

UBS ETF *Market Matters*

EUR and USD Credit Spreads: Aggregate vs. Investible Exposures

- We compare investment grade corporate aggregates and see that USD spreads have been widening since July '14 and drifting away from EUR spreads, which levelled off.
- We attribute spreads to sectors and maturities. Furthermore, we investigate two *investible* corporate exposures, rather than the aggregates, and demonstrate that liquidity clearly matters.
- As default risk only accounts for part of the credit spread, the non-default component is strongly related to bond liquidity. Investors aiming for credit risk premium should focus on liquid indices that 'remove' the liquidity premium. We discuss two options based on Barclays Liquid Corporate Indices.

Pawel Janus, Ph.D.
ETF Strategist, UBS Global Asset Management
pawel.janus@ubs.com

The divergence in EUR and USD credit spreads has been one of the key topics in bond markets over recent weeks. **Figure 1** shows the credit spreads (incremental yields over the benchmark *risk free* government issues) for EUR- and USD-denominated investment grade (IG) aggregate corporate exposures, highlighting a recent period of divergence. After the EMU sovereign crisis settled down, in early 2012, credit spread levels began trending downwards - until Jul. '14 - when both spreads converged to 100bps. From this point onwards, USD spreads have been widening and drifting away (particularly strongly between Jul. '14 to Jan. '15) from EUR spreads. This divergence appears counterintuitive, as US economy appears in a better shape than in Eurozone. This effect has often been explained by some of the following arguments:

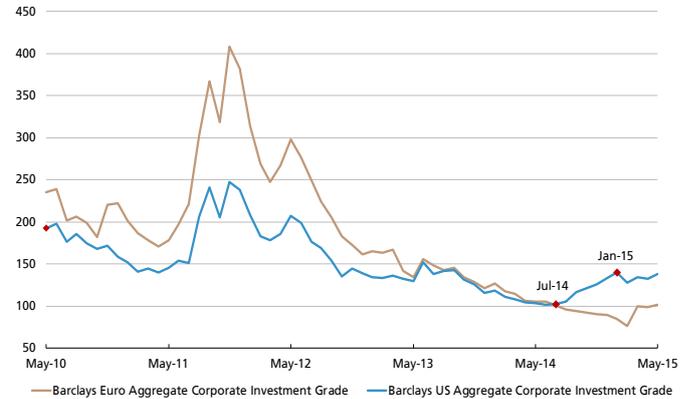
- The net issuance of USD IG bonds has lately outpaced the net issuance of EUR IG bonds, implying higher volume to pick-up.
- The ECB's Quantitative Easing (QE) program (and its earlier anticipation) "crowded in" some additional assets into more risky EUR corporate credit, at the cost of EUR sovereign debt.
- Different monetary policy regimes across the US and the Eurozone, in particular, expected interest rate hikes by the Fed, which could translate into higher re-financing costs.
- The fall in the oil price (started in July. '14) impacting the US energy sector (generally thought of as having higher impact on the U.S. High Yield credit).

To investigate further, we attribute spreads to sectors and maturity buckets. Furthermore, we look into *investible* corporate credit indices, rather than the aggregates, and demonstrate that liquidity clearly matters.

Energy and Duration Risk drive US aggregate spread widening

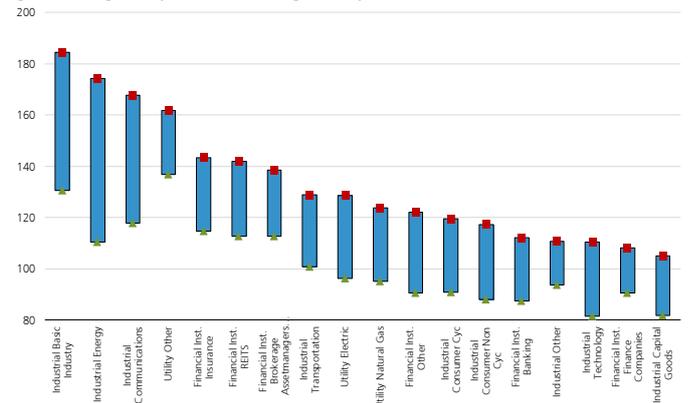
The perception of credit risk is seen in the recent development of individual sector spreads in **Figure 2**, showing the move of the USD IG spreads over the period from Jul. '14 to May '15. All sector spreads widened, and some substantially, e.g. basic industry, energy and communications. In particular, the USD IG energy spreads widened from 110bps to 175bps (reaching max 210bps in Jan. '15). This sector has a substantial market value of more than 8% of the entire aggregate (compared to 4.8% of the EUR IG), and the majority of the energy issuances (approx. 70%) have a Barclays composite rating of BAA (the lowest IG segment). Similarly, **Figure 3** displays the spread development across 5yr maturity buckets, showing that yields of long-dated bonds (with high duration risk) have indeed widened more than their short-dated counterparts. For example, the spreads of 30+ corporate bonds widened from 140bps to 210bps. The USD IG

Figure 1: Credit Spreads in IG Aggregates (in basis points) (monthly data)



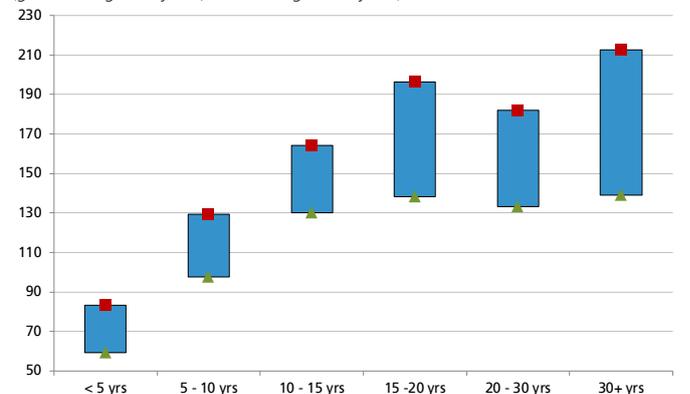
Source: Barclays POINT, UBS Global AM, as of 31 May 2015

Figure 2: USD IG Credit Spreads (in bps) – Sector Breakdown (green triangle=July '14; red rectangle= May '15)



Source: Barclays POINT, UBS Global AM, as of 31 May 2015

Figure 3: USD IG Credit Spreads (in bps) – Maturity Buckets (green triangle=July '14; red rectangle= May '15)



Source: Barclays POINT, UBS Global AM, as of 31 May 2015

For all charts/tables: Past performance is not a reliable indicator for the future.

aggregate has a substantial exposure to long-maturity bonds: 30% of aggregate index market value has maturity of 10+ years as compared to 10% in the case of EUR IG. The other driver, with a lesser impact though, is a relatively high fraction of issuers (2% of the market value) originating from riskier domiciles in emerging economies (Brazil, China, Mexico etc.), whose spreads tend to be above-average. To sum up, there appears to be a pattern in USD IG aggregate spreads, with energy and duration risk (linked to interest rate hike expectations) driving spreads upwards (and non US-domiciled issuers to some degree), while EUR spreads have remained flat over the last few months, against the backdrop of ECB QE.

Liquidity Matters (for credit spreads)

Default risk only accounts for part of the corporate credit spread. The non-default component is strongly related to bond liquidity. Bond liquidity generally increases with: i) larger issue size, ii) shorter time since issuance, iii) higher credit quality, iv) nearer time to maturity, v) lesser complexity of bond characteristics, vi) developed and liquid currency, and vii) domicile of risk. **Figure 4** shows USD IG credit spreads vs. liquidity, where liquidity is measured by the Liquidity Cost Score (LCS is the Barclays measure for liquidity in credit markets representing the *round-trip* cost, as a percent of a bond's price, of immediately executing a standard institutional transaction). Undoubtedly, credit spreads increase with higher LCS, i.e. liquidity premium is an important part of credit compensation. Barclays Liquid Indices aim to select liquid issuances, which result in lower-than-average LCS figures. This diminishes the non-default component in the credit spreads. **Figure 5** shows the LCS time series, indicating substantially lower liquidity costs (hence higher liquidity) for liquid investible exposure compared to aggregate. The delta in LCS – between aggregate and liquid exposure – reflects liquidity premium, which actually started widening from the beginning of 2014. Investors aiming for *pure* credit risk premium should therefore consider liquid indices.

Investible Indices for USD and EUR IG (with limited duration risk)

UBS Chief Investment Office WM overweights USD and EUR IG corporate bonds relative to the highest grade segment (Source: Chief Investment Office WM: *Corporate bonds (investment grade)*, May 2015). At the same time, bonds with very long maturities (10+ years) should be avoided due to duration risk. This call can be covered by **Barclays US Liquid Corporate 1-5 Year Index** and **Barclays Euro Area Liquid Corporate 1-5 Year Index**, respectively. These indices:

- Invest in fixed rate senior bonds issued by investment grade corporates; the risk domicile of the issuer is the USA and the Eurozone, respectively.
- Invest in short-dated bonds with less than 5 years to maturity.
- Unlike in aggregates, eligible issues satisfy liquidity criteria.

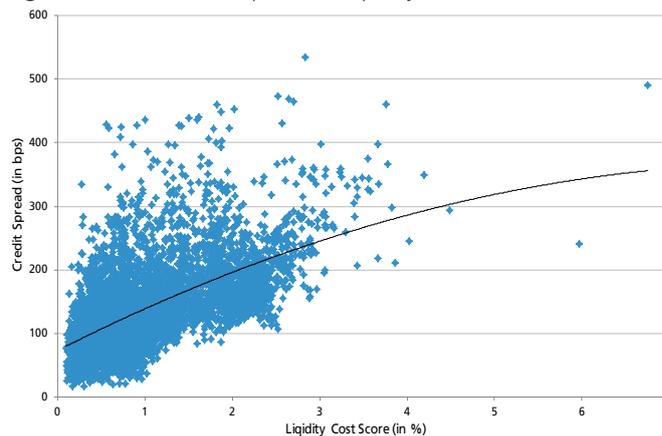
Figure 6 plots the credit spreads. The general pattern is similar to aggregates, i.e. compression in spreads since early 2012. The crossing of USD IG spreads from below the EUR IG spreads is also seen, yet both converged (end-of-March) to 80bps. This indicates that credit event risk in short-term US and Eurozone issues is currently seen as equal. Importantly, these indices: i) give *pure* exposure to single region risk (US and Eurozone, respectively), ii) mitigate duration risk (focus on short-dated bonds), and iii) mitigate liquidity risk (focus on liquid issues). **Table 1** shows UBS ETFs which track Barclays Liquid Indices and provide exposure to short-term credit in US and Eurozone.

Table 1: UBS ETFs

Fund name	TER (ex ante)	AuM	Base Ccy.	Replication	Domicile	Launch	ISIN	Valor
UBS ETF (LU) Barclays Euro Area Liquid Corporates 1-5 UCITS ETF	0.18%		EUR	Physical Sampling	Luxembourg	30.05.2014	LU1048314196	24 016 077
UBS ETF (LU) Barclays Euro Area Liquid Corporates hedged CHF 1-5 UCITS ETF	0.23%	135	CHF	Physical Sampling	Luxembourg	31.03.2015	LU1048314865	24 017 543
UBS ETF (LU) Barclays Euro Area Liquid Corporates hedged USD 1-5 UCITS ETF	0.23%		USD	Physical Sampling	Luxembourg	30.01.2015	LU1048314436	24 016 322
UBS ETF (LU) Barclays US Liquid Corporates 1-5 UCITS ETF	0.18%		USD	Physical Sampling	Luxembourg	01.12.2014	LU1048314949	24 019 996
UBS ETF (LU) Barclays US Liquid Corporates hedged CHF 1-5 UCITS ETF	0.23%	296	CHF	Physical Sampling	Luxembourg	30.01.2015	LU1048315755	24 020 111
UBS ETF (LU) Barclays US Liquid Corporates hedged EUR 1-5 UCITS ETF	0.23%		EUR	Physical Sampling	Luxembourg	31.03.2015	LU1048315243	24 020 000
UBS ETF (LU) Barclays US Liquid Corporates hedged GBP 1-5 UCITS ETF	0.23%		GBP	Physical Sampling	Luxembourg	01.12.2014	LU1048315326	24 020 108

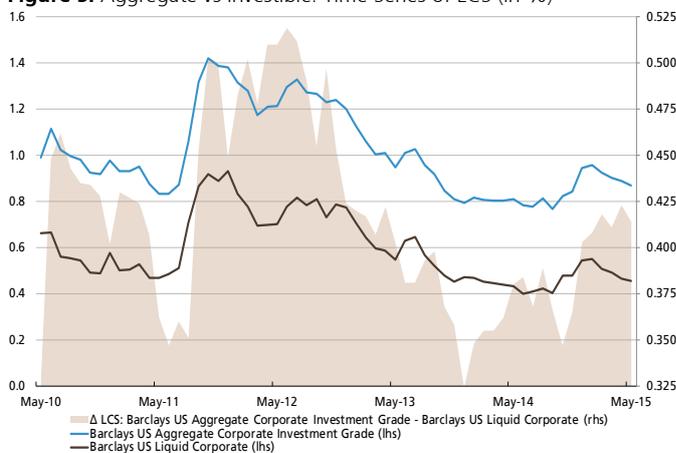
AuM in CHF, million, data as of end-May 2015

Figure 4: USD IG Credit Spread vs. Liquidity



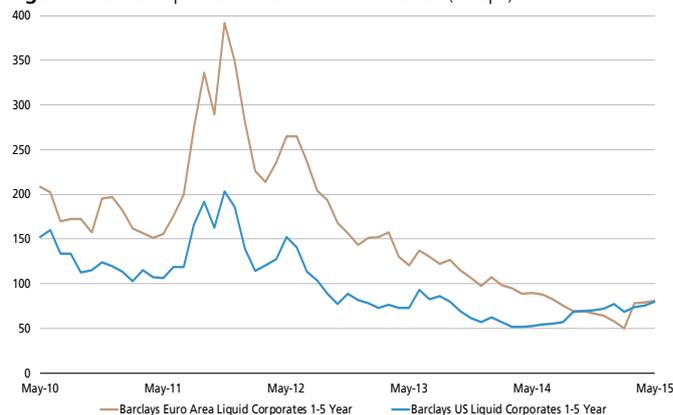
Source: Barclays POINT, UBS Global AM, as of 31 May 2015

Figure 5: Aggregate vs Investible: Time Series of LCS (in %)



Source: Barclays POINT, UBS Global AM, as of 31 May 2015

Figure 6: Credit Spreads in IG Investible Indices (in bps)



Source: Barclays POINT, UBS Global AM, as of 31 May 2015

For all charts/tables: Past performance is not a reliable indicator for the future.

How to contact us

Hotline	044-234 34 99	Bloomberg	UETF <Go>
E-mail	ubs-etf@ubs.com	Website	www.ubs.com/etf

About UBS ETFs

Passive capital investments have been a core competence of UBS Global Asset Management for over 30 years. This business segment, which includes UBS ETFs, has assets under management of CHF 230 billion (March 2015). Assets under management in UBS ETFs total approx. CHF 25 billion (May 2014). UBS is one of Europe's leading ETF providers, and Europe's second largest provider of physically replicated ETFs (measured in number of ETFs). UBS ETFs replicates 163 indices covering equities, bonds, precious metals, real estate, commodities and alternative investments. UBS ETFs are listed on four of Europe's leading stock exchanges: Borsa Italiana, the German Stock Exchange (XETRA), the London Stock Exchange (LSE), and the SIX Swiss Exchange.

For more information on UBS ETFs: www.ubs.com/etf



ETF Provider of the Year
UBS ETFs



Excellence in Asset Management
UBS Global Asset Management



etfexpress
AWARD WINNER 2013
Best Europe Equity ETF Manager
UBS ETFs



Best equity fund for Swiss large cap stocks



ETF Provider of the Year
UBS ETFs



Excellence in Asset Management Global
UBS Global Asset Management



etfexpress
AWARD WINNER 2014
Best Mixed ETF Manager
UBS Global Asset Management

For marketing and information purposes by UBS. For qualified investors only. The information and opinions contained in this document have been compiled or arrived at based upon information obtained from sources believed to be reliable and in good faith, but is not guaranteed as being accurate, nor is it a complete statement or summary of the securities, markets or developments referred to in the document. UBS AG and / or other members of the UBS Group may have a position in and may make a purchase and / or sale of any of the securities or other financial instruments mentioned in this document. UBS funds under Luxembourg. Representative in Switzerland for UBS funds established under foreign law: UBS Fund Management (Switzerland) AG, P.O. Box, CH-4002 Basel. Paying agent: UBS AG. Prospectuses, simplified prospectuses or Key investor information, the articles of association or the management regulations as well as annual and semi-annual reports of UBS funds are available free of charge from UBS AG, P.O. Box, CH-4002 Basel or from UBS Fund Management (Switzerland) AG, P.O. Box, CH-4002 Basel. The representative and paying agent in Liechtenstein for UBS Funds under foreign law is Liechtensteinische Landesbank Aktiengesellschaft, Städtle 44, FL-9490 Vaduz. Prospectuses, simplified prospectuses or Key investor information, the articles of association or the management regulations as well as annual and semi-annual reports of UBS funds in German are available free of charge from Liechtensteinische Landesbank Aktiengesellschaft. The BARCLAYS indexes are the exclusive property of BARCLAYS. BARCLAYS and the BARCLAYS index names are service mark(s) of BARCLAYS or its affiliates and have been licensed for use for certain purposes by UBS AG ("UBS"). The financial securities referred to herein are not sponsored, endorsed, or promoted by BARCLAYS, and BARCLAYS bears no liability with respect to any such financial securities. The full prospectus of the UBS ETF Sicav contains a more detailed description of the limited relationship BARCLAYS has with UBS and any related financial securities. No purchaser, seller or holder of this product, or any other person or entity, should use or refer to any BARCLAYS trade name, trademark or service mark to sponsor, endorse, market or promote this product without first contacting BARCLAYS to determine whether BARCLAYS's permission is required. Under no circumstances may any person or entity claim any affiliation with BARCLAYS without the prior written permission of BARCLAYS. Before investing in a product please read the latest prospectus carefully and thoroughly. Units of UBS funds mentioned herein may not be eligible for sale in all jurisdictions or to certain categories of investors and may not be offered, sold or delivered in the United States. The information mentioned herein is not intended to be construed as a solicitation or an offer to buy or sell any securities or related financial instruments. Past performance is not a reliable indicator of future results. The performance shown does not take account of any commissions and costs charged when subscribing to and redeeming units. Commissions and costs have a negative impact on performance. If the currency of a financial product or financial service is different from your reference currency, the return can increase or decrease as a result of currency fluctuations. This information pays no regard to the specific or future investment objectives, financial or tax situation or particular needs of any specific recipient. The details and opinions contained in this document are provided by UBS without any guarantee or warranty and are for the recipient's personal use and information purposes only. This document may not be reproduced, redistributed or republished for any purpose without the written permission of UBS AG. This document contains statements that constitute "forward-looking statements", including, but not limited to, statements relating to our future business development. While these forward-looking statements represent our judgments and future expectations concerning the development of our business, a number of risks, uncertainties and other important factors could cause actual developments and results to differ materially from our expectations. Source for all data and charts (if not indicated otherwise): UBS Global Asset Management © UBS 2015. The key symbol and UBS are among the registered and unregistered trademarks of UBS. All rights reserved. E2