European Financial Debt and U.S. Prime Money Market Funds:

Understanding the Connections and Evaluating the Exposure

Abstract:

Credit concerns have once again taken center stage as the treasury community closely monitors its cash investments. These fresh concerns are relevant to U.S. cash and short-duration investors because prime money market funds are major investors in European financial debt. Approximately two-thirds of commercial paper and one half of jumbo bank deposits available to U.S. investors are obligations of non-U.S. financial institutions. We estimate that 44% of a typical U.S. prime fund is exposed to non-U.S. financial debt. For large prime funds, 69% of assets are estimated to be non-U.S financial debt, of which 55% is European, 16% eurozone, and 4.6% southern European. No direct exposure to Greece or Portugal was found but the significant dispersion of exposure among large prime funds should continue to be a reminder of the importance of credit monitoring in prime funds.

Introduction:

Credit concerns regarding southern European sovereign borrowers (Greece, Portugal and Spain) have been the talk of global markets in recent weeks. Ambitious attempts by the European Union to infuse liquidity into the eurozone sovereign debt market seemed to have unnerved investors even more.

These concerns are particularly relevant to U.S.-based cash and short-duration investors, most notably to those who invest in prime money market funds, because the U.S. money markets have become a major playing field for non-U.S. financial firms in recent decades. Global financial systems are highly interconnected and it may no longer be sufficient to simply assess direct credit exposures to the affected entities; rather, one may also need to evaluate secondary derivative exposures, namely financial institutions with a significant presence in the southern European region.

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In this paper, we attempt to quantify the concentration of foreign financial institutions in the U.S. short-term debt market. By identifying the concentration of bank issuers with southern European exposure in several large prime money market funds, we gain a glimpse of relative risk management among major participants in this debt market. With this exercise, we hope to remind investors that due diligence remains the top priority today in liquidity investments, whether it relates to money market funds or to separately managed accounts.

The Odd Couple: Foreign Bank Debt and U.S. Prime Money Market Funds

Today, many cash investors have come to accept that money market debt is, for the most part, synonymous to financial institutions debt. Unbeknownst to some, however, U.S. money markets have been dominated by non-U.S. financial issuers for years. Even before the recent financial crisis arose, debt issuance from strong U.S. firms such as JPMorgan Chase and Goldman Sachs was rare and expensive. European banks, on the other hand, are constrained by limited deposit growth potential in their home markets and are attracted to the large and liquid U.S. capital markets. These issuers tap the U.S. market mainly through commercial paper (CP) debt and large-denomination certificates of deposits ("jumbo" CDs).

Exhibit 1: Foreign Issuers in the U.S. CP Market[1]

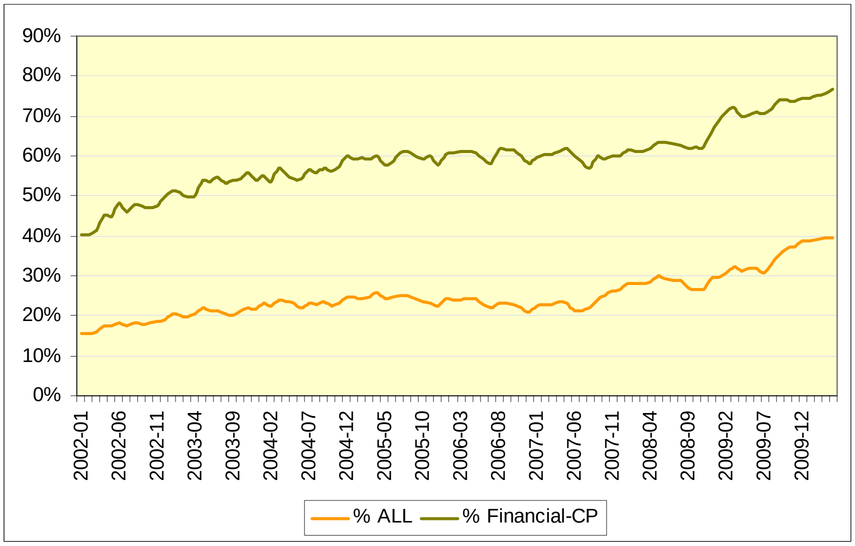
ALL U.S. COMMERCIAL PAPER OUTSTANDING (IN $MILLIONS AS OF APRIL 30, 2010)						
NON-FIN	FINANCIAL					ABCP
	DOMESTIC			FOREIGN		
	US-ENTITY	FORE-BANK	FORE-NON-BANK	BANK	NON-BANK	
120,065	121,269	171,918	40,261	119,961	91,566	397,476

BREAK-DOWNS OF FOREIGN AND U.S. ISSUERS				
	Without ABCP		With ABCP	
FOREIGN	423,706		683,081	
FINANCIAL	552,163	77%	949,639	72%
ALL CP	1,074,683	39%	1,074,683	**64%**
U.S.	121,269		259,370.38	
FINANCIAL	552,163	22%	949,639	27%
ALL CP	1,074,683	11%	1,074,683	24%

Source: Capital Advisors Group's compilation of data from the Federal Reserve's CP Data Download Program.

Exhibit 1 displays the numerous foreign entities that issue CP in the U.S. This list includes foreign bank and non-bank financials as well as U.S. subsidiaries of foreign financials. Such entities in aggregate issue 39% of the U.S. CP outstanding as of April 2010. When asset-backed commercial paper (ABCP) programs are included (see footnote 1), foreign financial debt constitutes 72% of all financial CP and 64% of the total CP issuance in the U.S.

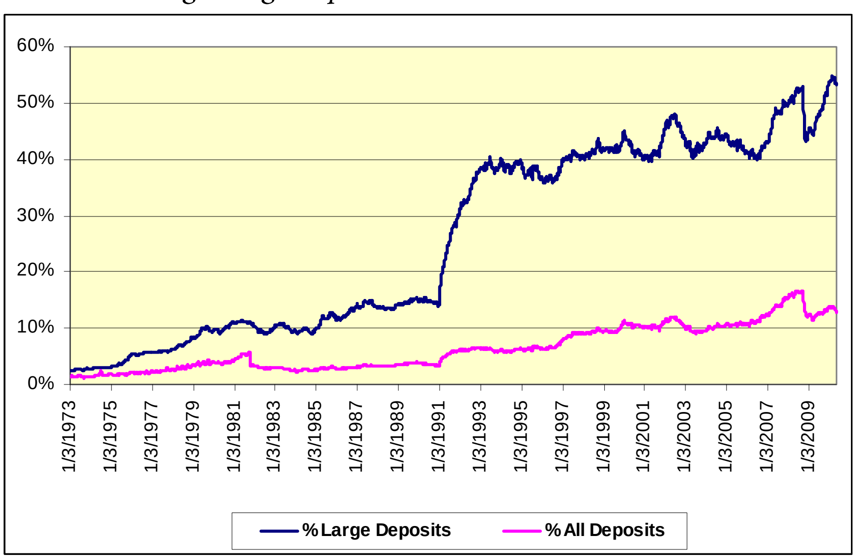
Exhibit 2: History of Foreign Issuer Concentration in the U.S. CP Market



Source: Capital Advisors Group's compilation of data from the Federal Reserve's CP Data Download Program.

Exhibit 2 illustrates the historical concentration of foreign exposure in the U.S. CP market based on data from the 100 most recent months tracked by the Federal Reserve. This chart shows a clear trend of an increasing concentration of foreign issuers. Please note that this graph does not include ABCP due to the lack of historical break-down information in the data series. In summary, the data shows that foreign issuer concentration nearly doubled over the period as percentages of both the overall CP and financial CP outstanding.

Exhibit 3: Foreign Large Deposits in the U.S.



Source: The Federal Reserve's Data Download Program "Select Assets and Liabilities of Commercial Banks in the US", weekly data through May 5, 2010.

Exhibit 3 shows the growth of jumbo CDs issued by foreign banks in the U.S. bank deposits market. As of May 5, 2010, foreign jumbo CDs in the U.S. amounted to $9.84 billion, or 53% of the jumbo CD market and 13% of the overall U.S. deposits market. Note that foreign issued jumbo CDs first emerged in the 1970s at a modest 2% of the jumbo market, skyrocketed in the early 1990s to 40%, and currently stand at 53%. We find this interesting because virtually all CDs purchased by prime money market funds in the U.S. are jumbo CDs.

Exhibit 4: Estimated Foreign Financial Exposure in Prime Money Market Funds

Type	% Fund	% in Foreign	% Total
CD	31%	53%	16%
Eurodollar CD	5%	100%	5%
CP	28%	64%	18%
Repo	9%	59%	5%
Total w/o Repo			39%
Total with Repo			44%

Source: ICI's 2010 Fact Book, "Asset Composition of Taxable Non-Government Money Market Funds as a Percentage of Total Net Assets", page 166. Foreign issuer concentrations are from this paper.

To obtain the approximate exposure of U.S. prime money market funds to non-U.S. financial issuers, we studied the overall portfolio composition of "taxable non-government money market funds" from the 2010 Fact Book of the Investment Company Institute (ICI) as of December 2009. Applying our foreign issuer weight estimates to the three major financial debt types, we estimate that U.S. prime fund exposure to foreign financial institutions stands at 39%, as demonstrated in Exhibit 4.

Note that the 39% does not include the counterparty risk of non-U.S. securities dealers in repurchase agreements (repo). If we assume that foreign dealers represent 59% of all repo dealers (the average of 53% and 64%), then we arrive at a foreign financial issuer concentration of 44%. This figure may be underestimating foreign issuer concentration, as we do not assign any foreign weight to the three other portfolio debt types in the ICI data: bank notes, corporate notes and other assets (which amount to 13.7% of total prime fund assets).

Dig Deeper: European Financials in Large Prime Funds

To gain a better understanding of the presence of European financial issuers in the U.S. money markets, we have evaluated aggregate portfolio holdings in 15 of the largest AAA-rated prime money market funds that we track[2] as a firm. In computing aggregate exposure, we combined CDs, unsecured CP, and affiliated-ABCP programs into a single economic entity. We also included repo counterparty exposure, but we excluded overnight repos backed by government collateral from our calculations.

Exhibit 5: Aggregate exposure in 15 Large Prime Money Market Funds as of April 30, 2010

Rank	Aggregate Issuer	DOMICILE	Asset Size	% Total	% Foreign	% European
1	**Calyon**	France	19,581,603,977	3.8%	3.8%	3.8%
2	**Rabobank**	Netherlands	19,037,253,541	3.7%	3.7%	3.7%
3	**Societe Generale**	France	18,194,798,314	3.5%	3.5%	3.5%
4	**BNP Paribas**	France	18,068,353,754	3.5%	3.5%	3.5%
5	**Royal Bank of Scotland**	U.K.	16,766,792,858	3.3%	3.3%	3.3%
6	**FHLMC**	U.S.	15,263,355,773	3.0%		
7	**Lloyds**	U.K.	14,947,134,702	2.9%	2.9%	2.9%
8	**FHLB**	U.S.	14,878,169,135	2.9%		
9	**Bank of Tokyo UFJ**	Japan	14,709,687,717	2.9%	2.9%	
10	**U.S. Treasury**	U.S.	14,428,958,488	2.8%		
11	**Natixis**	France	14,425,014,973	2.8%	2.8%	2.8%
12	**Barclays**	U.K.	13,704,715,475	2.7%	2.7%	2.7%
13	**Deutsche Bank**	Germany	12,651,653,892	2.5%	2.5%	2.5%
14	**UniCredito**	Italy	12,281,869,412	2.4%	2.4%	2.4%
15	**BBVA**	Spain	11,535,507,450	2.2%	2.2%	2.2%
16	**ING**	Netherlands	10,187,892,461	2.0%	2.0%	2.0%
17	**Bank (unknown)**	N/A	9,565,025,500	1.9%		
18	**Scotiabank**	Canada	9,222,810,000	1.8%	1.8%	
19	**Bank of America**	U.S.	8,918,841,474	1.7%		
20	**Dexia**	Belgium/France	8,810,653,014	1.7%	1.7%	1.7%
	Top 20		277,180,091,910	54.0%	41.7%	37.0%
		Germany, France, U.K.				26.7%
		Portugal, Ireland, Italy, Greece, Spain				4.6%
	All		513,642,964,638	93.0%	68.8%	54.9%

Source: Capital Advisors Group data based on web-posted portfolio holdings at individual fund families.

Exhibit 5 provides a list of the top 20 aggregate issuers in our prime money market fund peer group. Note that 15 of the top names are foreign financial firms, 13 of which are European, representing 41.7% and 37% of prime funds assets, respectively. When all issuers are included, non-U.S. financial firms represent 68.8% of the large prime fund assets, 54.9% of which are European financial institutions.

Comparing these figures to Exhibit 4 which shows only 44% of financial exposure, we may infer that large prime money market funds may be more heavily exposed to non-U.S. financial debt than the overall prime fund universe. We suspect this may be due to demand for liquid investments that forces large prime funds to hold higher concentration in large global banks than in smaller regional U.S. banks.

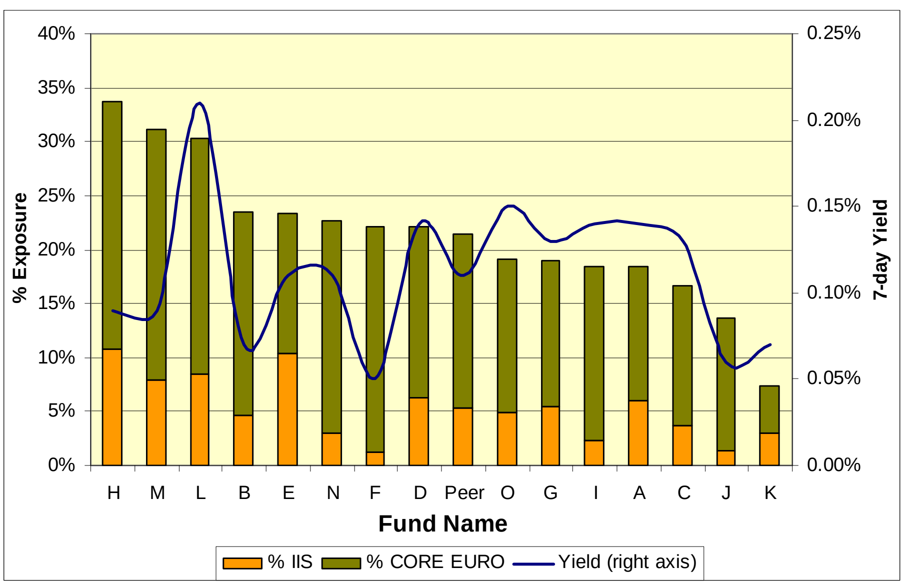
It is important to point out that we did not find evidence that any of the 15 large prime funds that we track have direct credit exposure to sovereign or bank debt based in either Greece or Portugal. A notable insight from Exhibit 5 is that France, Germany and the U.K. compose the majority of the European bank exposure among the top 20 names, representing 26.7% of assets. By contrast, the only notable southern European banks in the top 20 are UniCredito of Italy (2.4%) and BBVA of Spain (2.2%). Two other large banks that did not make the top 20 are Banco Santander of Spain (1.3%) and Intesa of Italy (1.2%). In general, we view the aforementioned institutions as having strong systemic status in their home markets, thus having very high linkage to the sovereign credit of their respective home governments.

Side by Side: Prime Funds' Exposure to IIS and Core Eurozone Banks

With the ongoing turmoil in the eurozone, cash investors may be interested in a particular fund's concentration in specific financial credits exposed to southern Europe. To answer that question, we revisited the portfolio holdings in our peer group of 15 prime funds and organized "at-risk" financial credits into three categories: a) sovereign and financial debt of Greece and Portugal (GP); b) sovereign and financial debt of Ireland, Italy, and Spain (IIS); and c) sovereign and financial debt of the rest of the 16-nation eurozone, most notably Germany and France (Core Euro).

First, we are happy to report that none of the funds in our peer group has any direct credit exposure to the first group. The rest of the categories are reported in Exhibit 6 along with the 7-day yield as of April 30, 2010. Fund names are replaced with letters to preserve anonymity.

Exhibit 6: Large Prime Funds' Exposure to Eurozone Financial Debt[3]



Source: Capital Advisors Group data based on web-posted portfolio holdings at individual fund families as of April 30, 2010.

The graph shows that the funds' exposure to IIS debt ranges from 1% to 11%, with an average of 5%. Their exposure to Core Euro debt ranges from 4% to 23%, with an average of 16%. The overall exposure to the eurozone ranges from 7% to 34%, averaging 21%. It appears that fund yield does not seem to correlate with eurozone debt exposure among the funds. We think diversification and liquidity may have been bigger factors than yield in portfolio managers' investment decisions regarding eurozone debt exposure.

The side-by-side comparison of exposure to eurozone financial debt gives us comfort because of the lack of direct exposure to Greece and Portugal and the relatively benign IIS exposure in most of the funds. The high combined eurozone financial exposure reflects the funds' concentration in very large global banks, which continue to enjoy systemic status, access to market funding and market share gains in the wake of the financial crisis. The large dispersion of exposure among funds in the respective categories should continue to be a reminder of the importance of credit monitoring in prime funds.

Conclusions: New Environment, New Landscape, and New Perspective

After a period of relative calm, credit concerns once again return to the forefront of the treasury community with respect to cash investments. With Greece, Portugal, and Spain grabbing the headlines, questions regarding credit risk of eurozone financial institution debt in prime money market funds and short-duration separate accounts inevitably has surfaced.

It is no surprise that we find approximately two-thirds of commercial paper and one half of jumbo bank deposits available to U.S. investors are obligations of non-U.S. financial institutions. We further find that European financial firms make up 13 of the 20 largest issuers representing 37% of total holdings in our large prime fund peer group. Exposure to financials in the southern European region is modest, at 4.6% of holdings. Firms from Germany, France and the U.K. make up another 26.7%.

When we break down the eurozone financial debt into three groups, we find none of the funds in our peer group has direct exposure to Greece and Portugal; and on average, exposure is 5% to Ireland, Italy and Spain, and 21% to core eurozone countries. Consistent with our recent observations in individual funds, risk concentration in eurozone debt remains disparate, ranging between 7% and 34% among the peers.

We leave investors with three key thoughts: 1. the large prime fund peer group as a whole has, so far, managed risk exposure to southern Europe satisfactorily; 2. large exposure to eurozone banks does not necessarily mean high risk as systemic status, diversification, and market confidence also are important factors; 3. events in the eurozone are unfolding in real time, which requires investors to remain vigilant and be aware of the contagion risk to the global economic recovery.

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[1] Asset-backed commercial paper (ABCP) programs are typically backed with 100% liquidity from financial institutions. We consider the programs as part of the obligations of the institutions providing the liquidity support. To break out the U.S./foreign mix in the U.S. ABCP outstanding as of April 30, 2010, we assume 65% foreign and 35% U.S. from CP outstanding in the "Top 20 ABCP Programs" in Moody's "ABCP Program Index" as of March 31, 2010. See http://v3.moodys.com/page/viewresearchdoc.aspx?docid=PBS_SF204955 for more information.

[2] Capital Advisors Group rates 15 of the largest AAA-rated prime institutional money market funds

TICKER	RATING	NAME
N/A	AAA/Aaa	AIM STIT Liquid Assets - Institutional
TMPXX	AAA/Aaa	BlackRock TempFund - Institutional
NRIXX	AAA/Aaa	Columbia MM Reserves - Institutional
DICXX	AAA/Aaa	Dreyfus Cash Management - Institutional Shares
ICAXX	AAA/Aaa	DWS MM Series - Institutional
POIXX	AAA/Aaa	Federated Prime Obligations - Institutional Shares
FIPXX	AAA/Aaa	Fidelity Institutional Prime Money Market Portfolio
FPZXX	AAA/Aaa	First American Prime Obligations Class Z
FPOXX	AAA/Aaa	Goldman Sachs Financial Square Prime Obligations - Institutional
JINXX	AAA/Aaa	JPMorgan Prime Money Market Institutional
MPFXX	AAA/Aaa	Morgan Stanley Institutional Liquid Prime Fund
SVPXX	AAA/Aaa	SSGA Prime Money Market Fund
SELXX	AAA/Aaa	UBS Select Prime Money Market - Institutional
PIIXX	AAA/Aaa	Wells Fargo Advantage Prime Investor MM - Institutional
CFRXX	AAA/Aaa	Western Asset Citi Institutional Cash Reserve

[3] Based on holdings as of April 30, 2010, five aggregate issuers are in the IIS category: all Irish banks, Intesa and UniCredito of Italy, and Santander and BBVA of Spain. Seven names are in the Core Euro category: Deutsche Bank and Commerzbank of Germany, CIC, Calyon, BNP Paribas, Natixis and Societe Generale of France.