Strictly Confidential

FX Swaps and US MMF

European Central Bank Money Market Contact Group

Munich, June 9th 2016



Corporate & Investment Banking | Treasury and Collateral Management

FX Swaps Basis

Anticipating monetary policy decisions





2

US MMF

US MMF Reform, full implementation October 14th 2016

In response to the SEC's money fund reform, investment companies converted some of their Prime funds into Government funds, reducing demand for bank and corporate debt.

Managing a VNAV (Prime) fund is expensive and onerous and the fear, from final investors, of a lock up to take money out of a fund justify this transfer.

Prime funds are building large liquidity buffers (at least 30%) and will manage their assets to face potential redemptions in October.



VNATIXIS

US MMF

Leverage Ratio

US MMF investments to the private sector are also affected by bank regulation and especially the leverage ratio as evidenced by the use of FED's Reverse Repo on year ends.

If US banks report the leverage ratio quaterly on an average of daily and monthly figures, European banks report only quater-end figures, which contribute to an increased volatility between investments on European banks and the use of Fed's RRP.



Main U.S. Money Market Fund Investment Holdings



US MMF

Table 1: U.S. Money Market Fund Investment Holdings by Country of Issuance (billions of dollars)

		· 2010 ·	· 2011 ·	· 2012 ·	· 2013 ·	· 2014 ·	2015											- 2016 -		
		Dec	Dec	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan		
1	Worldwide	3040.4	2912.2	2983.5	3050.0	3081.9	3032.9	3016.9	2926.9	2950.5	2982.3	2998.6	3046.1	3032.1	3076.1	3081.1	3058.3	3046.0	1	
2	Europe	1041.9	746.6	726.4	637.5	550.0	776.1	566.9	756.9	757.9	522.7	775.4	777.5	516.4	761.5	703.7	420.0	744.6	2	
3	Eurozone	609.0	275.7	367.7	365.2	294.1	426.6	320.5	404.6	402.7	282.0	433.4	430.9	288.0	423.3	397.5	243.7	431.8	3	
4	Austria	1.7	0.8	0.3	1.1	0.6	0.2	0.3	0.3	0.1	0.1	0.0	0.0		0.5	0.0		0.1	4	
5	Belgium	25.6	0.8	2.2	3.5	4.6	14.8	7.2	12.6	11.3	4.1	10.8	11.6	3.5	11.3	12.6	3.9	15.0	5	
6	Finland	0.1				0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	6	
7	France	290.6	85.6	184.9	199.7	174.5	269.9	171.8	255.9	252.6	152.6	291.0	289.0	161.5	289.8	274.5	145.0	296.0	7	
8	Germany	152.0	107.8	112.4	78.0	40.9	56.1	58.7	56.8	55.2	52.2	54.9	58.8	53.4	52.1	44.3	38.8	53.2	8	
9	Ireland	0.2	0.1																9	
10	Italy	20.6	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	10	
11	Luxembourg	1.1	0.1	0.9	1.0	0.9	1.6	1.7	1.6	1.4	1.2	1.0	0.8	1.2	1.1	0.9	0.8	0.4	11	
12	Netherlands	96.3	79.0	66.3	79.6	69.1	81.2	77.9	75.6	79.9	70.5	72.9	68.8	67.1	67.6	63.8	53.9	65.9	12	
13	Spain	20.9	1.5	0.6	2.2	3.4	2.5	2.7	1.6	2.0	1.1	2.5	1.6	1.1	0.8	1.2	1.0	1.0	13	
14	Other Europe	432.9	470.9	358.7	272.3	255.9	349.5	246.5	352.3	355.2	240.7	342.1	346.6	228.4	338.1	306.1	176.4	312.8	14	
15	Denmark	18.0	3.5			0.1		0.2	0.1			0.2	0.4	0.6	2.5	2.9	2.6	3.4	15	
16	Norway	13.7	13.9	20.5	16.1	17.7	41.9	15.5	34.3	38.8	8.4	28.9	36.0	6.9	48.5	35.4	8.2	34.6	16	
17	Supranational (1)	6.2	0.2		0.1	0.2	0.9	1.0	1.1	0.6	3.1	2.0	5.3	4.4	1.6	1.6	1.2	0.1	17	
18	Sweden	54.7	89.0	96.4	96.3	89.5	114.7	84.5	102.2	113.3	88.0	122.2	120.3	83.8	113.6	108.6	52.3	116.0	18	
19	Switzerland	94.4	157.7	90.2	63.0	53.7	58.8	60.1	72.8	66.2	62.0	69.6	61.1	51.7	74.7	60.1	35.3	59.0	19	
20	UK	246.0	206.6	151.6	96.9	94.6	133.3	85.2	141.9	136.3	79.1	119.2	123.6	81.0	97.2	97.5	76.7	99.7	20	
21	North America	1799.8	1882.3	1923.5	2060.5	2192.1	1909.9	2117.0	1846.0	1862.8	2124.0	1892.7	1946.7	2200.5	1982.2	2055.4	2321.6	1987.8	21	
22	Canada	146.5	202.6	256.8	241.0	254.8	247.2	252.0	254.2	267.2	274.3	263.7	266.0	262.4	236.8	256.3	243.9	234.9	22	
23	USA	1653.3	1679.7	1666.7	1819.5	1937.3	1662.7	1864.9	1591.8	1595.6	1849.7	1629.0	1680.7	1938.2	1745.4	1799.2	2077.7	1753.0	23	
24	Treasury	378.8	496.9	510.3	547.3	483.9	435.0	508.8	454.1	442.2	444.5	451.8	458.0	435.8	444.4	564.9	530.3	520.4	24	
25	Agency & GSE	450.6	459.3	406.1	437.9	456.8	410.7	398.0	395.5	391.0	406.4	400.6	430.0	466.7	501.1	495.9	533.1	537.0	25	
26	Federal Reserve (2)				163.3	371.2	184.4	345.3	122.1	149.0	402.8	129.4	143.9	433.5	188.4	133.9	424.0	104.0	26	
27	Municipal	412.6	369.3	340.6	309.1	275.7	271.0	269.2	258.2	261.3	254.6	256.5	251.1	251.7	252.6	251.1	246.8	244.7	27	
28	Other	411.2	354.3	409.7	361.9	349.6	361.6	343.7	362.0	352.1	341.3	390.6	397.8	350.5	358.9	353.4	343.5	346.8	28	
29	Asia/Oceania (3)	193.8	278.6	327.1	342.7	332.1	337.8	323.5	314.6	321.2	327.7	322.9	313.7	303.1	324.3	312.8	305.8	304.2	29	
30	Australia	104.1	130.4	127.6	106.7	100.0	100.4	97.3	95.6	98.1	97.4	89.8	85.3	79.4	89.6	88.2	87.4	84.4	30	
31	China	0.1	0.5	2.2	7.6	9.0	6.1	7.0	6.4	6.9	9.6	8.0	5.2	5.6	7.2	6.6	7.4	7.9	31	
32	India	0.4	0.5	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32	
33	Japan	89.1	144.5	190.9	208.0	198.0	205.8	198.7	195.0	197.6	198.6	200.1	199.3	197.7	207.5	198.2	188.7	193.8	33	
34	New Zealand				0.0	0.0	0.0												34	
35	Singapore		2.6	6.2	20.0	24.6	25.0	19.8	16.9	18.1	21.5	24.2	23.0	19.7	19.1	18.9	21.6	17.4	35	
36	South Korea	0.1	0.1	0.2	0.3	0.6	0.5	0.7	0.6	0.5	0.6	0.8	0.8	0.7	0.8	0.7	0.6	0.6	36	
37	Other	4.9	4.7	6.4	9.2	7.7	9.0	9.5	9.4	8.6	8.0	7.6	8.3	12.1	8.2	9.2	10.8	9.3	37	

```
VNATIXIS
```

Source : Federal Reserve System

Apr 8, 2016

Disclaimer

This document (including any attachments thereto) is confidential and intended solely for the use of the addressee(s). It should not be transmitted to any person(s) other than the original addressee(s) without the prior written consent of Natixis. If you receive this document in error, please delete or destroy it and notify the sender immediately.

This document has been prepared by our economists. It does not constitute an independent investment research and has not been prepared in accordance with the legal requirements designed to promote the independence of investment research. Accordingly there are no prohibitions on dealing ahead of its dissemination.

The distribution, possession or delivery of this document in, to or from certain jurisdictions June be restricted or prohibited by law. Recipients of this document are therefore required to ensure that they are aware of, and comply with, such restrictions or prohibitions. Neither Natixis, nor any of its affiliates, directors, employees, agents or advisers nor any other person accept any liability to anyone in relation to the distribution, possession or delivery of this document in, to or from any jurisdiction.

This document (including any attachments thereto) are communicated to each recipient for information purposes only and do not constitute a personalised recommendation. It is intended for general distribution and the products or services described therein do not take into account any specific investment objective, financial situation or particular need of any recipient. It should not be construed as an offer or solicitation with respect to the purchase, sale or subscription of any interest or security or as an undertaking by Natixis to complete a transaction subject to the terms and conditions described in this document or any other terms and conditions. Any undertaking or commitment shall be subject to Natixis prior approval and formal written confirmation in accordance with its current internal procedures. This document and any attachments thereto are based on public information.

Natixis has neither verified nor independently analysed the information contained in this document. Accordingly, no representation, warranty or undertaking, express or implied, is made to the recipients of this document as to or in relation to the accuracy or completeness or otherwise of this document or as to the reasonableness of any assumption contained in this document. The information contained in this document does not take into account specific tax rules or accounting methods applicable to counterparties, clients or potential clients of Natixis. Therefore, Natixis shall not be liable for differences, if any, between its own valuations and those valuations provided by third parties; as such differences June arise as a result of the application and implementation of alternative accounting methods, tax rules or valuation models. In addition, any view, opinion or other information provided herein is indicative only and subject to change or withdrawal by Natixis at any time without notice. Prices and margins are indicative only and are subject to changes at any time without notice depending on inter alia market conditions. Past performances and simulations of past performances are not a reliable indicator and therefore do not predict future results. The information contained in this document June include the results of analysis derived from a quantitative model, which represent potential future events, that June or June not be realised, and is not a complete analysis of every material fact representing any product. The information by Natixis at any time without notice. More generally, no responsibility is accepted by Natixis, nor any of its holding companies, subsidiaries, associated undertakings or controlling persons, nor any of their respective directors, officers, partners, employees, agents, representatives or advisors as to or in relation to the characteristics of this information. The opinions, views and forecasts expressed in this document (including any attachments thereto) reflect the personal views

It should not be assumed that the information contained in this document will have been updated subsequent to date stated on the first page of this document. In addition, the delivery of this document does not imply in any way an obligation on anyone to update such information at any time.

Natixis shall not be liable for any financial loss or any decision taken on the basis of the information contained in this document and Natixis does not hold itself out as providing any advice, particularly in relation to investment services. In any event, you should request for any internal and/or external advice that you consider necessary or desirable to obtain, including from any financial, legal, tax or accounting advisor, or any other specialist advice, in order to verify in particular that the investment(s) described in this document meets your investment objectives and constraints and to obtain an independent valuation of such investment(s), its risks factors and rewards.

Natixis is authorised in France by the Autorité de contrôle prudentiel (ACP) as a Bank – Investment Services providers and subject to its supervision. Natixis is regulated by the AMF in respect of its investment services activities.

Natixis is authorised by the Autorité de Contrôle Prudentiel and subject to limited regulation by the Financial Conduct Authority and Prudential Regulation Authority. Details about the extent of our regulation by the Financial Conduct Authority and Prudential Regulation Authority are available from us on request.

Natixis is authorised by the ACP and regulated by the BaFin (Bundesanstalt für Finanzdienstleistungsaufsicht) for the conduct of its business in Germany. The transfer / distribution of this document in Germany is done by / under the responsibility of NATIXIS Zweigniederlassung Deutschland.

Natixis is authorised by the ACP and regulated by Bank of Spain and the CNMV for the conduct of its business in Spain.

Natixis is authorised by the ACP and regulated by Bank of Italy and the CONSOB (Commissione Nazionale per le Società e la Borsa) for the conduct of its business in Italy.

Natixis, a foreign bank and broker-dealer, makes this research report available solely for distribution in the United States to major U.S. institutional investors as defined in Rule 15a-6 under the U.S. Securities Act of 1934. This document shall not be distributed to any other persons in the United States. All major U.S. institutional investors receiving this document shall not distribute the original nor a copy thereof to any other person in the United States. All major U.S. institutional investors receiving this document shall not distribute the original nor a copy thereof to any other person in the United States. Natixis Securities Americas LLC a U.S. registered broker-dealer and member of FINRA is a subsidiary of Natixis. Natixis Securities Americas LLC did not participate in the preparation of this research report and as such assumes no responsibility for its content. This research report has been prepared and reviewed by research analysts employed by Natixis, who are not associated persons of Natixis Securities Americas LLC and are not registered or qualified as research analysts with FINRA , and are not subject to the rules of the FINRA.

