for booking</td>
</tr>
<tr>
<td>May 17, 2019</td>
<td>1st Freddie Mac Gold PC Exchange settlement</td>
</tr>
<tr>
<td>June 3, 2019</td>
<td>SS Implementation Date – 1st new UMBS issuance, Indices reflect UMBS</td>
</tr>
<tr>
<td>June 13, 2019</td>
<td>1st UMBS notification/settlement date</td>
</tr>
<tr>
<td>June 24, 2019</td>
<td>1st post go-live REMIC issuance with UMBS</td>
</tr>
</tbody>
</table>


Both the market and DWS believe that investors are not likely to exchange on day one; oftentimes when these types of events occur investors look to monitor the situation for a defined amount of time. DWS’ objective in the early stages of the program is to demonstrate operational efficiencies and provide effective execution for portfolio management trading and investor requests based on order flow.
For institutional investor and registered representative use only. Not to be shared with the public.

The brand DWS represents DWS Group GmbH & Co. KGaA and any of its subsidiaries such as DWS Distributors, Inc. which offers investment products or Deutsche Investment Management Americas Inc. and RREEF America L.L.C. which offer advisory services.

The material was prepared without regard to the specific objectives, financial situation or needs of any particular person who may receive it. It is intended for informational purposes only and it is not intended that it be relied on to make any investment decision. It is for professional investors only. It does not constitute investment advice or a recommendation or an offer or solicitation and is not the basis for any contract to purchase or sell any security or other instrument, or for Deutsche Bank AG and its affiliates to enter into or arrange any type of transaction as a consequence of any information contained herein.

Please note that this information is not intended to provide tax or legal advice and should not be relied upon as such. DWS does not provide tax, legal or accounting advice. Please consult with your respective experts before making investment decisions.

Neither DWS nor any of its affiliates, gives any warranty as to the accuracy, reliability or completeness of information which is contained. Except insofar as liability under any statute cannot be excluded, no member of DWS, the Issuer or any officer, employee or associate of them accepts any liability (whether arising in contract, in tort or negligence or otherwise) for any error or omission or for any resulting loss or damage whether direct, indirect, consequential or otherwise suffered.

This document is intended for discussion purposes only and does not create any legally binding obligations on the part of DWS and/or its affiliates. Without limitation, this document does not constitute investment advice or a recommendation or an offer or solicitation and is not the basis for any contract to purchase or sell any security or other instrument, or for DWS to enter into or arrange any type of transaction as a consequence of any information contained herein. The information contained in this document is based on material we believe to be reliable; however, we do not represent that it is accurate, current, complete, or error free. Assumptions, estimates and opinions contained in this document constitute our judgment as of the date of the document and are subject to change without notice. Past performance is not a guarantee of future results. Any forecasts provided herein are based upon our opinion of the market as at this date and are subject to change, dependent on future changes in the market. Any prediction, projection or forecast on the economy, stock market, bond market or the economic trends of the markets is not necessarily indicative of the future or likely performance. Investments are subject to risks, including possible loss of principal amount invested.

Certain DWS products and services may not be available in every region or country for legal or other reasons, and information about these products or services is not directed to those investors residing or located in any such region or country. The material was prepared without regard to the specific objectives, financial situation or needs of any particular person who may receive it. It is intended for informational purposes only and it is not intended that it be relied on to make any investment decision. It is for professional investors only. It does not constitute investment advice or a recommendation or an offer or solicitation and is not the basis for any contract to purchase or sell any security or other instrument, or for DWS and its affiliates to enter into or arrange any type of transaction as a consequence of any information contained herein. The information contained herein is based on material we believe to be reliable; however, we do not represent that it is accurate, current, complete, or error free. Assumptions, estimates and opinions contained in this document constitute our judgment as of the date of the document and are subject to change without notice. Past performance is not a guarantee of future results. Any forecasts provided herein are based upon our opinion of the market as at this date and are subject to change, dependent on future changes in the market. Any prediction, projection or forecast on the economy, stock market, bond market or the economic trends of the markets is not necessarily indicative of the future or likely performance. Investments are subject to risks, including possible loss of principal amount invested.

For investors in Bermuda: This is not an offering of securities or interests in any product. Such securities may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003 of Bermuda which regulates the sale of securities in Bermuda. Additionally, non-Bermudian persons (including companies) may not carry on or engage in any trade or business in Bermuda unless such persons are permitted to do so under applicable Bermuda legislation.

For investors in Peru: The Products may not be offered or sold to the public in Peru. Accordingly, the Products have not been nor will they be registered with the Peruvian Superintendence of Capital Markets – Public Registry of the Capital Markets- nor have they been submitted to the foregoing agency for approval. Documents relating to the Products, as well as the information contained therein, may not be supplied to the public in Peru, as the offering of the Products is not a public offering of securities in Peru, and may not be used in connection with any offer for subscription or sale of securities to the public in Peru.
What should investors be aware of regarding Fannie and Freddie MBS and the UMBS initiative?

For investors in Chile: The information contained in this document is not intended to be an offer of securities. This information is subject to General Rule No. 336 of the Superintendencia de Valores y Seguros de Chile (“SVS”). The units issued under this fund are not registered with the SVS. The issuer is not required to provide information in Chile on the units issued under the fund. The units may not be publicly offered unless they are properly registered with the SVS. Without limitation, this document does not constitute an offer or a recommendation to enter into any transaction neither does it constitute the offer of securities or funds. The offer of any services and/or securities or funds will be subject to appropriate local legislation and regulation.

The products and services in this communication shall not involve or be deemed to be considered an offering of securities or gathering of financial resources or savings in Argentina.

In EMEA

This marketing communication is intended for professional clients only.

Important information

DWS is the brand name under which DWS Group GmbH & Co. KGaA and its subsidiaries operate their business activities. Clients will be provided DWS products or services by one or more legal entities that will be identified to clients pursuant to the contracts, agreements, offering materials or other documentation relevant to such products or services.

The information contained in this document does not constitute investment advice.

All statements of opinion reflect the current assessment of DWS Investment International Gmbh and are subject to change without notice.

Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical performance analysis, therefore actual results may vary, perhaps materially, from the results contained here. Past performance, [actual or simulated], is not a reliable indication of future performance. The information contained in this document does not constitute a financial analysis but qualifies as marketing communication.

This marketing communication is neither subject to all legal provisions ensuring the impartiality of financial analysis nor to any prohibition on trading prior to the publication of financial analyses.

This document and the information contained herein may only be distributed and published in jurisdictions in which such distribution and publication is permissible in accordance with applicable law in those jurisdictions. Direct or indirect distribution of this document is prohibited in the USA as well as to or for the account of US persons and persons residing in the USA. DWS Investment International Gmbh. As of: March 2019.

In AsiaPacific

DWS is the brand name of DWS Group GmbH & Co. KGaA. The respective legal entities offering products or services under the DWS brand are specified in the respective contracts, sales materials and other product information documents. DWS Group GmbH & Co. KGaA, its affiliated companies and its officers and employees (collectively “DWS Group”) are communicating this document in good faith and on the following basis.

This document has been prepared without consideration of the investment needs, objectives or financial circumstances of any investor. Before making an investment decision, investors need to consider, with or without the assistance of an investment adviser, whether the investments and strategies described or provided by DWS Group, are appropriate, in light of their particular investment needs, objectives and financial circumstances. Furthermore, this document is for information/discussion purposes only and does not constitute an offer, recommendation or solicitation to conclude a transaction and should not be treated as giving investment advice.

DWS Group does not give tax or legal advice. Investors should seek advice from their own tax experts and lawyers, in considering investments and strategies suggested by DWS Group. Investments with DWS Group are not guaranteed, unless specified.
What should investors be aware of regarding Fannie and Freddie MBS and the UMBS initiative?

June 2019

Investments are subject to various risks, including market fluctuations, regulatory change, possible delays in repayment and loss of income and principal invested. The value of investments can fall as well as rise and you might not get back the amount originally invested at any point in time. Furthermore, substantial fluctuations of the value of the investment are possible even over short periods of time. The terms of any investment will be exclusively subject to the detailed provisions, including risk considerations, contained in the offering documents. When making an investment decision, you should rely on the final documentation relating to the transaction and not the summary contained herein. Past performance is no guarantee of current or future performance. Nothing contained herein shall constitute any representation or warranty as to future performance.

Although the information herein has been obtained from sources believed to be reliable, DWS Group does not guarantee its accuracy, completeness or fairness. No liability for any error or omission is accepted by DWS Group. Opinions and estimates may be changed without notice and involve a number of assumptions which may not prove valid. All third party data (such as MSCI, S&P, Dow Jones, FTSE, Bank of America Merrill Lynch, Factset & Bloomberg) are copyrighted by and proprietary to the provider. DWS Group or persons associated with it may (i) maintain a long or short position in securities referred to herein, or in related futures or options, and (ii) purchase or sell, make a market in, or engage in any other transaction involving such securities, and earn brokerage or other compensation.

The information contained in this document does not constitute a financial analysis but qualifies as marketing communication.

This marketing communication is neither subject to all legal provisions ensuring the impartiality of financial analysis nor to any prohibition on trading prior to the publication of financial analyses.

This document and the information contained herein may only be distributed and published in jurisdictions in which such distribution and publication is permissible in accordance with applicable law in those jurisdictions. Direct or indirect distribution of this document is prohibited in the USA as well as to or for the account of US persons and persons residing in the USA.


In AsiaPacific

DWS is the brand name of DWS Group GmbH & Co. KGaA. The respective legal entities offering products or services under the DWS brand are specified in the respective contracts, sales materials and other product information documents. DWS Group GmbH & Co. KGaA, its affiliated companies and its officers and employees (collectively “DWS Group”) are communicating this document in good faith and on the following basis.

This document has been prepared without consideration of the investment needs, objectives or financial circumstances of any investor. Before making an investment decision, investors need to consider, with or without the assistance of an investment adviser, whether the investments and strategies described or provided by DWS Group, are appropriate, in light of their particular investment needs, objectives and financial circumstances. Furthermore, this document is for information/discussion purposes only and does not constitute an offer, recommendation or solicitation to conclude a transaction and should not be treated as giving investment advice.

DWS Group does not give tax or legal advice. Investors should seek advice from their own tax experts and lawyers, in considering investments and strategies suggested by DWS Group. Investments with DWS Group are not guaranteed, unless specified.

Investments are subject to various risks, including market fluctuations, regulatory change, possible delays in repayment and loss of income and principal invested. The value of investments can fall as well as rise and you might not get back the amount originally invested at any point in time. Furthermore, substantial fluctuations of the value of the investment are possible even over short periods of time. The terms of any investment will be exclusively subject to the detailed provisions, including risk considerations, contained in the offering documents. When making an investment decision, you should rely on the final documentation relating to the transaction and not the summary contained herein. Past performance is no guarantee of current or future performance. Nothing contained herein shall constitute any representation or warranty as to future performance.

Although the information herein has been obtained from sources believed to be reliable, DWS Group does not guarantee its accuracy, completeness or fairness. No liability for any error or omission is accepted by DWS Group. Opinions and estimates may be changed without notice and involve a number of assumptions which may not prove valid. All third party data (such as MSCI, S&P, Dow Jones, FTSE, Bank of America Merrill Lynch, Factset & Bloomberg) are copyrighted by and proprietary to the provider. DWS Group or persons associated with it may (i) maintain a long or short position in securities referred to herein, or in related futures or options, and (ii) purchase or sell, make a market in, or engage in any other transaction involving such securities, and earn brokerage or other compensation.
What should investors be aware of regarding Fannie and Freddie MBS and the UMBS initiative?

The document was not produced, reviewed or edited by any research department within DWS Group and is not investment research. Therefore, laws and regulations relating to investment research do not apply to it. Any opinions expressed herein may differ from the opinions expressed by other DWS Group departments including research departments. This document may contain forward looking statements. Forward looking statements include, but are not limited to assumptions, estimates, projections, opinions, models and hypothetical performance analysis. The forward looking statements expressed constitute the author’s judgment as of the date of this material. Forward looking statements involve significant elements of subjective judgments and analyses and changes thereto and/or consideration of different or additional factors could have a material impact on the results indicated. Therefore, actual results may vary, perhaps materially, from the results contained herein. No representation or warranty is made by DWS Group as to the reasonableness or completeness of such forward looking statements or to any other financial information contained herein.

This document may not be reproduced or circulated without DWS Group’s written authority. The manner of circulation and distribution of this document may be restricted by law or regulation in certain countries, including the United States. This document is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, including the United States, where such distribution, publication, availability or use would be contrary to law or regulation or which would subject DWS Group to any registration or licensing requirement within such jurisdiction not currently met within such jurisdiction. Persons into whose possession this document may come are required to inform themselves of, and to observe, such restrictions.

Unless notified to the contrary in a particular case, investment instruments are not insured by the Federal Deposit Insurance Corporation (“FDIC”) or any other governmental entity, and are not guaranteed by or obligations of DWS Group.

© 2019 DWS Investments Singapore Limited.
© 2019 DWS GmbH & Co. KGaA. All rights reserved. I-067917-1