B2B Foreign Exchange Payments: Technology-Enabled Opportunities for Banks

Banks looking to increase their share of the FX payments business must focus on developing an advanced payments solution.

Executive Summary

Corporate treasury organizations within multinational corporations must manage foreign exchange (FX) transactions with a variety of participants, including vendors, shareholders and a global employee base. In their hunt for ways to reduce cost and improve efficiency in the transaction-management process, corporations partner with global banks to handle their FX needs. Small and medium-sized banks also form partnerships with global banks to offer FX services to their clients.

This paper provides an overview of the operating model followed by some leading banks in the FX payments business. It also discusses some of the key hurdles faced by banks’ front- and back-office divisions, which provide FX payments services to clients. Finally, the paper lists the key processes and functions that should be part of a bank’s FX solution.

Maintaining pricing transparency and offering different pricing methods, including negotiated pricing for FX payments, are the primary challenges faced by front offices. Back offices are tasked with reducing the cost of payments by considering alternatives to wire transfers. Offering same-day settlement for applicable currencies within a specific geography is another requirement that back offices are trying to address. In addition to these issues, regulatory developments such as the Dodd-Frank Act have compelled banks to enforce greater transparency in FX pricing and impose tighter risk-monitoring controls.

These challenges are driving banks to innovate and keep pace with evolving technology developments.

Introduction

Consumers are increasingly transacting on a global basis - buying from e-commerce sites across the globe and traveling, living and working overseas. As a result, businesses have been forced to expand and strengthen their global supply chains. The World Trade Organization (WTO) reports that since 2005, world merchandise trade has grown by an average 3.7% annually, while the global GDP has risen by 2.3%. This has boosted volumes in terms of currency value and the number of foreign exchange (FX) transactions made by businesses across the globe.
Corporations small and large typically turn to banks that offer foreign currency transaction services along with a host of other financial functions – managing cash, liquidity, risk and other investment services for example – as part of “global transaction banking.” Recent regulatory developments such as the Dodd-Frank Act have compelled these banks to provide greater transparency in areas like pricing and stricter risk management. This is steering technology initiatives related to B2B FX payments.

In the following pages, we will explore some of the challenges faced by large banks in the B2B FX payments space, and recommend IT solutions for banks looking to capitalize on the business opportunities in this area.

### B2B FX payments – An Overview

B2B payments can range from US$500 to millions of dollars. The most common end users of B2B FX payment solutions are the treasury departments within a corporation. Small banks might also use white-labeled solutions offered by other medium-sized or large banks.

#### Business Process

FX payments differ from domestic payments because of the FX trading aspect. (Figure 2, next page depicts a typical business process for a B2B FX payment).

For example, let us assume that ABC Shipping Ltd. is a U.S.-based client of Bank XYZ (also in the U.S.), which offers B2B FX payment services.

Mark, a Treasury officer at ABC Ltd., has been asked to make a payment of Euro 100,000 to a vendor in Germany.

Mark reaches out to the sales desk at Bank XYZ through the channels offered by the bank, such as a Web application, phone, etc., for an FX rate to buy the equivalent Euro. Depending on the service offered by the bank, Mark can either negotiate a rate or simply accept a fixed FX rate. Once Mark accepts the rate, it is assumed that the FX trade is executed.

The sales desk immediately notifies the bank’s trading desk of this open “short” position in Euro. The trading desk covers this position by buying Euro in one of the FX market venues before the end of the trading day. Both the sales and trading desks aim to make a profit on this FX trade; the rate offered to Mark contains the trading desk’s spread.

Once the trade is executed, the operations (back office) team validates the settlement instructions to ensure proper settlement. This process is known as confirmation. The money is then transferred to the beneficiary after two business days in the case of a wire payment.

To successfully complete the settlement of this payment, Bank XYZ needs to maintain a corresponding relationship with another bank, or a different branch of XYZ in Germany.

### Business-to-Business (B2B) FX Payments Can Be Classified as FX Payables and FX Receivables

<table>
<thead>
<tr>
<th>FX Payables</th>
<th>FX Receivables</th>
</tr>
</thead>
<tbody>
<tr>
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<td>• Customer Receipts</td>
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<td>• Expatriate Payroll and Incentive Compensation</td>
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<td>• Stock Option Redemptions</td>
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</tr>
<tr>
<td>• Inter-company Settlements</td>
<td>• Foreign Currency Check Collections</td>
</tr>
<tr>
<td>• Claims payments</td>
<td></td>
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<td>• Tax payments</td>
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</table>

Figure 1
Typical Business Process for a B2B FX Payment

Operating Model

Large global banks operate around the clock in the FX market. This enables them to serve clients globally, thereby offering FX trading and settlement services in a wide variety of currencies. (Figure 3 depicts a typical operating model for banks offering B2B FX payment services).

Most successful banks have localized sales teams that service clients in a particular region or time zone. Trading desks are usually located across different time zones to enable around-the-clock FX trading.

The back-office, being the cost-center of a bank, is usually centralized in a preferably low-cost location providing round-the-clock support. Banks focused on growing their FX business globally must aim to move towards this model.

Industry Challenges in the B2B FX Payments Process

When a corporate client signs up for an FX payment service with a bank, they have to interact with both the front-office (sales) and back-office (operations and support) teams. Some of the common challenges faced by both the corporate clients and the banks are described in Figure 4, next page.

The Front Office

One of the primary issues many corporate clients face is the lack of transparency in FX spreads. Corporations with well-informed and
sophisticated treasury organizations usually reach agreements with their banks on the FX spreads for the payments they make. However, in most small or mid-sized corporations, the treasury organization is often unaware of the FX spreads offered by their bank’s front office. Recent regulations such as the Dodd-Frank Act are trying to address this challenge.

An obstacle facing many banks offering an FX service is the ability to offer multiple pricing methods. Common pricing methods offered by banks are:

- **Real-time**: Banks enable their clients to negotiate the FX rate in real time through their online channel. The real-time market rate is offered to the client, along with a spread.

- **Fixed/Rate-of-the day**: Some clients prefer a single FX rate for all the FX transactions they make throughout the day. The spread on such rates is usually higher than on the real-time rate to compensate for market fluctuations.

- **Benchmark pricing**: There are clients who send in payments at a particular time during the day. Depending on the time they choose, a market standard rate such as WM Fixing is applied to the payments.

Not all banks have the infrastructure in place to offer all three pricing methods. On the other hand, not all corporate clients are conversant with the pricing mechanism used in these pricing methods.

The ability to offer multiple payment input options to their clients is an issue for banks. Payment information consists of the financial information (payment amount and currency-pair, and date of settlement) and the settlement instructions. Though most banks have an online Web application with file-upload capabilities, enabling FX payments through mobile devices and file transmission channels such as Electronic Data Interchange (EDI) – which permits corporations to send a large number of payments at the same time – has yet to be fully utilized.

Today, the technology infrastructure of a bank must have the flexibility to support any input channel from a client. With clients becoming increasingly comfortable with online input channels, banks are focusing less on capturing payment information through conventional modes, such as phone, fax or e-mail.

**The Back Office**

The back office – or operations team – handles all the business processes related to trade confirmation and settlement. Clients call on the back office of a bank for support in fixing settlement instructions or other settlement-related concerns.

Commonly used methods for settling FX payments are wires and foreign currency drafts. Despite the high costs involved, wire payments continue to be the choice for faster settlement. A study by the Association of Financial Professionals reveals that 79% of the nearly 500 respondents surveyed use wires for cross-border payments. The high cost of settling an FX payment through a SWIFT MT103 message (also called a wire payment) has been a concern for clients for years. The cost of wire transactions goes up when a bank does not have enough correspondent banking relationships in a specific currency. In this case, the payment has to go through multiple banks before it reaches the beneficiary.

To address this issue, the Federal Reserve launched the International Automated Clearinghouse (IACH) service in 2009 following a survey it conducted in the fall of 2007. The survey revealed that nearly 230 of the 550 respondents
expected 15-25% annual growth in the cross-border ACH market. The National Automated Clearing House Association (NACHA) published findings in 2012 based on a research study conducted by Earthport, which showed that more than 80% of the industry was interested in adopting IACH as a payment method. The findings also revealed that the majority of cross-border transactions are between US$500 and US$100,000. IACH is a good fit for high-volume, low-value payments. Currently, IACH payments can be made to nearly 35 countries around the world.

With more and more corporations becoming global, there is a growing need to settle their payments the same day for currencies in the same time zone. For example, a corporation in Australia might want to settle its payments the same day to its beneficiary in Singapore or Japan. Leading U.S. and Europe-based banks that are aiming to tap the global payment traffic must be well positioned from a business and technology standpoint to offer same-day settlement within the same time zone. Though same-day settlement is not a pressing concern today, it is definitely a differentiator for banks planning to position themselves as global payment service providers.

The Ideal B2B FX Payment Solution

A survey by Glenbrook partners in 2012 revealed that banks and payment providers considered reliability, speed/timeliness of payments and security as the top three requirements for an ideal B2B FX payment solution. (See Figure 5).

Based on our industry experience and interactions with banks’ senior management, we have developed a list of features that the ideal B2B FX payments solution should possess (See Figure 6, next page). A “solution” can be a single end-to-end application with separate modules for every function, multiple integrated applications to support the entire payment process, a home-grown or off-the-shelf product, or a combination of each.

Payment Input Channels

An ideal FX payment solution must provide the following input channels for clients to enter payment information:

1. **Online (Web and mobile application):** Apart from being speedy and secure, a Web/mobile application must have a customizable business process workflow built in. This will support the approvals workflows required by corporate treasury organizations.

### Requirements For a B2B FX Payment Solution

![Requirements For a B2B FX Payment Solution](image)

**Figure 5**
**File Upload:** This channel enables corporations to upload multiple payments at one time. Its most important aspect is its ability to support multiple file formats requested by clients. The file upload process must be highly interactive so that the client uploading the file can fix all the errors in the file before it is processed. This can minimize the operations team’s workload.

**Electronic Data Interchange (EDI):** This is similar to a file upload. The only difference is that the upload is from a client’s system to the bank’s system through the EDI infrastructure. Since the EDI file is transferred from one system to another, the payment solution must be sufficiently automated to process the payments.

**SWIFT:** The FX payment solution must be capable of processing both incoming and outgoing SWIFT messages.

**Phone/Fax/E-mail:** Despite all the automation, there are always client requests (usually for payment cancellations) that come in through conventional channels - phone, fax or e-mail. The payment solution must accommodate workflows in order for the bank staff to process these requests. It should also be able to automatically read the payment information sent through a fax and store it in the database.

**Pricing and Execution**
A bank’s front-office personnel or sales teams are responsible for the pricing and execution of the FX payments created by clients. This involves:

**Pricing Engine:** The sales desk applies a spread on top of the market rate for the currency pair and offers it to the client. The pricing engine within the payment solution must enable the sales desk to conveniently manage these spreads - offering automatic prices to the client.

The solution should offer both negotiated (real-time) and non-negotiated (benchmark/rate-of-the-day) pricing to clients. Usually, the online application provides negotiated pricing, whereas File Upload and EDI channels offer non-negotiated pricing.

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**Cross-Border B2B Payment Solution**

<table>
<thead>
<tr>
<th>Payment Input Channels (Corporates, Banks)</th>
<th>Pricing, Execution, Risk (Sales Desk &amp; Risk Mgmt. Group)</th>
<th>Trading &amp; Position Mgmt. (Trading Desk)</th>
<th>Post-Trade (Operations)</th>
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<tbody>
<tr>
<td>Online (Web &amp; Mobile Applications)</td>
<td>Pricing Engine</td>
<td>FX Price Aggregation</td>
<td>Payment Review/Confirmation</td>
</tr>
<tr>
<td>File Upload</td>
<td>Real-Time Limit Management (Credit and Settlement Limit)</td>
<td>Smart Order Routing</td>
<td>Settlement (Wires, Drafts, IACH)</td>
</tr>
<tr>
<td>EDI</td>
<td>Auto Execution</td>
<td>Algorithmic Trading</td>
<td>Fee Processing</td>
</tr>
<tr>
<td>SWIFT</td>
<td></td>
<td>Position Management</td>
<td>Accounting</td>
</tr>
<tr>
<td>Phone/FAX/E-mail</td>
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<td>Payment Tracking</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Draft Printing</td>
</tr>
</tbody>
</table>

**Support Functions**

- Data Mgmt. (Static, History & Audit)
- Investigations/Fixing Failed Payments
- Handling Payment Cancellation
- Communication to Internal ERP/ Domestic Payment Applications
- Reporting
- White Labeling

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Figure 6
Real-Time Limit Management: Banks usually maintain limits to monitor two primary risks – counterparty credit risk (also known as potential future exposure) and daily settlement risk (determines the maximum amount that the client can settle on a particular day).

In the B2B FX business, corporate clients are usually assigned a credit limit based on their credit-worthiness. As long as the credit usage of a client is within the credit limit, FX trades are priced and executed. The payment solution must perform the limit checks on a real-time basis to minimize risk for the bank and the beneficiary of the payment. The solution must also be seamlessly integrated with the bank’s risk-management systems.

Auto-Execution: With most banks focused on achieving straight-through processing (STP), the ideal payment solution must support automatic execution of trades – thereby eliminating the need for a salesperson to execute the FX trade with the client. The application must also be able to bulk payments before execution based on certain criteria (usually payments with the same currency pair are bulked together) so as to obtain a better FX rate for the payments.

Trading and Position Management
Although the trading and position management function of a bank does not directly impact clients, it is a key function for managing exposures arising from the FX trades made with clients. Once a sales person (or the payment solution in the case of automatic execution) executes an FX trade with a client, the bank is exposed to a certain risk. The payment solution should immediately notify the bank’s FX trader of the open position so that he/she can cover the exposure.

Traders can take advantage of the following technology developments to better manage their open positions:

FX Price Aggregation: This process aggregates FX prices from multiple market venues (multi-dealer platforms such as Hotspot, Currenex, FXAll, Bloomberg, etc., and single-dealer FX platforms offered by banks such as Citi, Deutsche Bank, etc.), and lists them in order of best to worst prices. This provides the trader with a macro view of market liquidity.

Smart Order Routing: In order to achieve “best execution,” the trading system can automatically route orders to the respective market venues.

Algorithmic Trading: This enables traders to set up pre-determined algorithms or strategies for FX trading. When the conditions listed in the algorithm are met, the trade is automatically executed.

Position Management: This is a book of records that manages open positions and updates them when they are covered by the traders.

The ideal payment solution must either offer these features or seamlessly integrate with other applications providing these services.

Post-trade
The back-office or operations staff handles the post-trade processes of confirmation and settlement. These activities include:

Payment Confirmation: The solution must support STP in confirmation, provided the settlement instructions conform to SWIFT standards and are valid. The solution must also be able to print confirmations in a specific format if required.

Settlement: The solution must support the three types of settlement methods: wires, drafts and international ACH. It should provide a sophisticated workflow for clients to create and manage their settlement instructions for the payments they make. It should also be able to settle payments for various value dates – same-day (as the trade date), next day, spot (trade date +2) and forwards (more than T+2).

Fee Processing: There are usually two types of fees related to B2B FX payments: service fees and settlement fees. A service fee is charged for using the payment solution, and is usually based on the number of transactions made by the client through the payment solution. A settlement fee is the cost of sending a wire, draft or ACH, and is more expensive. Depending on the volume of business done by a client, banks usually share this fee with the clients or pass it on to the beneficiaries. The payment solution must be capable of processing the service and settlement fees and handling fee-sharing.
**Accounting:** Corporate clients typically maintain their custody and other accounts with the same bank that offers the FX service. However, there are clients who maintain custody accounts with a different bank. In either case, the solution must be capable of transmitting the required information to the respective accounting systems.

**Payment Tracking:** Once a client completes an FX trade, they should be able to track the payment until it reaches the beneficiary. The solution must have the ability to track the payment flow.

**Drafts Printing:** The solution must be capable of integrating with a drafts printer in-house or with another vendor. It must satisfy the printing requirements for various currencies. The business requirements around the mailing of drafts to the beneficiaries must also be met by the bank.

**Support Functions**

**Data Management:** The solution must efficiently manage static data related to client information, pricing and settlement instructions. It must have sophisticated workflows for seamless data management, and be able to manage sufficient history and audit data.

**Investigations/Fixing Failed Payments:** Payments coming in through a File Upload or EDI can fail due to bad data. The operations team usually fixes these errors and moves them along for pricing. The solution should provide the team with sufficient workflows to manage the investigation process with the clients.

**Payment Cancellation:** Clients usually reach out to the bank's sales desk if they need to cancel payments. An ideal payment solution must have a request-response workflow built in so clients can request cancellations; the sales desk receives alerts and cancels the trade. Cancelling payments that are past the value date requires a reversal trade handled by the sales desk. The solution should be capable of linking the original trade to the cancelled/reversed trade.

**Communication to Internal ERP Applications:** Corporate clients might require their FX payment details to be communicated to other ERP systems for corporate accounting or treasury management. The payment solution must be able to seamlessly communicate with these applications.

**Reporting:** Reports (both transactional and analytical) are a critical feature of a payment solution. The solution must have the ability to integrate data from multiple applications and support any delivery format (.pdf, .doc, .xls, .csv are the most commonly used). The solution must also be able to deliver real-time as well as scheduled reports. Analytical intelligence built into the solution is very valuable.

**White Labeling:** Large banks usually white-label the products to be used by smaller banks that are their clients. The small bank can, in turn, sell the solution to its clients. White-labeling is therefore a compelling feature for an ideal payment solution.

**Conclusion**

The B2B FX landscape is in transition due to a variety of forces. The recent regulations in the financial markets have mandated that banks be more transparent with pricing and reporting. This has provided banks with a strong business case for enabling STP in their business process. With some banks adopting the latest trading technologies, such as low-latency trading, price aggregation, etc., other banks have been compelled to follow suit in order to offer speedy execution and better FX rates. The global reach of small and mid-sized corporations is pushing banks to focus on high-volume, low-value payments, thereby gradually shifting FX trading from a “spread-based” to a “volume-based” business.

On the settlement front, central banks across the globe are realizing the need to improve their payment and settlement systems to facilitate smooth and secure cross-border transactions. Thus, a good operating model backed by a sound technology solution will become the mantra for any bank looking to deliver a competitive B2B FX service in the future.
Footnotes

1. The Dodd-Frank Wall Street Reform and Consumer Protection Act, commonly known as the Dodd-Frank Act, was signed into a federal law on July 21, 2010. It aims to promote financial stability of the United States by improving accountability and transparency in the financial system. More detail on this act is available at http://www.sec.gov/about/laws/wallstreetreform-cpa.pdf.


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