Rule Change Announcements Annual index rule review



31 March 2017

Bond Indices Global

Phil Galdi

Research Analyst MLPF&S +1 646 556 2908 phil.galdi@baml.com

Preston Peacock

Research Analyst MLPF&S +1 646 556 2949 preston.peacock@baml.com

Access to BofA Merrill Lynch Bond Indices

On Bloomberg: IND<GO>

On Mercury (institutional client website):

www.baml.com/markets

Public website: www.mlindex.ml.com

BofA Merrill Lynch Index Hotline:

New York: +1 646 556 2900 London: +44 20 7995 3927 Email: mlindex@ml.com

Three changes will take effect on June 30, 2017

We announce that the following three changes have been adopted and will take effect on June 30, 2017:

- An ISIN identifier will be required for a security to be included in any bond and convertible securities indices;
- The Sterling Broad Market All Stocks Index series will be discontinued;
- Hybrid and IO MBS will be removed from all indices, including the US MBS Index (MOAO) and the US Broad Market Index (USOO).

Additional changes under consideration

A total of seven proposed changes to selection criteria are under consideration for the BofA Merrill Lynch indices. Details of all changes under consideration and the potential impact on affected indices are outlined in this report.

Register your vote

All clients are encouraged to use our online <u>rules survey</u> to register their responses to the index changes under consideration as well as to comment on any other rules and methodologies that are used in our global bond, convertible security and commodity indices. The survey will be open through June 30.

Final decisions will be announced in July

After carefully considering all responses received, BofA Merrill Lynch, in its sole discretion, will make a final decision on the changes to be implemented. The official list of adopted rule changes will be published in July. Any one or more of the potential changes considered in this report may be modified or eliminated completely from the final list of rule changes. Similarly, new changes not included in this report may be introduced in the final list of rule changes.

Adopted changes will take effect on September 30, 2017

Unless otherwise noted, those changes that are officially adopted and announced in July will take effect on September 30, 2017, and new selection criteria will be incorporated in the indices beginning with the October 2017 constituent lists.

Custom indices that are based off indices affected by these rule changes will automatically pick up the new rules unless the sponsor of the index notifies us in advance of their desire to modify the rules for their custom index.

BofA Merrill Lynch, in its sole discretion, reserves the right to issue rule changes apart from this annual cycle in the event that such a change is deemed necessary in order to deal with extraordinary circumstances including, but not limited to, changes in data availability.

BofA Merrill Lynch does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Changes adopted for June 30, 2017

ISIN to be required for index inclusion

Rule change

Effective June 30, 2017 in order to qualify for inclusion in any of the BofA Merrill Lynch Bond or Convertible indices, a security must have an International Security Identification Number (ISIN). The only exceptions to this rule are synthetic securities, such as generic US MBS, swaps, etc.

Comments

This change is implemented in order to ensure that any security included in any index can be easily identified and loaded into an investor's analytical platform.

Impact

Only 24 securities out of our entire universe of nearly 65,000 do not currently have an ISIN. Of those, 22 are Chinese domestic securities and the other two are denominated in Hong Kong dollars.

Sterling Broad Market All Stocks index series discontinued

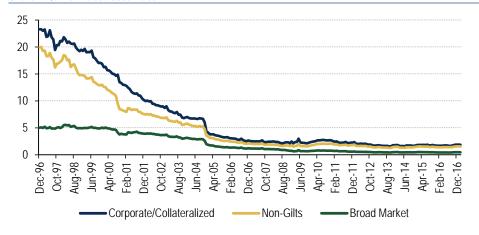
Rule change

The BofA Merrill Lynch Sterling Broad Market All Stocks index series will be discontinued on June 30, 2017. Complete performance results for the discontinued indices will be compiled up to and including June 30, 2017, but July 2017 constituent holdings will not be selected for these indices. A full list of the discontinued indices can be found in Table 1.

Comments

The All Stocks series was originally introduced to complement our Sterling Broad Market Index series and include the unrated U.K. domestic corporate securities, which at the time, comprised a meaningful segment of the sterling market. In the '90s this segment was more than 20% of the sterling corporate market (Chart 1), but now it has fallen to less than 2%.

Chart 1: % Non-rated securities



Source: BofA Merrill Lynch Bond Indices

Impact

As the amount of non-rated domestic corporate debt has dwindled over the years, so has the difference between the Sterling All Stocks series and the Sterling Broad Market series. In most cases, we expect users of the All Stocks indices will be able to switch to

a comparable index with minimal impact. Available replacement indices are listed in Table 1.

Table 1: Discontinued Sterling All Stocks indices with suggested replacement

T' 1	D ' ' ''	D 1 .
Ticker	Description	Replacement
U5PC	Sterling 1-10 Year Corporate & Collateralized All Stocks Excluding Subordinated Financials	UC5S
U9PC	Sterling 10+ Year Corporate & Collateralized All Stocks Excluding Subordinated Financials	UC9S
UCP0	Sterling Corporate & Collateralized All Stocks	UC00
UCP1	1-3 Year Sterling Corporate & Collateralized All Stocks	UC01
UCP2	3-5 Year Sterling Corporate & Collateralized All Stocks	UC02
	ů i	
UCP3	5-7 Year Sterling Corporate & Collateralized All Stocks	UC03
UCP4	7-10 Year Sterling Corporate & Collateralized All Stocks	UC04
UCP5	1-10 Year Sterling Corporate & Collateralized All Stocks	UC05
UCP6	5-10 Year Sterling Corporate & Collateralized All Stocks	UC06
UCP7	10-15 Year Sterling Corporate & Collateralized All Stocks	UC07
UCP8	15+ Year Sterling Corporate & Collateralized All Stocks	UC08
UCP9	10+ Year Sterling Corporate & Collateralized All Stocks	UC09
UCPC	Sterling Corporate & Collateralized All Stocks Excluding Subordinated Financials	UC0S
UCPD	Sterling Corporate & Collateralized All Stocks Excluding Subordinated Financials Constrained	
UCPF	9 ,	
	1-4 Year Sterling Corporate All Stocks	UC0F
UCPL	5+ Year Sterling Corporate & Collateralized All Stocks	UC0L
UCPV	1-5 Year Sterling Corporate & Collateralized All Stocks	UC0V
UDP0	Sterling Corporate & Collateralized All Stocks UK Issuers	n.a.
UDP1	1-3 Year Sterling Corporate & Collateralized All Stocks UK Issuers	n.a.
UDP2	3-5 Year Sterling Corporate & Collateralized All Stocks UK Issuers	n.a.
UDP3	5-7 Year Sterling Corporate & Collateralized All Stocks UK Issuers	n.a.
UDP4	7-10 Year Sterling Corporate & Collateralized All Stocks UK Issuers	n.a.
UDP5	1-10 Year Sterling Corporate & Collateralized All Stocks UK Issuers	n.a.
	• •	
UDP6	5-10 Year Sterling Corporate & Collateralized All Stocks UK Issuers	n.a.
UDP9	10+ Year Sterling Corporate & Collateralized All Stocks UK Issuers	n.a.
UDPV	1-5 Year Sterling Corporate & Collateralized All Stocks UK Issuers	n.a.
UKP0	Sterling Broad Market All Stocks	UK00
UKP1	1-3 Year Sterling Broad Market All Stocks	UK01
UKP2	3-5 Year Sterling Broad Market All Stocks	UK02
UKP4	7-10 Year Sterling Broad Market All Stocks	UK04
UKP5	1-10 Year Sterling Broad Market All Stocks	UK05
UKP6	5-10 Year Sterling Broad Market All Stocks	UK06
UKP7	10-15 Year Sterling Broad Market All Stocks	UK07
	<u> </u>	
UKP8	15+ Year Sterling Broad Market All Stocks	UK08
UKP9	10+ Year Sterling Broad Market All Stocks	UK09
UKPJ	All Maturity Sterling Broad Market All Stocks	n.a.
UKPL	5+ Year Sterling Broad Market All Stocks	UK0L
UKPV	1-5 Year Sterling Broad Market All Stocks	UK0V
UNP0	Sterling Non-Gilt All Stocks	UN00
UNP1	1-3 Year Sterling Non-Gilt All Stocks	UN01
UNP2	3-5 Year Sterling Non-Gilt All Stocks	UN02
UNP3	5-7 Year Sterling Non-Gilt All Stocks	UN03
UNP4	7-10 Year Sterling Non-Gilt All Stocks	UN04
	4.40.77 0.78 0.78 0.78 0.78	
UNP5	1-10 Year Sterling Non-Gilt All Stocks	UN05
UNP6	5-10 Year Sterling Non-Gilt All Stocks	UN06
UNP7	10-15 Year Sterling Non-Gilt All Stocks	UN07
UNP8	15+ Year Sterling Non-Gilt All Stocks	UN08
UNP9	10+ Year Sterling Non-Gilt All Stocks	UN09
UNPF	1-4 Year Sterling Non-Gilts All Stocks	UN0F
UNPL	5+ Year Sterling Non-Gilt All Stocks	UN0L
UNPM	5-15 Year Sterling Non-Gilt All Stocks	UNOM
UNPV	1-5 Year Sterling Non-Gilt All Stocks	UNOV
UOP0	Sterling Corporate & Collateralized All Stocks Non-UK Issuers	n.a.
	9 ,	
UOP1	1-3 Year Sterling Corporate & Collateralized All Stocks Non-UK Issuers	n.a.
UOP2	3-5 Year Sterling Corporate & Collateralized All Stocks Non-UK Issuers	n.a.
UOP3	5-7 Year Sterling Corporate & Collateralized All Stocks Non-UK Issuers	n.a.
UOP4	7-10 Year Sterling Corporate & Collateralized All Stocks Non-UK Issuers	n.a.
UOP5	1-10 Year Sterling Corporate & Collateralized All Stocks Non-UK Issuers	n.a.
UOP6	5-10 Year Sterling Corporate & Collateralized All Stocks Non-UK Issuers	n.a.
UOP7	10-15 Year Sterling Corporate & Collateralized All Stocks Non-UK Issuers	n.a.
UOP8	15+ Year Sterling Corporate & Collateralized All Stocks Non-UK Issuers	n.a.
		e:

Table 1: Discontinued Sterling All Stocks indices with suggested replacement

Ticker	Description	Replacement
UOP9	10+ Year Sterling Corporate & Collateralized All Stocks Non-UK Issuers	n.a.
UOPL	5+ Year Sterling Corporate & Collateralized All Stocks Non-UK Issuers	n.a.
UOPV	1-5 Year Sterling Corporate & Collateralized All Stocks Non-UK Issuers	n.a.
UPIQ	10-20 Year Sterling Non-Gilt All Stocks Industrial	UNDN
UPIU	20+ Year Sterling Non-Gilt All Stocks Industrial	UNDP
UPIV	1-5 Year Sterling Non-Gilt All Stocks Industrial	UNDV
UPIW	5-10 Year Sterling Non-Gilt All Stocks Industrial	UND6
UQP0	Sterling Quasi-Government All Stocks	UQ00
UQP1	1-3 Year Sterling Quasi-Government All Stocks	UQ01
UQP2	3-5 Year Sterling Quasi-Government All Stocks	UQ02
UQP3	5-7 Year Sterling Quasi-Government All Stocks	UQ03
UQP4	7-10 Year Sterling Quasi-Government All Stocks	UQ04
UQP5	1-10 Year Sterling Quasi-Government All Stocks	UQ05
UQP6	5-10 Year Sterling Quasi-Government All Stocks	UQ06
UQP7	10-15 Year Sterling Quasi-Government All Stocks	UQ07
UQP8	15+ Year Sterling Quasi-Government All Stocks	UQ08
UQP9	10+ Year Sterling Quasi-Government All Stocks	UQ09
UQPF	1-4 Year Sterling Quasi & Foreign Government All Stocks	UQ0F
UQPL	5+ Year Sterling Quasi-Government All Stocks	UQ0L
UQPV	1-5 Year Sterling Quasi-Government All Stocks	UQ0V

Source: BofA Merrill Lynch Bond Indices

Hybrid and IO structures removed from the US MBS indices

Rule decision

Effective June 30, 2017, Hybrids and IOs will be removed from all indices in which they currently appear, including the US MBS Index (MOAO), the US Broad Market Index (USOO) and their parent and sub-indices. The US Hybrid Mortgage Backed Securities Index (MOAZ) and US IO Mortgage Backed Securities Index (MOAZ, MOAI) will be discontinued on June 30, 2017. Complete performance results for the decommissioned indices will be compiled up to and including June 30, 2017, but July 2017 constituent holdings will not be selected for these indices.

Comments

Hybrids and IOs were added to the US Mortgage Backed Securities Index (MOAO) and its parent and sub-indices at the end of 2007. At that time the segments were growing rapidly and upon entry their combined weight in MOAO was 8.6%. But that proved to be the high water mark, as the onset of the financial crisis soon thereafter led to these structures falling out of favor. As a result, the representation has dwindled to just a 2.3% share as of February 28, 2017. With little new issuance in recent years, there is no sign that these sectors will become active anytime soon.

Impact

As of February 28, 2017 Hybrids hold a 1.1% share of MOAO and a 0.3% share of the US Broad Market Index (USOO). IOs hold a 1.2% of MOAO and a 0.3% share of USOO.

Use the online survey to vote on proposed index changes

This report provides detailed explanations of changes in various index rules that are under consideration. The following items are under review:

- 1-4 Minimum size filters for Emerging Markets, Asian Dollar, Contingent Capital and select investment grade indices
- 5 Inclusion criteria for the Jumbo and Regular Pfandbrief indices
- 6 Inclusion criteria for the Green Bond Index
- 7 Inclusion criteria for the regional Convertible indices

Use our online <u>rules survey</u> to register your responses to the questions outlined in this report. The survey will remain open through June 30. After carefully considering all responses received, we will announce final decisions in July.

Minimum size filters for the Emerging Markets Corporate, Asian Dollar, Contingent Capital, and select investment grade indices

- 1. Should a higher minimum size threshold be adopted for the sub-investment grade component of the Emerging Markets Corporate Plus Index (EMCB) and all of its parent and sub-indices?
 - A. No, the minimum amount outstanding for sub-investment grade USD and EUR index constituents should remain 100mn.
 - B. Yes, the minimum amount outstanding for sub-investment grade USD and EUR index constituents should be raised from 100mn to 150mn.
 - C. Yes, the minimum amount outstanding for sub-investment grade USD and EUR index constituents should be raised from 100mn to 200mn.
 - D. Yes, the minimum amount outstanding for sub-investment grade USD and EUR index constituents should be raised from 100mn to 250mn.

E. Other:	
-----------	--

F. No opinion.

Reason for consideration

With last year's increase to the high yield minimum size requirements the threshold for inclusion in virtually all EUR and USD indices is now 250mm. We now consider whether it is appropriate to raise the bar for USD/EUR debt in other indices, including external EM corporate indices.

Impact

As of February 28, 2017, increasing the minimum size threshold from \$100mn to \$250mn would result in the removal of 97 bonds with a combined 1.3% share of EMCB. The index yield and spread would decline by just a few basis points. Pro forma statistics given each alternative size threshold are shown in Table 2.

Table 2: Impact of higher minimum size thresholds on EMCB

	Current (2/28)	150mn	150mn- Current	200mn	200mn- Current	250mn	250mn- Current
Number of issues	1951	1929	-22	1906	-45	1854	-97
Market cap (\$mm)	1,379,237	1,376,605	(2,632)	1,372,697	(6,540)	1,361,216	(18,022)
Yield (OAY)	4.20	4.19	0.01	4.18	-0.02	4.16	-0.04
Spread (OAS)	259	259	0	258	-1	256	-3
Duration (OAD)	4.70	4.70	0.00	4.71	0.01	4.73	0.03

Source: BofA Merrill Lynch Bond Indices

2. Should a higher minimum size threshold be adopted for the Asian Dollar Index (ADOL) and its sub-indices?

- A. No, the minimum amount outstanding for inclusion in ADOL should remain \$150mn.
- B. Yes, the minimum amount outstanding for inclusion in ADOL should be raised from \$150mn to \$200mn.
- C. Yes, the minimum amount outstanding for inclusion in ADOL should be raised from \$150mn to \$250mn.

D	Other:		
υ.	Other.		

E. No opinion.

Reason for consideration

With last year's increase to the high yield minimum size requirements the threshold for inclusion in most USD indices is now \$250mn. We now consider whether it is appropriate to raise the bar for other dollar-denominated indices, including the Asian Dollar Index.

Impact

As of February 28, 2017, increasing the minimum size threshold from \$150mn to \$250mn would result in the removal of 53 bonds with a combined 1.6% share of the Asian Dollar Index. The index yield and spread would decline by just a few basis points. Pro forma stats given each alternative size threshold are shown in Table 3

Table 3: Impact of higher minimum size thresholds on ADOL

	Current (2/28)	200mn	200mn-Current	250mn	250mn-Current
Number of issues	1001	989	-12	948	-53
Market cap (\$mm)	681,878	679,789	(2,089)	670,732	(11,146)
Yield (OAY)	3.57	3.56	0.01	3.54	-0.03
Spread (OAS)	172	172	0	169	-3
Duration (OAD)	4.95	4.95	0	4.98	0.03

Source: BofA Merrill Lynch Bond Indices

- 3. Should a higher minimum size threshold be adopted for sub-investment grade USD and EUR debt in the Contingent Capital Index (COCO), including its sub-indices?
 - A. No, the minimum amount outstanding for sub-investment grade USD and EUR index constituents should remain 100mn.

- B. Yes, the minimum amount outstanding for sub-investment grade USD and EUR index constituents should be raised from 100mn to 150mn.
- C. Yes, the minimum amount outstanding for sub-investment grade USD and EUR index constituents should be raised from 100mn to 200mn.
- D. Yes, the minimum amount outstanding for sub-investment grade USD and EUR index constituents should be raised from 100mn to 250mn.

E.	Other:	
----	--------	--

F. No opinion.

Reason for consideration

With last year's increase to the high yield minimum size requirements the threshold for inclusion in most EUR and USD indices is now 250mn. We now consider whether it is appropriate to raise the bar for other dollar-denominated indices, including the Contingent Capital Index.

Impact

As of February 28, 2017, increasing the minimum size threshold of sub-investment grade USD and EUR debt from 100mn to 250mn would result in the removal of 5 bonds with a combined 0.6% share of COCO. The change would have minimal impact on the index yield and spread.

- 4. Should the few below remaining US investment grade indices (see Table 4) with a \$150mn minimum size requirement move to a \$250mn threshold?
 - A. No, the minimum amount outstanding for inclusion in these indices should remain \$150mn.
 - B. Yes, the minimum amount outstanding for inclusion in these indices should be raised from \$150mn to \$250mn. (Note: if this rule change is adopted, at that point H531 would exactly match the US Corporate Index (COAO). In that case, H531 would be decommissioned and users would need to switch to COAO.)

_	Other·		
ι	CHIEL.		

D. No opinion.

Table 4: US investment grade indices with bonds below \$250mn outstanding

Ticker	Description
C01A	0-1 Year AAA-A US Corporate
CWA0	0-5 Year US Corporate
CWAW	0-5 Year AAA-A1 US Corporate
GSA0	0-3 Year US Treasury & Agency
H531	US Corporate 150
H540	0-1 Year US Corporate
H541	0-1 Year US Composite Agency
H542	0-1 Year US Foreign Government & Supranational

Source: BofA Merrill Lynch Bond Indices

Reason for consideration

Table 4 lists the last of the US domestic investment grade indices that having less than a \$250mn minimum size threshold for inclusion. As such, we take this opportunity to consider bringing these indices in line with all others.

Impact

Table 5 highlights the impact of an increased size filter on the yield, spread and duration of these indices.

Table 5: Impact if excluding securities <\$250mn outstanding

Index	# Issues	Face (mm)	% Weight	OAY	OAS	OAD
		` '	3	OAT	OAS	OND
C01A	-12	(2,282)	-0.8	-	-	-
CWA0	-32	(5,965)	-0.2	0.01	-	-
CWAW	-5	(880)	-0.1	-	-	-
GSA0	-51	(9,586)	-0.2	-	-	-
H531	-478	(89,604)	-1.7	(0.01)	(1)	(0.02)
H540	-32	(5,965)	-1.3	(0.01)	-	-
H541	-51	(9,587)	-5.9	-	-	-
H542	-1	(200)	-0.1	-	-	_

Source: BofA Merrill Lynch Bond Indices

Inclusion criteria for the Jumbo and Regular Pfandbrief indices

- 5. Should the Euro Pfandbrief sub-indices continue to be segmented based on the concept of "jumbo" versus "regular" issues?
 - A. Yes, continue to qualify these indices based on the original type (jumbo versus regular) at the point of issuance.
 - B. No, segment the issues based on size using a €500mn amount outstanding threshold, and change the index names to the Large Cap and Small Cap indices.
 - C. No, segment the issues based on size using a €1bn amount outstanding threshold, and change the index names to the Large Cap and Small Cap indices.

D.	Other:	

E. No opinion.

Reason for consideration

The product largely responsible for starting the global covered bond phenomenon has continued to dry up in the aftermath of the 2008 financial crisis. With very little new issuance the concept originally associated with "jumbo" (large AAA-rated issues with at least three market makers) as a form of primary issuance has little meaning now. As such we are considering differentiating jumbo and regular pfandbriefe simply on size. This way we have continuity with respect to the history of these indices while making qualification criteria more clear cut for today's market.

Impact

If option C were adopted the impact would be minor. Only seven securities would move from the Regular Pfandbrief Index (GODP) to the Jumbo Pfandbrief Index (GODJ). Option A would see a far more dramatic shift, with 134 of 155 securities in GODP shifting to GODJ.

Inclusion criteria for the Green Bond Index

- 6. Should sovereign issues be included in the Green Bond Index?
 - A. No, continue to exclude sovereign debt from the index.
 - B. Yes, add sovereign green use of proceeds debt to the index.
 - C. Other: _____
 - D. No opinion.

Reason for consideration

While the rules of the Green Bond Index (GREN) clearly state that local currency sovereign issues do not qualify (though foreign currency sovereigns are included), until recently there were simply none to consider. With the arrival of the recent green bond issued by the French government, we think it is time to revisit this rule.

Impact

As of February 28, 2017 the impact on GREN would be minimal if option B were adopted. Only one security would enter: €7bn FRTR 1.75 6/25/2039.

Inclusion criteria for the regional Convertible indices

- 7. Should the country designation used to qualify certain regional convertible indices such as VEOO, VASI and VEMK change to the country of risk of the underlying equity issuer from that country in which that issuer's listed equity was issued?
 - A. No, the regional convertible sub-indices should continue to be segmented based on the country in which the underlying listed equity was issued.
 - B. Yes, the indices should use the underlying equity's country of risk.
 - C. Other: ______.
 - D. No opinion.

Reason for consideration

With the exception of the US Convertible Index (VXAO) and its sub-indices, constituents for all other regional convertible indices are selected based on the country in which the underlying listed equity was issued. One reason to consider a move to country of risk is that some companies list in one country while the entirety of their business operations reside in another. Since the idea of the regional convertible indices such as the Asian, European, or Emerging Markets indices is to capture the underlying companies' geographic exposures it is worth considering a switch to country of risk.

Impact

The following tables highlight the securities that would be added and removed from key regional indices should the proposed change to country of risk be adopted. The tables are all pro forma as of February 28, 2017.

The Global 300 Convertible Index (VG00) is also affected by this rule change, as its composition is driven by the relative market capitalization of the regional indices. However, VG00's rules state that there is no forced turnover as long as the constituents remain a part of the convertible universe, defined by the Global Convertible Index

(CONV). Therefore, though the regional target weights will change if the proposal is adopted, VG00 would move towards the new weights through natural attrition.

Table 6: Pro-forma VE00 constituent changes if country of risk criterion adopted

					(Country of	Country
Action	ISIN	Issuer	Ticker	Coupon	Maturity	Risk	of Issue
ADD	USY0020QAA95	AEGEAN MARINE PE	ANW	4	11/1/2018	GR	US
ADD	US00773VAA44	AEGEAN MARINE PE	ANW	4.25	12/15/2021	GR	US
ADD	NO0010701055	GOLDEN OCEAN GRO	GOGL	3.07	1/30/2019	NO	US
ADD	US62952QAB68	NXP SEMICOND	NXPI	1	12/1/2019	NL	US
ADD	USG81075AE63	SHIP FINANCE INT	SFL	3.25	2/1/2018	NO	US
ADD	USG81075AF39	SHIP FINANCE	SFL	5.75	10/15/2021	NO	US
ADD	US80918TAA79	SCORPIO TANKERS	STNG	2.375	7/1/2019	MC	US
ADD	XS1494008003	TELENOR EAST HOL	TELNO	0.25	9/20/2019	NL	US
ADD	US89643QAB41	TRINITY BIOTECH	TRIB	4	4/1/2045	ΙE	US
REMOVE	NO0010719735	BW GROUP LTD	BWGRP	1.75	9/10/2019	SG	NO
REMOVE	XS1403868398	ABIGROVE	CHMFRU	0.5	4/29/2021	RU	GB
REMOVE	XS1566998297	ABIGROVE	CHMFRU	0	2/16/2022	RU	GB
REMOVE	NO0010687304	RENEWABLE CORP	RECAS	6.5	9/11/2018	US	NO
REMOVE	XS1383319974	REMGRO JERSEY GB	REMSJ	2.625	3/22/2021	ZA	GB
REMOVE	XS0605635787	STEINHOFF FINANC	SHFSJ	4.5	3/31/2018	ZA	DE
REMOVE	XS1023684282	STEINHOFF FINANC	SHFSJ	4	1/30/2021	ZA	DE
REMOVE	XS1272162584	STEINHOFF FINANC	SHFSJ	1.25	8/11/2022	ZA	DE
REMOVE	XS1398317484	STEINHOFF FINANC	SHFSJ	1.25	10/21/2023	ZA	DE

Source: BofA Merrill Lynch Bond Indices

Table 7: Pro-forma VASI constituent changes if country of risk criterion adopted

Action	ISIN	Issuer	Ticker	Coupon N	Naturity	Country of Risk	Country of Issue
ADD	NO0010719735	BW GROUP LTD	BWGRP	1.75	9/10/2019	SG	NO
ADD	US22943FAB67	CTRIP.COM INTL	CTRP	0.5	9/15/2017	CN	US
ADD	US22943FAD24	CTRIP.COM INTL	CTRP	1.25	10/15/2018	CN	US
ADD	US22943FAF71	CTRIP.COM INTL	CTRP	1	7/1/2020	CN	US
ADD	US22943FAL40	CTRIP.COM INTL	CTRP	1.25	9/15/2022	CN	US
ADD	US22943FAH38	CTRIP.COM INTL	CTRP	1.99	7/1/2025	CN	US
ADD	US316827AC80	51JOB INC	JOBS	3.25	4/15/2019	CN	US
ADD	US55932XAA28	MAGNACHIP	MX	5	3/1/2021	KR	US
ADD	US82922RAD52	SINA CORP	SINA	1	12/1/2018	CN	US
ADD	US874080AB08	TAL EDUCATION GR	TAL	2.5	5/15/2019	CN	US
ADD	US92763WAA18	VIPSHOP HOLDING	VIPS	1.5	3/15/2019	CN	US
ADD	US98426TAB26	YY INC	YY	2.25	4/1/2019	CN	US

Source: BofA Merrill Lynch Bond Indices

Table 8: Pro-forma VEMK constituent changes if country of risk criterion adopted

						Country of Country of	
Action	ISIN	Issuer	Ticker	Coupon I	Maturity	Risk	Issue
ADD	NO0010719735	BW GROUP LTD	BWGRP	1.75	9/10/2019	SG	NO
ADD	US151290BC62	CEMEX SAB	CEMEX	3.75	3/15/2018	MX	US
ADD	US151290BT97	CEMEX SAB	CEMEX	3.72	3/15/2020	MX	US
ADD	US151290BR32	CEMEX SAB	CEMEX	3.72	3/15/2020	MX	US
ADD	XS1403868398	ABIGROVE	CHMFRU	0.5	4/29/2021	RU	GB
ADD	XS1566998297	ABIGROVE	CHMFRU	0	2/16/2022	RU	GB
ADD	US22943FAB67	CTRIP.COM INTL	CTRP	0.5	9/15/2017	CN	US
ADD	US22943FAD24	CTRIP.COM INTL	CTRP	1.25	10/15/2018	CN	US
ADD	US22943FAF71	CTRIP.COM INTL	CTRP	1	7/1/2020	CN	US
ADD	US22943FAL40	CTRIP.COM INTL	CTRP	1.25	9/15/2022	CN	US
ADD	US22943FAH38	CTRIP.COM INTL	CTRP	1.99	7/1/2025	CN	US
ADD	US316827AC80	51JOB INC	JOBS	3.25	4/15/2019	CN	US
ADD	US58733RAB87	MERCADOLIBRE INC	MELI	2.25	7/1/2019	AR	US
ADD	US55932XAA28	MAGNACHIP	MX	5	3/1/2021	KR	US
ADD	US65366HAA14	NICE SYSTEMS INC	NICE	1.25	1/15/2024	IL	US
ADD	XS1383319974	REMGRO JERSEY GB	REMSJ	2.625	3/22/2021	ZA	GB
ADD	XS0605635787	STEINHOFF FINANC	SHFSJ	4.5	3/31/2018	ZA	DE
ADD	XS1023684282	STEINHOFF FINANC	SHFSJ	4	1/30/2021	ZA	DE

Table 8: Pro-forma VEMK constituent changes if country of risk criterion adopted

						Country of Country of	
Action	ISIN	Issuer	Ticker	Coupon	Maturity	Risk	Issue
ADD	XS1272162584	STEINHOFF FINANC	SHFSJ	1.25	8/11/2022	ZA	DE
ADD	XS1398317484	STEINHOFF FINANC	SHFSJ	1.25	10/21/2023	ZA	DE
ADD	US82922RAD52	SINA CORP	SINA	1	12/1/2018	CN	US
ADD	US874080AB08	TAL EDUCATION GR	TAL	2.5	5/15/2019	CN	US
ADD	US88163VAE92	TEVA PHARMACEUT	TEVA	0.25	2/1/2026	IL	US
ADD	US47216EAA82	JAZZ US HOLDINGS	TSEMIT	8	12/31/2018	IL	US
ADD	US92763WAA18	VIPSHOP HOLDING	VIPS	1.5	3/15/2019	CN	US
ADD	US98474TAB35	YANDEX NV	YNDX	1.125	12/15/2018	RU	US
ADD	US98426TAB26	YY INC	YY	2.25	4/1/2019	CN	US

Source: BofA Merrill Lynch Bond Indices

Disclosures

Important Disclosures

BofA Merrill Lynch Research Personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

BofA Merrill Lynch Global Credit Research analysts regularly interact with sales and trading desk personnel in connection with their research, including to ascertain pricing and liquidity in the fixed income markets.

Other Important Disclosures

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for the purpose of any recommendation in relation to: (i) an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report; or (ii) a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including Bank of America Merrill Lynch trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Officers of MLPF&S or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

BofA Merrill Lynch Global Research policies relating to conflicts of interest are described at http://go.bofa.com/coi.

BofA Merrill Lynch includes Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") and its affiliates. Investors should contact their BofA Merrill Lynch representative or Merrill Lynch Global Wealth Management financial advisor if they have questions concerning this report. BofA Merrill Lynch and Merrill Lynch are each global brands for BofA Merrill Lynch Global Research.

Information relating to Non-US affiliates of BofA Merrill Lynch and Distribution of Affiliate Research Reports:

MLPF&S distributes, or may in the future distribute, research reports of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSFC); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Investment Industry Regulatory Organization of Canada; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; Merrill Lynch (Japan): Merrill Lynch Japan Securities Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Roeul): Merrill Lynch International Incorporated (Seoul Branch) regulated by the Financial Supervisory Service; Merrill Lynch (India): DSP Merrill Lynch Limited, regulated by the Securities and Futures Bureau; DSP Merrill Lynch (India): DSP Merrill Lynch Limited, regulated by the Securities and Exchange Board of India; PT Merrill Lynch (Indonesia): PT Merrill Lynch Indonesia, regulated by the Central Bank of the Russian Federation; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Spain): Merrill Lynch Capital Markets Espana, S.A.S.V., regulated by Comisión Nacional del Mercado De Valores; Merrill Lynch (Brazil): Bank of America Merrill Lynch Banco Multiplo S.A., regulated by Comissã

This research report: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK) and Bank of America Merrill Lynch International Limited, which are authorized by the PRA and regulated by the FCA and the PRA, and is distributed in the UK to retail clients (as defined in the rules of the FCA and the PRA) by Merrill Lynch International Bank Limited, London Branch, which is authorized by the Central Bank of Ireland and subject to limited regulation by the FCA and PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been considered and distributed in Japan by Merrill Lynch (Japan), a registered securities dealer under the Financial Instruments and Exchange Act in Japan; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSFC (research reports containing any information in relation to, or advice on, futures contracts are not intended for issuance or distribution to, or use by, any person in Hong Kong); is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by DSP Merrill Lynch (India); and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (International Bank Limited (Merchant Bank) (MLIBLMB) and Merrill Lynch (Singapore) (Company Registration Nos F 06872E and 198602883D respectively). MLIBLMB and Merrill Lynch (Singapore) are regulated by MAS. Bank of America N.A., Australian Branch (ARBN 064 874 531), AFS License 412901 (BANA Australia) and Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distribute this report in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of BANA Australia, neither MLEA nor any of its affiliates involve

This research report has been prepared and issued by MLPF&S and/or one or more of its non-US affiliates. MLPF&S is the distributor of this research report in the US and accepts full responsibility for research reports of its non-US affiliates distributed to MLPF&S clients in the US. Any US person receiving this research report and wishing to effect any transaction in any security discussed in the report should do so through MLPF&S and not such foreign affiliates. Hong Kong recipients of this research report should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities (and not futures contracts) or provision of specific advice on securities (and not futures contracts). Singapore recipients of this research report should contact Merrill Lynch International Bank Limited (Merchant Bank) and/or Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this research report.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Merrill Lynch.

This research report provides general information only. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This report is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of any specific person. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this report and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this report.

Securities and other financial instruments discussed in this report, or recommended, offered or sold by Merrill Lynch, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may

lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

BofA Merrill Lynch is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

UK Readers: The protections provided by the U.K. regulatory regime, including the Financial Services Scheme, do not apply in general to business coordinated by BofA Merrill Lynch entities located outside of the United Kingdom. BofA Merrill Lynch Global Research policies relating to conflicts of interest are described at http://go.bofa.com/coi.

In the event that the recipient received this report pursuant to a contract between the recipient and MLPF&S for the provision of research services for a separate fee, and in connection therewith MLPF&S may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom MLPF&S has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by MLPF&S). MLPF&S is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities mentioned in this report.

Copyright and General Information regarding Research Reports:

Copyright 2017 Bank of America Corporation. All rights reserved. This research report is prepared for the use of BofA Merrill Lynch clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Merrill Lynch. BofA Merrill Lynch research reports are distributed simultaneously to internal and client websites and other portals by BofA Merrill Lynch and are not publicly-available materials. Any unauthorized use or disclosure is prohibited. Receipt and review of this research report constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained in this report (including any investment recommendations, estimates or price targets) without first obtaining expressed permission from an authorized officer of BofA Merrill Lynch.

Materials prepared by BofA Merrill Lynch Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Merrill Lynch, including investment banking personnel. BofA Merrill Lynch has established information barriers between BofA Merrill Lynch Global Research and certain business groups. As a result, BofA Merrill Lynch does not disclose certain client relationships with, or compensation received from, such issuers in research reports. To the extent this report discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this report. BofA Merrill Lynch Global Research personnel's knowledge of legal proceedings in which any BofA Merrill Lynch entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this report is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Merrill Lynch in connection with the legal proceedings or matters relevant to such proceedings.

This report has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of MLPF&S, any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Merrill Lynch Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Merrill Lynch and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This report may contain links to third-party websites. BofA Merrill Lynch is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this report and is not incorporated by reference into this report. The inclusion of a link in this report does not imply any endorsement by or any affiliation with BofA Merrill Lynch. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Merrill Lynch is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of the report and are subject to change without notice. Prices also are subject to change without notice. BofA Merrill Lynch is under no obligation to update this report and BofA Merrill Lynch's ability to publish research on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Merrill Lynch will not update any fact, circumstance or opinion contained in this report.

Certain outstanding reports may contain discussions and/or investment opinions relating to securities, financial instruments and/or issuers that are no longer current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with MLPF&S or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Merrill Lynch nor any officer or employee of BofA Merrill Lynch accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this report or its contents.