Since its launch in 2002, Continuous Linked Settlement (CLS) has grown into the industry standard to mitigate settlement risk in foreign exchange transactions. In an environment of enhanced scrutiny of transaction costs, an ancillary benefit of the product has emerged: CLS has proven to be a valuable technology in minimizing OTC spot and forward trading costs. It is an essential addition for any institutional entity frequently engaged in the foreign exchange market.

From the trading desk perspective, after addressing settlement risk, minimizing trading costs has become the most crucial and relevant benefit of CLS. Since CLS manages cross-party settlement risk, traders gain more options in seeking out the best liquidity, competing trades, and obtaining best execution.

**Competitive Pricing**

While CLS is not a requirement for competitive pricing, it greatly increases both flexibility and the amount of competitive pricing that can be delivered to the client. CLS provides the ability to execute trades with any execution venue or counterparty, subject to client constraints. A few examples include:

- **Rebalance trades**: CLS allows for market trades to be competitively priced across multiple counterparties. CLS also allows trades to be executed with the bank offering the tightest fixing spreads instead of the default bank which holds the position in the given currency pair.

- **Rolling positions**: Instead of transacting with the bank holding the existing position, rolls can be competitively priced across multiple counterparties.

Without CLS, a client’s position with a counterparty can be effectively ‘locked’; there is no way to move the position to a competing bank without incurring a cost. Any open positions with a counterparty that is not consistently providing the best execution available could create a situation with three main outcomes:

- **Continue to roll the position with the existing counterparty and potentially receive subpar pricing**

- **Migrate the position to a better performing counterparty at a specified fix, and possibly incur the spread on both the spot and forward prices**

- **Compete the roll without CLS, introducing settlement risk**

All three choices are undesirable. The ideal situation instead would be to migrate between counterparties at no cost. This is precisely the solution that CLS provides. With CLS, a 100MM USD/CAD hedge at Counterparty A can be rolled with any counterparty on the client’s roster, but without CLS, the same hedge would only be rolled with the incumbent counterparty. By competing the roll, a position can be ‘rolled away’ or migrated from the underperforming counterparty to a more competitive counterparty at no cost to the client.

To support the claims above, a sample of actual trade data is shown in the below table aggregated from the 2017 Mesirow Financial Currency Management Transaction Cost Analysis (TCA) for non-CLS AUD clients versus CLS AUD clients. Although clients do not all share identical bank rosters, tenor structures, and currency baskets, the results clearly show significant outperformance by the CLS client group versus the non-CLS group. On both spot/forwards and rolls, the annualized CLS client TCA results are 0.15 bps better than non-CLS clients.

- The cost savings could be significantly more if a bank counterparty is defensively priced. For traders, CLS is a highly valuable tool to ensure best execution.

<table>
<thead>
<tr>
<th>2017 TCA Data</th>
<th>Annualized bps</th>
<th>1,000MM Hedge, 50% turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spot / Forward</td>
<td>Roll</td>
</tr>
<tr>
<td>CLS</td>
<td>(0.20)</td>
<td>(1.60)</td>
</tr>
<tr>
<td>Non-CLS</td>
<td>(0.35)</td>
<td>(1.75)</td>
</tr>
<tr>
<td>Difference</td>
<td>0.15</td>
<td>0.15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Past transaction costs are not necessarily indicative of future transaction costs. Actual trading costs may materially differ from those above.

1 These numbers do not reflect actual trade results. Past transaction costs are not necessarily indicative of future trading costs. Actual trading costs may materially differ. The information contained herein is intended for institutional clients and Qualified Eligible Persons only and is for informational purposes only.
Settlement Risk Mitigation

As was previously mentioned, CLS was originally developed to address settlement risk in foreign exchange transactions. Prior to CLS, the FX market did not have a control mechanism to ensure that asset managers paid only if they were paid (payment versus payment or PVP). This situation can result from the difference in time zones where there can be long delays between the time that one party to an FX transaction delivers its funds and the time it receives its payment. This temporal risk was infamously and disastrously exemplified by the collapse of Herstatt Bank in June 1974, a German bank that had received Deutsche marks from a counterpart bank but was closed by banking regulators before it could make its US dollar payments.\(^2\) FX trading can be the equivalent of making an unsecured loan to a party; asset managers give money to the party without assurance that they will be paid back.

The problem can be exacerbated if the parties to an FX transaction choose to settle gross instead of net. In a gross payment process, payments are made one by one. For example, a US bank might have two transactions with a Japanese bank, buying ¥950,000,000 and selling ¥325,000,000. In settling gross, the US bank would make each of those two payments. Gross settlement has many drawbacks, not only payment risk, but the cost in processing payments and the possibility of liquidity risk, or the risk that one of the banks might not receive its funds when it needs them or that it might be paid the wrong currency or wrong amount.

An obvious improvement to the yen gross payment example above is to settle net. The US bank would combine its buy and sell payments into a single transfer of ¥625,000,000. Now the risk of payment failure is reduced because the amount to settle has declined from ¥1,275,000,000 (¥950,000,000 + ¥325,000,000) in the gross example to the net amount of ¥625,000,000. Settlement risk still exists, however, as the US bank or the Japanese bank could fail to deliver its part of the transaction.

For example, on settlement day, each counterparty to a transaction pays CLS the amount it is selling. CLS pays out the funds purchased only if the currency sold is received, thus eliminating the risk of settlement failure. In the case of one party defaulting, CLS could simply return the non-defaulting party’s funds. However, because CLS has access to lines of credit, the non-defaulting party can receive the currency it purchased. As a result, not only is settlement risk eliminated but liquidity risk diminished.

CLS remains a foundation piece for cost effective trading and efficient settlement. The vast majority of institutions implementing a hedging program integrate this service into the mandate structure to achieve material trading and operational benefits.

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