

Mitigating Risk with Portfolio Reconciliation

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Portfolio reconciliation has risen in prominence as a fundamental risk management process due to the unexpected market events of the last three years. Faced with the demise of several major global market-dealers, the default of countless hedge funds and hundreds of bank failures, institutions are reassessing their basic controls. With no counterparty 'too big to fail', a clear understanding of booked trades provides a critical business safeguard that can no longer be overlooked. A systematic approach to reconciliation can give institutions a clear understanding of their true counterparty risk at all times, avoiding surprises in times of crisis.

Portfolio reconciliation offers a number of benefits:

- An additional cross-check of internal books and records, to ensure accuracy and manage exposure
- Confirmation and matching of your trades with your counterparties, to address and resolve any discrepancies early in the process
- A clear understanding of positions and valuations at any point in time, to allow for appropriate collateralization

Many institutions regularly reconcile their cash trades (where cash is provided upon settlement), repurchase agreements or securities lending arrangements. The reconciliation of cash, securities or bonds is immediate and fairly straightforward, since it takes place at the individual trade level.

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In contrast, the underlying structure of over-the-counter (OTC) derivatives trades makes the trade confirmation and reconciliation process far more complex:

- **‘One to many; many to one’:** While one counterparty may book a straddle as one transaction, the other counterparty may book two transactions (a call and a put). Ideally, the trades are grouped, with a matching ID, so that they can be matched. However, the challenges of matching the trades on both sides, given the disparity in number of transactions, are significant.
- **Deal life cycle:** If a counterparty strikes a 30-year swap today, with a six-month reset, there would be no settlements for six months or more. If both counterparties don't have the transaction on their books, the error could linger for months before it is uncovered and corrective action can be taken.
- **Netting:** Two parties can agree on a netted value of their trades, leading to a mark-to-market valuation and collateralization, without realizing that the underlying transactions are not in synch (see Figure 1).

Just these few examples demonstrate how essential portfolio reconciliation is to integrated risk management, and why it is at the forefront of current industry discussions, changing market practices and regulation.

Augmenting Internal Controls and Processes

Reconciling portfolios provides institutions with a vital check and balance to ensure the accuracy of their books and records. When used as part of the trade checkout process, it augments segregation of duties and serves as an extra control. Confirming that trades match those of counterparties ensures that discrepancies, operational errors or – worst case – potentially fraudulent activities are caught and resolved early.

A clear understanding of the activities on the books will allow for correct collateralization to mitigate risk. Without detailed and accurate positions and valuations, investors run the risk of being over- or undercollateralized, either expending resources unwisely or being insufficiently secured.

Matching Accurately

When it comes to reconciliation, it's essential to compare the details. On the surface, net positions of counterparties can closely approximate one another, potentially creating a false sense of security. A closer look can uncover mismatched trades, unequal mark-to-market valuations, or other discrepancies. In the event that transactions offset one another, there's no warning sign until a credit event brings a loss (see Figure 1).

In addition to economic breaks, life cycle events (such as corporate actions, stock splits or credit events) can change key trade details such as number of shares, price, etc. Failure to ensure that both parties have adequately accounted for these changes to trade parameters creates additional, unnecessary, risk.

Managing Volatility

When markets are volatile and prices change rapidly, it's even more critical to be certain that both counterparties agree on pricing or valuation. Otherwise, divergent trade valuations can significantly affect the amount of collateral pledged or received during rapidly moving markets.

The International Swaps & Derivatives Association (ISDA) and the Credit Risk Market Policy Group (CRMPG) have both defined portfolio reconciliation as a key pillar for future market stability, resiliency, and growth.

Mitigating Counterparty Risk

During the credit crisis, portfolio reconciliation was central to unlocking collateralized transactions. In the event that two counterparties had not reconciled their transactions, the lack of consensus on what transactions had taken place might prevent or delay unwinds when one party defaulted or otherwise ceased being a viable counterparty.

FIGURE 1: NETTED OTC PORTFOLIO ISSUES / MASKING

BEFORE – DAY 1				AFTER – DAY 2			
Margin call agreed at \$5 million from Counterpart 1 to Client 1				Swap Option 1 expires, and the margin call is disputed			
Client	Mark to Market	Counterpart	Mark to Market	Client	Mark to Market	Counterpart	Mark to Market
Swap 1	-10	Swap 1	10	Swap 1	-10	Swap 1	10
Swap 2	5	Swap 2	-5	Swap 2	5	Swap 2	-5
Swap 3	10	Swap 3	-10	Swap 3	10	Swap 3	-10
Swap Option 1	-25			Swap Option 1	0		
Equity Option 1	25			Equity Option 1	25		
TOTAL NEEDED	5		-5	TOTAL NEEDED	30		-5

Until a full reconciliation is done to determine why only one counterparty is showing Swap Option 1, the client has a \$25 million exposure.

These recent events showcased the importance of mutual, preferably independent, reconciliation. In some cases, each institution had completed internal processes but had not reconciled their books and records to those of the other party, leaving them with little recourse during or after a credit event.

“When counterparties are actively executing trades daily, the portfolio reconciliation frequency should be daily.”¹

ISDA Collateral Committee on Collateralized Portfolio Reconciliation Best Operational Practices—December 11, 2009

Changing Industry Demands

The International Swaps & Derivatives Association (ISDA) and the Credit Risk Market Policy Group (CRMPG) have both defined portfolio reconciliation as a key pillar for future market stability, resiliency, and growth.

Recent ISDA documents point to the overall importance of reconciliation, and its particular usefulness for collateralized transactions. On a reactive basis, reconciliation can investigate and identify trades giving rise to a collateral dispute. Conversely, on a proactive basis, reconciliation can ensure that bilateral portfolios remain aligned to mitigate the potential for disputes.

The market is moving toward a model that demands more frequent portfolio reconciliation, with daily reconciliation agreed to by the major dealers and strongly recommended for all active market participants. This model will impose a significant operational burden on all but the largest players.

These recommendations have a long history: earlier this decade, the Federal Reserve Bank expressed concern about the sharp increase in OTC derivatives trading and the high percentage of backlogged or unprocessed trade confirmations. In addition to pushing

market reforms in CDS Index trade confirmations, the regulators' uneasiness drove ISDA to develop reconciliation solutions for improve trade matching and mark-to-market agreements. Ultimately, this shaped the creation of third-party solutions and accelerated the trend toward outsourced models.

Understanding the Options

Today, market participants have several options for how they reconcile portfolios. Smaller organizations that trade less frequently may elect to manage all these activities in house.

Increasingly, however, institutions are turning to market solutions or third party service providers that can provide an end-to-end solution that encompasses valuation, collateral management and portfolio reconciliation. The reason is clear: rapid growth of collateralized OTC trades – both in number and in the total volume of collateral in circulation – has increased steadily in recent years.

According to a recent ISDA survey,² the percentage of trades collateralized rose from 30% to 59%, while the collateral volume grew 60% from 2003 through 2008. This trend rapidly accelerated in 2009, when credit and market events increased the focus on counterparty risk. Estimated collateral in circulation increased 86% to \$4 trillion during 2008.

Moving Toward Interoperability and Standardization

The rigors of daily portfolio reconciliation place a huge strain on the human, financial and technological resources of institutions and demand more robust collateral management capabilities. With the right solution that supplements in-house procedures, a reconciliation process can be simple to initiate and maintain, versus a constant strain on operations and resources.

Since mid-2008, J.P. Morgan Collateral Management has supplemented its end-to-end outsourced Derivatives Collateral Management solution with automated portfolio reconciliation using TriOptima's triResolve service.

Now used by all 15 major derivatives dealers (known collectively as the G-15) as well as many buy-side and regional financial institutions, triResolve reconciles 5.8 million trades for over 1,900 legal entities, most on a daily basis.³ With integrated portfolio reconciliation as a key core service offering, J.P. Morgan is the leading provider of derivatives collateral management solutions, and the first choice of institutions facing the twin challenges of managing operational and credit risk in dynamic markets.

Recognizing that community solutions are inherently stronger than private solutions, there's a strong move toward the use of peer-to-peer platforms in portfolio reconciliation. These platforms provide counterparties with common views of each other's data, allowing desks to confirm trades and resolve valuation issues. Designed to work with multiple market participants, these platforms provide ease, cost efficiency, and streamlined operations:

- Individual file formats can be accepted, standardized, synthesized and matched.
- Automatic uploads ensure frequent reconciliation.
- Once a trade is matched, it stays matched – allowing future reconciliations to take place more rapidly as only new trades are compared.
- Frequent and systematic reconciliation removes most of the background noise stemming from small discrepancies.
- Ongoing monitoring can serve as an early warning system to identify more quickly systemic patterns of trade population or valuation discrepancies.

With shared data, desks can clean up the discrepancies stemming from timing or data source issues, clearing the way to identify and address areas of genuine dispute.

Reconciliation is the first step of ISDA's recently published Dispute Resolution Procedures, which outline the process and timing for managing disputes that cannot be resolved between the two parties.

Containing Costs While Mitigating Risks

The effective deployment of strategies to trade and collateralize OTC derivatives will continue to be a central business activity for controlling counterparty risk. However, high volumes, complexity and increasing regulation are rendering traditional spreadsheet-based operations obsolete.

Institutions are faced with a tough choice: to hire or develop the professional talent required to manage these activities, and to devote a significant portion of already constrained technology budgets to establishing and maintaining a comprehensive automated solution, or to outsource some or all of these services to a trusted and experienced partner able to deliver an integrated, end-to-end outsourced solution.

Those institutions facing this decision are well aware that, while regulations will continue to evolve, they have a responsibility to fully understand the risk parameters in which they operate as they face increasing scrutiny from shareholders, governments and taxpayers alike.

Conclusion

The ability to effectively manage risk with collateral is exponentially enhanced with a comprehensive portfolio reconciliation process. Accurately matching trades not only provides a clear understanding of the transactions on your own books and records (augmenting your internal controls and facilitating accurate collateralization), but also mitigates counterparty risk and avoids potentially costly mistakes or time-consuming disputes.

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Notes

1. ISDA Letter to the Federal Reserve Bank of New York (June 2, 2009)
2. ISDA Margin Survey, April 22, 2009
3. <http://www.trioptima.com>