

Separately Managed Accounts in Counterparty Risk Management

Abstract

Counterparty risk management should have an integrated framework. While utilizing a separately managed account may help reduce a corporation's concentration risk in a money market fund, it also may be an important tool to reduce enterprise level counterparty risk. A portfolio of securities not correlated with the firm's largest credit exposures may help diversify risk and improve credit scores.

An Integrated Counterparty Risk Management Framework

In the years following the financial crisis of 2008, Counterparty Risk Management (CRM) took on a new level of importance among corporate treasurers. In addition to bank accounts, money market funds, and direct investments, counterparty exposures can include credit providers, swap counterparties, suppliers and customers. While CRM always has been part and parcel with risk management at financial institutions, corporate practitioners often lack both the expertise and tools necessary to address this important subject.

In recent months, we endeavored to help our corporate treasury readership address this issue. In the [June 2013](#) newsletter, we introduced the corporate treasurers' perspective to counterparty risk, the types of susceptible transactions, new challenges in the post Lehman-bankruptcy world, and the general principles for corporate practitioners. We recommended an integrated CRM process.

In our [October 2013](#) newsletter, we introduced the capture-analyze-manage framework to CRM. It allows the typical, mid-sized treasury function to capture, consolidate, and categorize various sources of risk. One may then use analytical tools to standardize and normalize risk, study aggregate risk from common obligors, conduct look-through analysis, and form critical risk assessment through a credit scoring system. We recommended managing CRM using what-if analysis to adjust balances in bank deposits, money market fund shares and direct investments in separately managed accounts (SMAs).

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Lance Pan, CFA

Director of Investment Research

Main: 617.630.8100

Research: 617.244.9466

lpan@capitaladvisors.com

Separately Managed Accounts in Corporate CRM

As managers of separately managed liquidity portfolios, we hold the view that SMAs can be valuable tools in a firm's overall CRM undertaking. Dating as far back as our [November 2007](#) newsletter, we listed tailored risk management and transparency as the first two of the six advantages of SMAs. These points have been proven invaluable by the ensuing financial crisis in 2008 and, since then, the sovereign debt issues in the Eurozone.

In our [October 2012](#) newsletter, we introduced a portfolio risk management approach to reduce corporate investors' concentration risk in money market fund holdings. We showed that, by building a separately managed portfolio alongside an existing money

market fund, one may achieve a targeted portfolio weighted average maturity (WAM), reduce concentration in large financial issuers, improve the market risk profile while still achieving a yield potential comparable to the existing fund. In essence, new portfolio structures and the selection of non-correlated securities allow the combined corporate treasury portfolio to change its overall risk characteristics.

In this research commentary, we expand the counterparty risk basket to the enterprise level to address the firm’s overall CRM. We believe that, when one applies proactive portfolio decisions to the capture-analyze-manage framework, SMAs become prominent risk management tools in addition to sensible investment vehicles.

Basic Principles to Improving Counterparty Risk

To illustrate how one incorporates a SMA to improve counterparty risk, let us first review the building blocks of counterparty risk reduction.

A. Counterparties

In Figure 1, we recap the types of counterparties a typical mid-size treasury department may be exposed to and the degree of difficulty in managing each. Deposits, money market funds and separate accounts generally represent direct exposures. Credit lines, hedges and vendor/client relationships are often indirect exposures. One also needs to determine probable economic exposure as opposed to stated notional exposure. Enterprise-level CRM addresses the weighted sum of economic exposures from each counterparty.

Figure 1: Degree of Counterparty Manageability

Counterparty	Easy	Moderate	Difficult
Bank Deposits	X		
Money Market Funds	X	X	
Credit Lines			X
Hedges/FX		X	
Separate Accounts	X		
Vendors		X	X
Clients			X

B. Objectives

The basic goal of CRM is to minimize loss of value and liquidity resulting from counterparty default. In a portfolio context, one generally achieves this by a) diversifying risk and b) improving counterparty credit.

C. Diversifying Risk

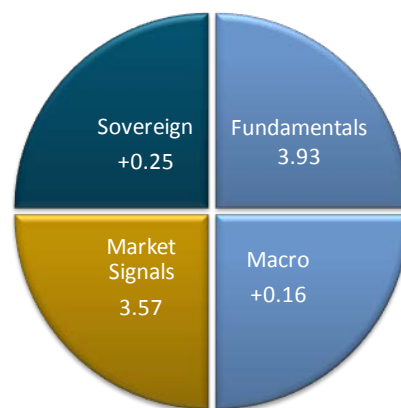
To reduce concentration risk, one may need to subdivide risk into categories such as issuer, asset type, country, and industry classifications. In a globalized financial system with complex structures, properly tracing issuer concentration to the ultimate obligors is often a difficult but necessary task. Diversification among asset types, country and

industry groups also may be necessary to reduce vulnerability to highly concentrated sectors.

D. Improving Credit

Contrary to popular belief, mere risk diversification is inadequate if risk is spread among counterparties with low creditworthiness, as systematic risk remains the same in the portfolio. Thus, one needs to improve the overall credit quality while diversifying, a process that requires a credit measurement system. Although credit ratings traditionally were used for this purpose, their flaws are now more widely recognized. We think that an independent and comprehensive credit scoring system that captures fundamental and market factors as well as analyst judgment may be more appropriate. Figure 2 is an example of our own credit scoring system consisting of four risk categories that measure counterparties on a scale of 1 to 5. The methodology is beyond the scope of this commentary, but we use the scores to illustrate the change in credit quality.

Figure 2: Components of a Credit Scoring Model



With these basic principles, we will use an example to show how one may collect, categorize, and analyze counterparty risk on the enterprise level, while ultimately diversifying concentration risk and improving credit scores utilizing a separately managed account.

Managing CRM with an SMA – An Illustration

For illustrative purpose, let us consider the current situation of this hypothetical treasury organization.

A. The Current Portfolio

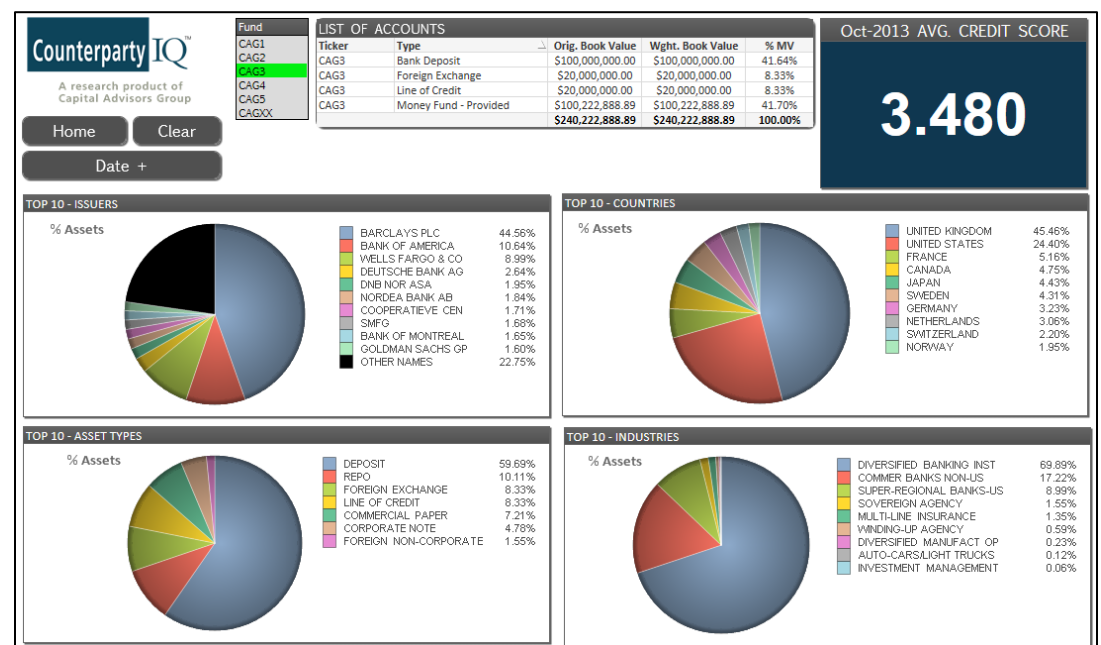
The portfolio in Figure 3 includes a deposit account with Barclays Bank, a credit facility with Wells Fargo, a foreign exchange contract with Bank of America, and a prime money market fund, each with nominal exposure of \$100 million. Figure 4 is a concentration report of top 10 entities by issuer, asset type, country and industry. It also includes a current portfolio credit score of 3.434. Let us observe the following:

Figure 3: Current Portfolio

Asset Name	Asset Type	Amount	Weighted Value
BARCLAYS	BANK DEPOSIT	\$100,000,000	\$100,000,000
WELLS FARGO	LETTER OF CREDIT	\$100,000,000	\$20,000,000
BANK OF AMERICA	FOREIGN EXCHANGE	\$100,000,000	\$20,000,000
MONEY MARKET FUND 1	MONEY MARKET FUND	\$100,000,000	\$100,000,000
TOTAL		\$400,000,000	\$240,000,000

- The seemingly equal exposure to the four banks is misguided as only the deposit account represents a direct credit exposure, while exposure to the other three is indirect.
- If the firm expects to tap only \$20 million of its credit facility and the FX contract provides an estimated \$20 million protection on the \$100 million notional, the total economic value at risk to counterparties is revised to \$240 million.
- The money market fund is a commingled asset pool of underlying credits that may include duplicated exposures to its three other counterparties.

Figure 4: Portfolio Concentration and Credit Score



B. Issues to be Resolved

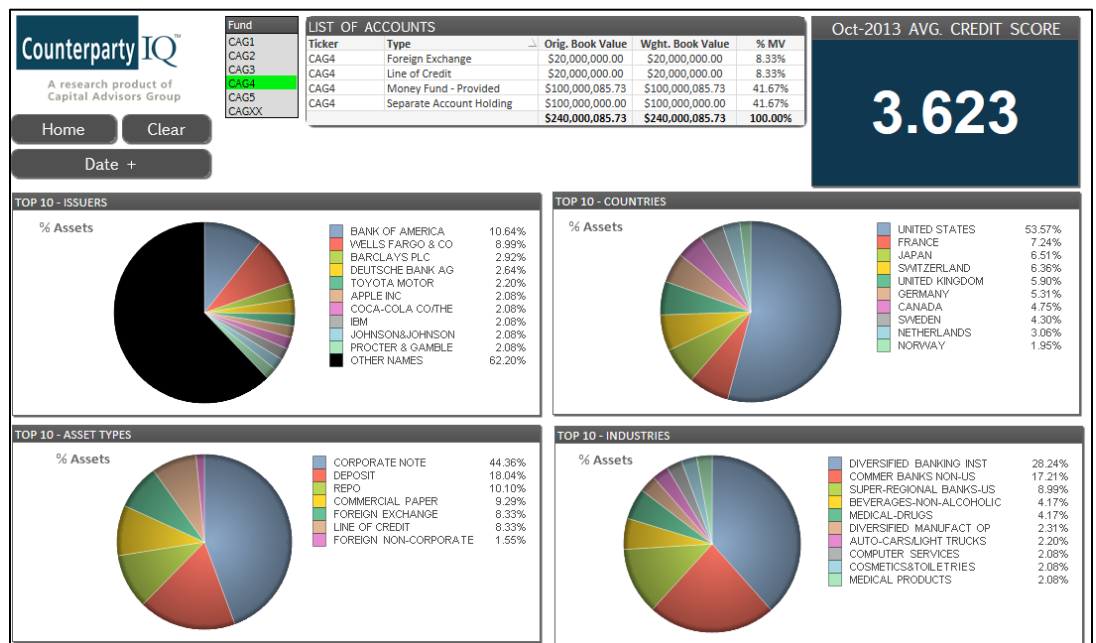
The analytical results in [Figure 4](#) provide some additional insight:

- The top three issuers are Barclays (44.56%), Bank of America (10.64%), and Wells Fargo (8.99%). If the firm has a maximum credit limit of 10% for non-US financial institutions, it needs to reduce exposure to Barclays.
- The top three countries of risk are United Kingdom (45.46%), United States (24.40%) and France (5.16%). If the firm’s non-U.S. concentration limit is 10%, it needs to reduce exposure to United Kingdom.
- The portfolio weighted credit score is 3.48, which is equivalent to a mid single-A credit rating. As it rebalances itself to reduce concentration risk, its score should not be lowered to negate the diversification benefit. Ideally, the score should improve concurrently with lower concentration risk.

C. Introducing the SMA

For simplicity’s sake, we decide to replace the \$100 million deposit account at Barclays, which is essentially unsecured lending to the U.K. bank, with a portfolio of 20 non-financial, short-duration credits with strong credit scores at \$5 million each (See [Appendix](#) for the list). [Figure 5](#) shows that the exposure to Barclays drops to 2.92% from 44.56% in the new, combined portfolio and no foreign country represents 10% or more of the portfolio. The portfolio credit score also improved to 3.623 from 3.48.

Figure 5: New Portfolio Concentration and Credit Score



Conclusion – Meeting New CRM Challenges with an SMA

As managers of separately managed portfolios, we have always advocated the use of SMAs in a corporate cash portfolio. New challenges in counterparty management practices, starting with a changing risk landscape and from higher board level scrutiny, present SMAs not merely as an investment strategy, but as an enterprise level risk management tool. As summarized in [Figure 6](#) from our example, replacing some large, unsecured bank exposure or partial money market balances with a portfolio of securities not correlated with the organization’s largest credit exposures may provide a new approach to reducing counterparty risk. Today, regulatory uncertainty and concentrated financial obligors serve as vivid reminders that counterparty challenges will remain front and center in a typical treasury organization. SMAs represent a viable solution to these daunting tasks.

Figure 6: Comparison of Portfolio Characteristics

Current Portfolio		Current Portfolio + SMA	
Issuer	Concentration	Issuer	Concentration
BARCLAYS	44.55%	BANK OF AMERICA	10.64%
BANK OF AMERICA	10.64%	WELLS FARGO	8.98%
WELLS FARGO	8.98%	BARCLAYS	2.92%
DEUTSCHE BANK	2.64%	DEUTSCHE BANK	2.64%
DNB NORWAY	1.95%	GE	2.31%
Sector	Concentration	Sector	Concentration
FINANCIAL	97%	FINANCIAL	56%
INDUSTRIAL	<1%	INDUSTRIAL	42%
GOVERNMENT	2%	GOVERNMENT	2%
CAG Credit Score*		CAG Credit Score*	
3.43		3.59	

Appendix: Sample List of Credits in a Separately Managed Account

CREDIT	SCORE
ANHEUSER-BUSCH	3.30
APPLE INC	4.20
BASF SE	3.23
BHP BILLITON	3.69
CATERPILLAR	3.19
COCA-COLA CO	3.65
GENERAL ELEC CAP	2.68
GOOGLE INC	4.44
HONEYWELL	3.68
IBM CORP	3.54
INTEL CORP	3.97
JOHNSON & JOHNSON	4.21
NESTLE CAPITAL CORP	3.63
NOVARTIS CAP CORP	3.94
PEPSICO INC	3.45
PROCTER & GAMBLE	3.54
ROCHE HOLDINGS	3.73
SANOFI	3.58
TOYOTA	3.74
VOLKSWAGEN	3.02

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