



Investment Perspective

Invesco Cash Management

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A Closer Look at Greek Debt and the Exposure of Money Market Funds to European Banks

A full year after the European Union (EU) and International Monetary Fund (IMF) agreed on a €110 billion bailout package, Greece's sovereign debt crisis remains unresolved as it appears that Greece will not be able to return to capital markets by early 2012 to meet its financing needs, as originally envisaged. As a result, a second bailout package for Greece is currently being contemplated and will likely be discussed by European Finance Ministers this summer.

The Greek sovereign debt crisis: One year out

During the past year, Greece has made important strides towards economic reform, most notably cutting the deficit to 9.5% of Gross Domestic Product (GDP) despite a contraction of 4.5% of GDP in 2010. The government has also pushed forward difficult structural reforms relating to the public sector and labor markets. Nevertheless, such progress has been difficult and Greece is expected to face strong headwinds going forward, as outlined by the IMF:

"First, after a period of improving confidence in the third quarter of 2010, market turmoil elsewhere in the Euro area put renewed pressure on Greek spreads. Second, wavering political support for the program and domestic infighting, combined with mixed messages from Euro area partners, has increased uncertainty. Third, recurrent discussions of private sector involvement have raised market fears that undermined the credibility of Greece's commitment not to restructure the debt. And fourth, the ratings of the sovereign, the banks, and their structured financing products have been downgraded, complicating liquidity management. In this context, since the end of 2010 the implementation of the reform process has lost momentum, now placing the government's program at a crossroads".¹

On June 20, European Finance Ministers gathered to discuss a second bailout package expected to total €120 billion. Recognizing that additional financing would be needed, with contributions from both official and private sources, the ministers decided to put the onus on Greece to adopt reforms before any decisions were made.

In response to mounting political pressure within Greek Prime Minister George Papanadreou's own party, and in advance of a scheduled June 21 no-confidence vote, Papanadreou reshuffled his cabinet, appointing Evangelos Venizelos to replace the embattled George Papaconstantinou as Finance Minister. After surviving the no-confidence vote, the Greek government approved €28 billion in austerity measures. The approval of these measures is a condition for the disbursement of an upcoming €12 billion tranche from the current

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¹ www.imf.org, "Achieving Sustainable Economic Reforms in Greece in 2011 and Beyond" Bob Traa, Senior Resident Representative in Athens, International Monetary Fund Washington D.C., June 7, 2011

bailout package, which Greece needs in order to meet a €6.6 billion, five-year government bond coming due on Aug. 20. Looking ahead, Eurozone finance ministers are expected to resume their discussions on a second bailout package for Greece in July.

Although the immediate economic and political crises have been contained a lot of work remains, particularly if Greece wants to qualify for a second round of bailout loans from its European neighbors.

Indirect U.S. prime money market exposure to Greece

U.S. Prime Money Market Funds (MMFs) have no direct holdings of Greek sovereign or private debt.² Greek debt is denominated almost entirely (98%) in Euros, and U.S. MMFs are prohibited from investing in securities that are not dollar-denominated. However, MMFs could have exposure to European banks which have Greece sovereign debt positions.

In terms of geographic exposure, according to a Fitch study,³ U.S. Prime MMF exposure to Europe totals approximately 50% of assets (\$1.656 trillion total AUM as of June 1, 2011), of which Eurozone (i.e., European Monetary Union) banks constitute 36%, and banks in other European countries (i.e., UK, Switzerland, Denmark, Norway, and Sweden) constitute the remaining 14% of assets. Exposure to these banks comes in the form of commercial paper (CP), asset backed commercial paper (ABCP), certificate of deposits (CD) and repurchase agreements (repos).

Why such a large exposure to Europe? With prime fund balances still near historic highs, the increased demand by U.S. MMFs for short-term high investment-grade paper has exceeded the availability of supply issued domestically in recent years. Prime MMF exposure to the U.S. has dropped from 26.7% of assets at the end of 2007 to 7.5% of assets in May 2011.³ One of the main drivers underpinning increased European exposure has been a compression of domestic U.S. supply:

- U.S. corporate issuers, the mainstay of short-term financing (e.g., autos), are no longer issuing short-term debt or have lower credit ratings, making them ineligible in many money market funds.
- U.S. regional banks, another important issuer for money market funds, have declined significantly in number. Since 2008, 370 U.S. banks have failed⁴ and the remaining banks have lower credit ratings, making them ineligible in many money market funds.
- Large U.S. financial institutions have sharply reduced their dependence on short-term wholesale funding in favor of bank deposits and are taking advantage of historically low rates to borrow longer term.
- Asset Backed Commercial Paper market has shrunk by 2/3 from \$1.1 trillion at the end of 2006 to \$382 billion as of the end of May 2011.

Importantly, the industry's investments in European banks are dollar-denominated, short-term liabilities of highly rated global financial institutions that are borrowing in the U.S. market mainly to help finance their U.S. and other dollar-based operations. Foreign banks, including Eurozone banks, have been active and important issuers in the U.S. short-term debt markets for decades. The rapid increase in recent years in the dollar-denominated assets of European banks has resulted in an increased need for dollar financing to fund expanding businesses. Although U.S. MMFs have served as an important source of short-term financing for these activities, they represent only around 2.5% of the total European bank liabilities, according to JPMorgan.⁵

Notably, MMF exposure to European banks has been fairly consistent for the past few years with exposure concentrated in a handful of very large, highly-rated banks with a global footprint. In the U.S., these European institutions hold approximately \$1 trillion in cash as excess reserves that accumulate interest at the Federal Reserve.⁶ As such, these European banks are subject to U.S. regulatory supervision. They also represent 79% of banks designated "systemically important financial institutions" under Dodd-Frank rules, according to a Bloomberg Government study.

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2 www.ici.org/viewpoints, "Money Market Funds and European Debt: Setting the Record Straight." June 20, 2011

3 Fitch Ratings, "US Money Fund Exposure to European Banks Remains Significant." June 21, 2011

4 <http://www.fdic.gov/bank/individual/failed/banklist.html>

5 Special Topic: "Some Facts About European Banks and the US Money Markets." JPMorgan. June 26, 2011

6 Barclays Capital, "U.S. Economics & Rate Strategy." June 24, 2011

Earnings issue but not a solvency problem

On June 15, Moody's Investor Services placed the long-term credit ratings of French banks BNP Paribas, Societe Generale and Credit Agricole S.A. on watch for possible downgrade, as Moody's believed their exposures to Greece could be inconsistent with their current ratings level. Importantly, in the same announcement Moody's affirmed its highest rating (P-1) on the short-term debt (the type of security held by MMFs) of these banks, which is not subject to review (see Table 1).⁷

Table 1: Moody's affirmed its highest rating on the short-term debt of the French banks

Banks	Credit Rating (Short-/Long-Term debt)		
	Moody's	S&P	Fitch Rating
BNP Paribas	P-1/Aa2	A-1+/AA	F1+/AA-
Societe General	P-1/Aa2	A-1/A+	F1+/A+
Credit Agricole S.A.	P-1/Aa1	A-1/A+	F1+/AA-

Source: Moody's, S&P, Fitch Rating

The above banks are among the world's largest. They are well-capitalized universal banks with significant domestic retail franchises and deposits as well as direct access to the European Central Bank window. French banks are major issuers in the short-term debt markets given their combination of historically strong creditworthiness, systemic importance in the global financial system, size, and high credit ratings.

We believe that the exposure these banks have to Greece is manageable relative to earnings and to total capital. For example, a 50% haircut⁸ on Greek sovereign debt would represent a write down of less than 4% of Tier one capital, respectively, for each of these banks (see Table 2). A debt default or restructuring would therefore appear to be more indicative of an earnings event rather than a solvency issue.

Table 2: Sovereign exposure to Greece is a manageable concern

Banks	Sovereign Debt Exposure (€ billions)			50% Haircut Scenario	
	Sovereign exposure	Tier one capital	Exposure (% of tier one capital)	Debt write off	% impact on tier one capital
BNP Paribas	5.0	68.5	7.3	2.50	3.6
Societe General	2.5	35.4	7.1	1.25	3.5
Credit Agricole S.A.	0.6	39.5	1.5	0.30	0.2

Sources: Moody's, UBS, Bloomberg L.P.

Is this Lehman all over again?

Let's be clear, while there are legitimate concerns about the challenges facing Greece and the impact of Greek debt on the balance sheets of the above mentioned European banks, we are not revisiting the circumstances that preceded the collapse of Lehman in 2008. The rules that govern MMFs were strengthened since 2008, incorporating important lessons gleaned from the crisis. The amendments to SEC Rule 2a-7 shortened portfolio maturity, mandated overnight and weekly liquidity levels, raised credit quality and enhanced transparency to shareholders. For example, MMFs are required to publicly disclose all of their holdings on a monthly basis. It is partly because of these more stringent requirements that MMFs turned to the large and highly rated European banks. Comparisons between Lehman and the French banks in 2011 are "misleading and inappropriate," according to the Investment Company Institute (ICI). French banks have much higher required capital ratios than Lehman Brothers did in 2008. While Lehman was a wholesale funding-dependent investment bank, these are large, profitable commercial banks, with significant core retail deposit franchises, and their direct exposure to Greek government debt is a small fraction of their capital. In addition, as mentioned above, commercial banks have access to liquidity facilities from the European Central Bank.

At Invesco Global Cash Management, we continue to monitor developments as they unfold and we are

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⁷ Moody's Investor Services "Announcement: Moody's Places SocGen, CASA, BNPP on Review for Possible Downgrade." June 15, 2011

⁸ A haircut is a percentage that is subtracted from the par value of assets that are being used as collateral. The size of the haircut reflects the perceived risk associated with holding the assets.

proactively positioning the portfolios to reflect our market views. From a portfolio management perspective, we continue to be vigilant in managing portfolio liquidity, interest rate risk, spread risk, and ensuring broad diversification in the Funds, a process that is further enhanced by our ongoing portfolio stress testing. From a credit perspective, all exposures continue to be reviewed on an ongoing basis by our independent credit research team to ensure they meet our strict credit risk standards. Collectively, we have and will continue to take appropriate action on a real time basis as we seek to preserve the safety and liquidity for our shareholders.

An investment in a money market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although a money market fund seeks to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in such a Fund.

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Consider the investment objectives, risks, fees/charges and expenses carefully before investing. Please read the prospectus carefully before investing. For this and more complete information about the Funds, contact your financial advisor or visit invesco.com/fundprospectus.

Diversification does not guarantee a profit or eliminate the risk of loss.

A credit rating is an assessment provided by Nationally Recognized Statistical Ratings Organization (NRSRO) of the creditworthiness of an issuer with respect to debt obligations, including specific securities, money market instruments or other debts. The ratings will generally range from AAA (highest) to D (lowest). For more information on rating methodologies, please visit the following NRSRO websites: www.standardandpoors.com and select "Understanding Ratings" under Rating Resources on the homepage; www.moodys.com and select "Rating Methodologies" under Research and Ratings on the homepage; www.fitchratings.com and select "Ratings Definitions" on the homepage.

Unless otherwise noted statistics are U.S. Congress, Bloomberg L.P, or Invesco.

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