

**THOMAS GRANDE**

Director  
646.227.4710  
thomas.grande@navigant.com

[navigant.com](http://navigant.com)

**About Navigant**

Navigant, Inc. (NYSE: NCI) is a specialized, global professional services firm that helps clients take control of their future. Navigant's professionals apply deep industry knowledge, substantive technical expertise, and an enterprising approach to help clients build, manage and/or protect their business interests. With a focus on markets and clients facing transformational change and significant regulatory or legal pressures, the Firm primarily serves clients in the healthcare, energy and financial services industries. Across a range of advisory, consulting, outsourcing, and technology/analytics services, Navigant's practitioners bring sharp insight that pinpoints opportunities and delivers powerful results. More information about Navigant can be found at [navigant.com](http://navigant.com).

## EVOLUTION OF COLLATERAL MANAGEMENT

Collateral management has become increasingly complex. The Federal Reserve of New York's Treasury Market Practice Group (TMPG) strongly recommends that counterparties enter into master control agreements related to collateral requirements. These agreements are intended to define specific haircut rules for market participants while protecting the integrity of portfolios that engage in derivative activities. This concept of collateral management primarily applied to derivative portfolios in the past but has evolved to include various investment types in this post Dodd-Frank era. (Figure 1)

**Figure 1. New Regulations Highlighting the Importance of Effective Collateral Management**

REGULATION	AFFECTS	MODEL IMPACT
<b>Dodd-Frank Act and European Market Infrastructure (EMIR)</b>	Cleared derivatives	Central counterparties (CCPs) determine the haircuts they set for the various collateral classes they accept to reflect credit, market and liquidity risks, likely creating different models across CCPs.
<b>BCBS/IOSCO Key Principles</b>	Uncleared derivative	Market participants have a choice of two haircut models: either an internally developed and regulator approved model (approved by the regulator in each country where such model is used) or a standardized initial margin schedule as set by BCBS/IOSCO.
<b>Financial Stability Board (FSB)</b>	Repo market	<ul style="list-style-type: none"> <li>Recent market consultation suggests minimum haircuts for uncleared repo transactions between a regulated and non-regulated entity.</li> <li>Through the introduction of numerical haircut floors on certain transactions, the FSB aims to limit leverage and reduce procyclicality outside the banking system.</li> </ul>

## COLLATERAL MANAGEMENT IS NOT JUST FOR DERIVATIVES

Investment types such as commit to purchase activity (TBAs) and currency forwards will have collateral requirements similar to a derivatives portfolio. Collateral management for such investment types have become complicated with the emergence of new regulations and products. Segregating the securities pledged for collateral from the main portfolio's securities is an important step in the collateral management process. Middle and back office operations manage this process internally in a multitude of ways. More often than not, the investment management operational groups develop sophisticated spreadsheets in an effort to find actionable exceptions in the trading day and efficiently manage the process. While these spreadsheets offer great flexibility, they represent a great deal of risk from a data integrity and management point of view.

In addition, middle and back office operational groups determine appropriate haircut levels for each security and reconcile them to the negotiated counterparty agreements on a daily basis. Typically, these groups have a tendency to over-collateralize because of the manual nature of this process. While it may appear to be a more conservative and safer approach, it may not be practical. Pledging securities unnecessarily limits performance and creates an opportunity cost dilemma for the impacted portfolio manager. This is especially true in case the portfolio is a part of a securities lending program or bonds borrowed arrangement.

### Are You Getting Too Much of a Haircut? Key Considerations for Determining Your Approach

#### *Haircuts and Spreads*

To determine if a portfolio is paying too much, it's important to have a basic understanding of haircuts. The process to determine haircuts depends on the type of securities being pledged for collateral. Various factors govern the calculated haircut, some of which are the type of investment, the investment's clearing house, the investment's beta compared to its relative benchmark and the quality of asset or rating if it's a fixed income instrument.

#### *Collateral Safekeeping*

Investment management operational groups are tasked with account segregation from a safekeeping and reporting point of view. In many cases counterparties may require a lot more transparency to the collateral account or direct access to the underlying custodian or safe-keeper of the encumbered assets. A tremendous amount of analytical capability and infrastructure is needed to efficiently manage the collateral and this task will become tougher with new regulations.

#### *Collateral Maximization*

With more investments requiring collateralization, it is critical that available collateral is used efficiently and not overpledged. In the future, investment operational teams will be required to perform more rigorous testing on a daily basis to meet the optimization imperative as regulations continue to evolve. It will be even more cumbersome for these teams to develop the right algorithms to satisfy existing counterparty agreements and to adhere to industry regulations.

The notion of collateral separation is critical, but it's more ideal to have reporting capabilities to consolidate the pledged collateral in a virtual long box. This approach helps with substitutions which are commonly applied when pledged securities pay income and the beneficial owner has a right to that income stream. Consolidation at a reporting level can forecast this better and help with optimizing collateral across all sub accounts within an account's legal structure.

#### *Custodial Banks*

Collateral separation is usually achieved by opening subaccounts that are linked to a larger parent account. In many cases, asset management firms have worked with safe-keepers of assets such as custodian banks to open subaccounts. Custodians' asset processing system infrastructure makes them a natural fit to safe-keep encumbered securities in segregated accounts. Another benefit is a custodian bank has a fiduciary and legal obligation to keep the asset it safe-keeps separate from its own assets.

## **ReHypothecation**

To lower the haircut and reduce costs associated with pledged collateral, many banks and brokers seek collateral that can be rehypothecated. Rehypothecation is the process through which banks and brokers can use the collateral posted by their clients, for their own purposes, e.g. lending. Clients who permit rehypothecation of their collateral may be compensated either through a lower haircut, reduced borrowing costs or a rebate on fees.

## **Inefficient Operations**

Middle and back office operations historically have not managed their collateral in the most efficient and effective manner. Collateralization is required to mitigate counterparty risk, but collateral management is required to optimize the available collateral to be pledged wisely in order to maximize portfolio managers' returns. In this era of stringent regulatory pressure and complex products, collateral management has become a sophisticated process and is not just for derivatives anymore.

## **LEADING PRACTICES**

Many solutions can be implemented to solve the collateral management riddle. Based on our decades of experience addressing collateral management issues — both from the in-house and advisor perspective — Navigant experts have found the following four approaches to be most effective:

**1. Complete Outsourcing:** The collateral management function can be completely outsourced to a sophisticated service provider with the capabilities and infrastructure to support the function. Outsourcing will reduce the costs associated with collateral management because of economies of scale and scope. It will help with transparency of available assets and reduce operational risk. In addition to these benefits, outsourcing the function will reduce regulatory risk as the service provider will make every effort to be compliant with new regulations.

- 2. Outsourced Technology:** The technology and infrastructure portion of the collateral management function can be outsourced in order to reduce technology costs. Utilizing vendor software will allow organizations to maintain control over their collateral management function by actioning exceptions themselves.
- 3. In-house Platform:** Efficient and effective in-house collateral management functions can be built with any of the numerous technology vendor products in the market today.
- 4. Operational Improvement:** Current collateral management processes in institutions provide ample scope for implementing operational improvement practices to enhance the quality of the collateral pledged-out function.

## **CONCLUSION**

Collateral management is a complicated business, and the complexity continues to increase given the multitude of new financial regulations and the variety of approaches available to investment managers. It is important to understand both the operational and revenue impacts of haircuts, spreads, safekeeping, and rehypothecation to maximize investment managers' returns and create lower opportunity costs. Implementing the right operating model, whether via in-house operations or a service provider, can have a tremendous effect on the bottom line.

## HOW NAVIGANT CAN HELP

Navigant, with our vast background in providing Operations, Regulatory, and Technology consulting services to Investment Managers, can help you choose and implement the collateral management solutions that are best for your organization. (Figure 2).

Our professionals possess real industry experience in successfully applying various approaches and solutions to collateral management. Navigant has in-depth knowledge and years of experience in helping clients outsource various middle-office functions to efficient service providers. Also, Navigant has helped numerous clients with selecting vendor products in different asset management functions which has transformed their clients into efficient organizations. Moreover, Navigant possesses in-depth expertise in reviewing and determining operational efficiencies, technology requirements, risk profiles and helping firms to better utilize their assets and human capital.

Figure 2.



We hope that you find this material to be informative. If you have questions, would like additional information, or wish to arrange a briefing for your executive team about collateral management, please contact any of our subject matter specialists listed below:

Thomas Grande, Director  
646.227.4710 | [thomas.grande@navigant.com](mailto:thomas.grande@navigant.com)

## NAVIGANT'S FINANCIAL SERVICES CONSULTING PRACTICE

Navigant (NYSE: NCI) provides a wide range of services, spanning from consulting and compliance to litigation and investigative support, to help highly-regulated industry organizations address their most critical business issues. Our Financial Services consulting practice works collaboratively with banking, insurance, and investment management clients to achieve their business objectives by improving operational effectiveness and mitigating compliance risks. Our comprehensive service offering focuses on our clients' key opportunities and challenges including core business operations, technology, human capital, regulatory compliance, strategic transformations, customer service, and business process outsourcing (BPO). We bring deep industry, consulting and technical expertise, and are known for partnering with our clients to realize their business objectives.