#### **CHAPTER 7**

#### INTERNATIONAL CASH MANAGEMENT

## **Objectives**

After reading this chapter you will be able to:

- Identify the complexities of international cash management
- Evaluate the risks associated with cross-border transactions
- Assess the major tools and organizational structures used to improve global cash flows
- Understand how developments in Europe impact liquidity management
- Review tips for treasurers with emerging international business

#### Introduction

The treasurer of GETDOE, Bill Fold, has just been advised of the acquisition of a large Western European manufacturer and distributor. This follows the outsourcing of some U.S. manufacturing to Mexico two years earlier. Until now Bill has supervised a U.S. dollar-based business supplemented with occasional foreign exchange contracts. The European acquisition, with it's euro and British pound-based businesses, means that the structure of treasury and how it controls overseas cash flows will have to be totally reexamined for issues such as:

- Identifying the new risks associated with the international business
- Deciding how to mitigate any resulting exposures
- Determining how to optimally manage liquidity
- Establishing a new banking structure to better meet the company's future needs.

The new global company is going to be organized very differently from the old, domestically focused one. To help him bridge the knowledge gap, Bill hired Ric Shaw as international cash manager to assist in determining and implementing the new structure. Ric had previously been with one of the major global banks, consulting with clients on global liquidity management. His challenge will be to apply his vast product knowledge and international banking experience to the real world of the corporate environment.

Few companies today can entirely escape the impact of globalization. Even the smallest companies find that they are buying, sourcing, and selling internationally or facing competition from abroad. Cash managers are moving beyond their domestic responsibilities and taking on the complexities of managing international funds flows.

## The Growth of International Business

Mastering the challenges of international risk and liquidity management requires new skills and a much broader knowledge of how business is transacted in other countries. Considering the inefficiencies of some international markets, it also opens up new areas of opportunity for treasury to make a significant contribution to company profitability. Domestically, float is measured in fractions of a day; internationally it is possible to reduce float by several weeks.

International business was traditionally the domain of multinational companies. However, since the advent of the Internet and the globalizing economy, this is no longer the case. Exhibit 7.1 illustrates the range of international products and services large and middle-market companies are using.

[Insert Exhibit 7.1 here]

#### The International Treasury Environment

The objectives of international cash management are fundamentally the same as for domestic cash management: accelerate collections, control disbursements, and use any excess cash optimally. Achieving these goals requires timely and accurate information, and tools to facilitate the efficient movement of funds. However, this is much more difficult to achieve in a global context. The objective of international cash management can be stated as:

Having the right currency, In the right place, At the right time, With the right information.

The interpretation of the objective will vary according to a company's tolerance of risk, its ability to monitor and manage exposure, and its trading patterns. A company with limited foreign currency receivables and payables, or with an inability to manage exposure, might prefer to have all currencies concentrated in U.S. dollars. Another company with high volumes of two-way foreign currency flows may choose to maintain currency accounts overseas for convenience, lower transaction costs, and use of natural hedges. In the world of international cash management,

managing and limiting exposure, rather than liquidity, becomes the primary objective.

## Complexities Of International Cash Management

One of the greatest challenges for the cash manager is dealing with the complexities that arise from the very different ways in which business and banking are conducted in other parts of the world.

#### Cultural differences

- Different holidays, weekends and religious practices can significantly limit common business days and delay crossborder transfers.
- Payment preferences may vary. Many countries prefer to use electronic payment methods, the low value *giro* system (a domestic consumer payment system often used in Europe and parts of Asia) or direct debits.
- Payment terms differ. For example, Scandinavian countries have usual credit terms of 15 to 30 days; other countries, such as Italy and Spain stretch terms out 90 to 120 days.
- "Getting right down to business" is not always appreciated and may even be regarded as offensive. Business discussions may need to be prefaced with an obligatory "small talk" or entertainment session.
- Dating conventions can be another source of confusion. The U.S. often uses a MM/DD/YY format, whereas most of the rest of the world uses DD/MM/YY. A clear understanding needs to be reached as to which convention is being used to avoid errors or misinterpretations.

## • Different economic and monetary environment

- Foreign currencies fluctuate in their value against the dollar.
   The resulting exposures and how to manage them are discussed in later sections.
- Each country has its own level of interest rates and inflation or deflation that impacts the value of business, assets, and liabilities in those countries.

#### Different banking practices

- Banking systems of the world are heterogeneous in structure and have little cross-border interconnectivity.
- Countries have different rules as to who may open accounts and be authorized signers.
- Fees may be set by a cartel of a country's banks.
- Compensation can take different forms, involving practices not usual in the U.S., e.g., value dating, turnover fees, and

- ad valorem charges. These are described later in the chapter.
- Many countries pay interest on demand accounts and permit automatic overdrafts. As a result, payment for services in those countries is usually in "hard" fees, not balances. There is also less emphasis on overnight investment vehicles.

#### Communications infrastructure

- A foreign country may not be able to support the level of technology used in the U.S.
- o Computers may not be as widespread or as advanced.
- Data lines may not be available or as robust for long distance transmissions.
- o Automation of certain functions may not be possible.
- o A continuous flow of electricity cannot be taken for granted.

#### Legal and regulatory barriers

- Legal barriers can impact a cash manager's ability to optimally manage cross-border liquidity.
- Some countries, especially those with nascent or difficult economies, have exchange controls that prohibit the free flow of funds outside the country, or which require laborious paperwork to document a transfer of funds.
- Secrecy laws may prohibit the flow of information crossborder.
- Money transfers from residents to non-residents may be restricted or may require additional central bank reporting or permission.
- The use of pooling or netting may be restricted or prohibited, and the commingling of resident and non-resident funds may not be allowed.

#### Tax implications

- Taxes will almost certainly be due on revenues generated in the local country. The extent to which they are deductible against income on the consolidated financials will depend on whether there is a double taxation treaty in place. A double taxation agreement stipulates the rates at which taxes will be levied between two countries and whether taxes paid in one can be offset against taxes due in the other.
- Withholding taxes may be payable on inter-company loans.
- Stamp duties are levied in certain countries on loan documents and promissory notes.
- Some countries offer tax-advantaged vehicles for international treasury operations, discussed later in this chapter.

#### Time zones

- Time zones can have a considerable impact on how treasury is organized. As an extreme example, California has no normal business day overlap with the Far East. In order to deal with Asia on a same-day basis, a California company needs to start working in the very early hours of the morning. As a practical matter, few companies attempt to manage liquidity on a global basis, most preferring to manage on a regional basis. This ensures local expertise and a reasonable time span in which to operate.
- Customer service may be located in a different time zone.

#### Language barriers

- Instructions may not be correctly interpreted, problem resolution can be difficult, and account-opening forms can be incomprehensible.
- Communication is often confused with comprehension. Although much of the international business world speaks some English, cultural biases and colloquial nuances may result in a different interpretation of a conversation. These difficulties exist even between English-speaking people. There is a considerable difference in usage between the U.K. and the U.S. despite their common ancestry. For example, when an American asks to "table a motion", this is a request to postpone the discussion. To an English person, this means bringing a topic to the table for immediate discussion. Understanding the words does not guarantee comprehension.

## Banking Compensation

Although many countries charge on a transaction basis, as in the U.S., paying through balances is almost unknown in countries where banks pay interest on demand accounts. Some of the other types of bank charges that are prevalent are:

- Value dating: This is a bank practice of taking value days as a form of compensation. Forward value dating is when the receiving bank provides available funds on an incoming credit one or two business days forward. With back value dating, the originating bank will back value the debit to the account by one or two business days.
- Turnover fees: Some countries charge fees based on a percentage of the value of the *activity* (debit or credit) in the account.

- Ad valorem: Ad valorem charges are based on a percentage of the value of the transaction, i.e., a percentage of the value of a wire transfer.
- Fixed annual charge: Some countries charge a fixed annual fee for access to the high value payment system.

Appreciating and managing the complexities involved in each of the different countries in which a company is operating is analogous to playing three-dimensional chess. It requires attention at both the individual local level as well as at the overall corporate level. A regional focus can help to span that gap.

#### International Risk

One of the major differences in the job description of an international cash manager, compared with a domestic colleague, is the priority given to risk management. In the domestic environment, optimizing liquidity is the priority. Internationally, the impact of foreign exchange and other exposures is potentially far more significant than the saving of a few days of float or dollars on banking fees. Although there are risks arising in a domestic situation, such as interest rate and commodity risk, international business gives rise to many additional exposures.

## Foreign Exchange Risk

Foreign exchange risk is a result of the fluctuation in the value of a foreign currency against the base, or home currency. A company doing business internationally can be exposed to any or all of the following types of risk.

- Transaction exposure is due to a movement in foreign exchange rates between the time a transaction is booked and the time it settles, which can impact the value of the deal. For example, if the euro weakens over the next month, the value of a euro receivable due in 30 days will be worth less in U.S. dollars when paid than the value today.
- Translation exposure is the balance sheet exposure that results from a company's consolidating its financial statements on a global basis and reporting the change in the net value of its foreign currency assets. The exposure results from fluctuations in exchange rates from year to year which change the rate at which the net assets are valued.
- Economic exposure refers to the impact of fluctuating exchange rates on the value of future cash flows from long-term contracts. The longer the term of the contract, the greater the exposure.

#### Tips and Techniques

Cash managers should establish foreign exchange arrangements with at least two or three major banks for several reasons:

- The rates that are quoted will reflect the bank's current position and appetite for a currency, and the company's standing as a customer. Rates will vary from one bank to another even for the major currencies.
- Because deals settle at a future date, most banks require that a separate credit facility be put in place for foreign exchange. In order to ensure that a company has adequate credit in place to conduct its foreign exchange, arrangements may be required with more than one bank.
- Competitive pressure will improve the rates.

A better rate will be obtained if the bank is not informed whether the deal is to buy or sell a currency. Banks quote rates with a spread between the buying and selling rate. This is known as the bid-offer rate and represents the bank's profit margin. If the side of the market is undisclosed, the spread will be slimmer. Cash managers should also investigate the new on-line foreign exchange dealing products, such as FXall (www.fxall.com) and Currenex (www.currenex.com). These services will often provide a better rate than polling the banks by telephone.

#### Country Risk

Country risk is comprised of several elements, all of which refer to specific risks of doing business in a foreign country.

- Political/sovereign risk is the possibility that the actions of a sovereign government (e.g., nationalization or expropriation) or independent events (e.g., wars, riots, civil disturbances) may affect the ability of customers in that country to meet their obligations.
- Convertibility risk refers to legal, regulatory, or logistical barriers that may prevent conversion of local currency into a foreign currency when a payment is due. This is particularly common in countries that have a shortage of hard currency at the central bank. In those situations, payments are queued, pending future availability of the currency.
- Transfer risk, caused by exchange control regulations, is the possibility that a borrower will be prohibited from transferring funds cross-border when the payment is due.

#### Cross-Border Commercial Risk

Cross-border commercial risk exists when goods move internationally. The specific risks are that:

- The exporter does not receive payment.
- The importer does not receive the goods expected, or the quality required, or in time.

In cross-border situations, these risks are exacerbated due to various factors:

- The difficulties of obtaining reliable credit information on trading partners.
- The uncertainty of finding legal remedies in the event of a dispute.
- The time for shipment and paperwork to arrive.
- The need for instructions and value to pass through several banks in different countries to complete the transaction.

The cash manager has to initially identify the specific risks to which the business is exposed, establish a system for measuring and monitoring exposures, and determine a strategy to manage the risk.

## Risk Management Tools

Hedging is the term used to define a company's actions to reduce or eliminate risk. The cost of hedging will depend on a number of variables, such as the instrument chosen, the amount being hedged, and the degree of risk being protected. Because hedging can be expensive, some companies choose to "self-insure" or to hedge only certain percentages and areas of their risk. These are perfectly legitimate strategies. The only indefensible strategy is to not hedge by default rather than as a result of a conscious decision.

A number of tools are available for managing risk. Many of the following vehicles can be used to hedge interest rate, foreign exchange, or commodity exposure.

#### In the Real World

Foreign exchange markets have traditionally settled on a "spot" basis, i.e., two business days forward. A new system called Continuous Link Settlement (CLS) is due to be launched in 2002 to eliminate the risk associated with cross-currency transactions, specifically referred to as Herstatt risk. Herstatt risk was named after the German bank that almost caused the collapse of the banking system in 1974, when its Luxembourg

Branch declared bankruptcy and failed to settle its foreign exchange contracts. The 40+ charter member banks of CLS will settle foreign exchange transactions on a real time net settlement basis; see Chapter 2.

#### Forward Contracts

A forward contract is an agreement between two parties to buy or sell a fixed amount of an asset at a rate established today for delivery on a specific date in the future. These arrangements can be customized as to amount and settlement date. Although markets can fluctuate both favorably and unfavorably, the predictability of a *certain* future cash flow is more important to a cash manager than taking the gamble on the direction of the markets. Forward contracts are used mainly to hedge transaction exposures. The fees are usually built into the price (i.e., the spread).

## **Futures Contracts**

Although a futures contract is similar to a forward contract in that it involves a fixed rate for purchase at a future date, futures differ in a number of other respects. The contacts are for large, standardized amounts and mature at fixed maturity dates. Futures are traded on securities exchanges and provide a great deal of flexibility as they can be bought and sold at any time prior to maturity. In contrast, a forward contract commits the cash manager to consummating the deal on settlement date. Investors and speculators who want to take a position on the movement of the market over a period of time often use futures. Cash managers use them to hedge transaction or translation exposures. Futures are executed through a broker who charges a commission.

#### **Options**

Options provide the right (but not the obligation) to buy or sell an asset at a specified price (the strike price), on or before a certain date. An American option allows the owner to exercise the option at any time prior to maturity. A European option can be exercised at maturity only. Options are traded through banks or brokers and are more expensive than forwards and futures, due to the lower volumes and lack of liquidity. In addition to a spread, brokers also charge a commission. Options do, however, provide considerable flexibility to the cash manager.

#### <u>Swaps</u>

Swaps can be used for both risk and liquidity management. For a cash manager with a flow of foreign currency payables and on-going currency exposure, a swap allows the cash manager to exchange (or swap) that set of cash flows against cash flows in domestic currency. These deals are

established through brokers, and carry the risk that if the counterparty defaults, the cash manager re-assumes the original obligation. Swaps are also used to exchange interest rate or commodity floating rate obligations for fixed rate terms.

Another use of swaps is for liquidity management, where a temporary deficit in one currency can be covered by a surplus in another currency. The foreign exchange exposure is hedged by linking the spot transaction simultaneously to a forward transaction, converting back to the original currency. Swaps are usually executed at a "mid-rate" for the spot and forward, and are, therefore, cost advantageous over carrying out the two transactions independently, one on either side of the bid-offer spread.

#### **Balance Sheet Matching**

Translation exposure is measured as the change in value of the *net* amount of foreign currency assets (i.e., assets minus liabilities). One strategy for hedging this exposure is to offset foreign currency asset exposures with borrowings or liabilities in the same currency and country. Instead of funding a new plant overseas from the head office, a balance sheet hedge can be achieved by borrowing in the local currency and creating a same currency liability to offset the asset.

## Leading and Lagging

Leading and lagging allows the cash manager to anticipate the timing of inter-company payables and receivables to take advantage of current foreign exchange rates or anticipated future movements.

- Leading refers to accelerating the timing of a transaction. If a
  receivable is in a currency that is depreciating, leading brings the
  transaction date forward to minimize the devaluation. A cash
  manager might also lead a payable in a currency that is
  appreciating, to minimize the cost of the transaction.
- Lagging is the delaying of the timing of a payment. If a receivable is in a currency that is strengthening, lagging delays the transaction date to maximize the appreciation. A cash manager might also lag a payable in a currency that is weakening to minimize the cost.

Leading and lagging are also used as liquidity management tools; for example, when cash rich subsidiaries lead payments to subsidize the cash poor divisions or cash poor units are allowed to lag their payments. However, this technique needs to be applied in a very controlled fashion to avoid the complications created by inter-company lending and the resulting withholding tax issues.

## Letter of Credit

A letter of credit is a collection method that substitutes the credit risk of the importer with a bank assurance of payment upon performance by the exporter. The letter of credit specifies the precise terms of the contract. As long as the title and shipping documents presented by the exporter conform precisely to the requirements of the letter of credit, the bank issuing the letter of credit is obligated to pay the exporter, regardless of the status of the importer. For an additional fee, the exporter can choose to add the backing of a confirming bank to insure against the risk of default of the issuing bank. The confirming bank is usually located in the country of the exporter.

Due to the labor-intensive nature of the process and the credit risk being underwritten by the banking system, letters of credit are a relatively expensive service, although they provide the most protection to the exporter against non-payment.

One of the most significant developments in recent years has been the digitization of the letter of credit process. There are a number of initiatives that have undertaken to computerize all of the paper associated with a letter of credit, including the shipping documents, and making them available on the Web. As a result, transmission, presentment, and discrepancy resolution are much more efficient. It is now not unusual for the paperwork to be concluded before the goods arrive.

#### **Documentary Collections**

Documentary collections provide an exporter with the assurance that title to the goods being shipped will be delivered only against payment. This provides some protection to the exporter against non-payment. The banking system, acting as agent for the exporter, retains custody of the title documents and delivers them to the buyer after the buyer pays for the goods or commits to the payment. However, the exporter remains exposed to the risk of non-acceptance by the importer. Although the exporter retains title, the goods are in a foreign country incurring storage costs while awaiting disposition. The options are to find another buyer, return the goods, or re-negotiate the price, none of which are inexpensive options for the exporter.

#### Country Risk Insurance

Insuring against country risk can be difficult because the expected loss is normally not calculable. Unlike normal loss situations where loss history determines insurance rates, the probability of adverse government actions is more difficult to calculate. Country risk insurance can sometimes be

purchased from a company's own government, such as the Export Development Corporation (EDC) of Canada. This organization insures Canadian companies selling capital goods or services in foreign markets.

The principal organization offering country risk insurance is the Export-Import Bank (Ex-Im Bank), which protects exporters against the political and commercial risks of a foreign buyer defaulting on payment. Policies may be obtained for single or ongoing export sales and for leases. Various types of policies are available to accommodate the needs of exporters.

- Short-Term Single and Multi-Buyer. The short-term single and multi-buyer policy insures short-term sales with repayment terms of up to 180 days.
- Medium-Term Single Buyer. Medium-term insurance is available for exporters of capital goods or services for terms up to five years.
- Small Business. The Ex-Im Bank offers a short-term (up to 180 days) insurance policy geared to meet the credit requirements of smaller, less experienced exporters.

#### **Cross-Border Clearing And Settlement**

The only certainty in cross-border clearing and settlement is that delays will be involved. The underlying cause of these delays is that all currencies must eventually settle in their country of origin. U.S. dollar checks will settle through the U.S. payment system. If the check is drawn in U.S. dollars on the account of a bank that is not a member of the U.S. payment system, the item must be returned to the drawee bank for collection. This manual process, involving numerous mail and processing delays, can take weeks.

#### In the Real World

There are a number of examples where a foreign currency (usually the U.S. dollar) is widely used in a local economy, and arrangements have been made to *clear* locally drawn and payable items offshore. The U.K. Currency Clearing system clears checks drawn and payable in the City of London in U.S. dollars, Canadian dollars, Australian dollars, Yen and Swiss francs. Singapore offers U.S. dollar check clearing. Hong Kong, the Philippines and Canada all clear electronic payments and checks in U.S. dollars. Ultimately the currencies will *settle* across correspondent accounts in their country of domicile. U.S. dollars will *settle in* the U.S.; British pounds *will settle* in the U.K.

Trade transactions are covered by a well established internationally recognized body of rules and regulations issued by the International

Chamber of Commerce (ICC). Although the United Nations and the European Community (EC) are currently attempting to establish limited international guidelines, cross-border movements of cash at present are not subject to any internationally accepted codes of performance.

Banks initiating wire transfers in foreign currencies will usually draw on the currency accounts (also called "nostro" accounts) established with their correspondent bank in the currency centers. If the correspondent bank has no direct relationship with the beneficiary bank, the instructions will pass through a chain of correspondent banks until a mutual relationship with the beneficiary bank is found. Even wire transfers can take five days or more before the credit is received.

#### Tips and Techniques

If business practice or cultural preferences dictate payment by check, there are a numbers of things that can be done to improve cross-border collections.

- Request a check drawn on a bank that is a member of the currency clearing system.
- Have the items deposited directly to an account in the currency center.
- Collect closer to the customer. A number of banks now offer international lockbox-type services (also called intercept points) described later in this chapter.
- o Take advantage of local currency clearing where it is available.
- Use a cost-benefit analysis to determine when it becomes efficient to require electronic payments.
- Open an account at the same bank used by large customers and have checks deposited directly to that account. This will ensure fast credit. Funds can be converted to the base currency and remitted to the concentration account as soon as they become available.

Specifying value dates and routing of the transfer to limit the number of correspondent banks involved in the process can speed up wire transfers.

#### Basic International Cash Management Tools

Although companies have been managing their international cash flows for more than 20 years, it is only relatively recently that off-the-shelf cash management services have become available. Initially these products were offered only through the major global banks. However, smaller regional banks and third party providers are now forming alliances and networks to offer international cash management to their global

customers. The growth of the Internet and communications technology means that many international services can now be offered without requiring physical branches worldwide. The principal tools are described in the sections that follow:

## Electronic Banking Services

Many of the electronic services offered domestically are now available globally, although they are not necessarily identical to the U.S. products. Treasury workstations have long been able to automatically dial-up banks' electronic reporting services, download the information, and insert the data into the company's spreadsheets, also known as polling and parsing. Polling and parsing can now be done on a global scale to compile a consolidated balance report. Alternatively, a company can arrange for a cash management bank or third party provider to consolidate and report the balances on its behalf.

Although global balance reporting is a well-established service, implementation and execution can still vary greatly by country and bank. A consolidated global balance report will be only as good as the weakest reporting location.

- Some banks (including branches of global banks) are not able to send transaction detail, only summary balances.
- Certain banks will send reports only when there has been activity, and so on some days there will be no report.
- Other banks may not have automated interfaces for balance reporting and may be keying information manually, which affects the accuracy and timeliness of the reporting.
- Real-time information is most readily available from banks doing business globally.

It is important that users' expectations are realistic as to what a global balance report can provide.

In the past, in order to be able to initiate transfers a company had to subscribe to the proprietary electronic banking platforms from all the banks. These multiple subscriptions were not always convenient and posed additional access-security risks for the company. The SWIFT MT101 message (see Appendix 1) provides a solution by allowing a chosen "host" electronic banking platform to act as the conduit to transmit wire transfer messages to other banks.

The MT 101 is a message sent through the initial bank but destined for action by another financial institution. It can be used not only to pay funds but also to de-fund an account and consolidate balances with the

concentration bank. Exhibit 7.2 illustrates how the MT 101 works, allowing a single electronic platform to manage an entire banking structure.

[Insert Exhibit 7.2 here]

### In the Real World

The MT101 message type will prove to be very beneficial to treasurers. However, before it can be implemented, an agreement needs to be in place between the customer and the "host" bank, and the host bank must also have executed a bilateral agreement (known as a bilat) with all the prospective recipient banks. The bilats are important because they define responsibilities and service levels between the parties. Some banks are even insisting on bilats with their own branches. Over the last few years, the major banks have been steadily increasing the number of bilats that are in place. A corporate customer with banking arrangements not covered by the existing agreements will have to wait until a new bilat is negotiated, which can require considerable time.

### Foreign Currency Accounts

There are various options in establishing foreign currency accounts. The two major ones are:

- Centralized: One of the simplest ways to manage foreign currency accounts is to maintain sub-accounts in the branch of a single bank, often called a multicurrency account. Centralized currency accounts are easy to set up and maintain. There is one set of account opening documentation, lower maintenance fees, and a single point of contact for customer service. The disadvantages are that a currency handled in a country other than that of its domicile is subject to availability delays upon deposit and up to two days delay on transfer. Cross-border currency transfers are usually done on a spot basis, i.e., with two-business days notice.
- Decentralized: The alternative way to maintain foreign currency accounts is to open accounts for each currency in their country of domicile. However, this may require opening up accounts with new banks; can prove to be more labor intensive to manage and monitor; and may be more difficult in resolving customer service issues due to language and time zone differences. The advantages are that a currency in its own currency center will have better local deadlines, faster availability, and lower domestic pricing.

The decision whether to hold centralized or decentralized accounts will depend on the following:

- Volumes and amounts of individual currencies collected and disbursed.
- The cash manager's ability to measure, monitor, and manage both currency exposure and multiple overseas banking relationships.
- Sensitivity to administrative costs versus transaction costs.

Each option carries tradeoffs in terms of price, convenience, availability and timing.

Most companies make a currency-by-currency decision as to whether to centralize or decentralize the location of the account, based on the nature, value, and volume of the flows. The resulting configuration will be a mix of both. Often, even though a currency might be held in a currency center account, there may also be an additional second centralized account for that currency as the top layer in a liquidity management structure.

#### International Lockboxes

The concept of a lockbox is valid anywhere in the world where payments are still being made by check, across a wide geographical area, and there is a potential for mail, processing and availability delays. Although the precise mechanics may not be the same as in the U.S., the effect of an international lockbox (also known as an intercept point) is to collect a check close to point of mailing, preferably in the same currency center, and to deposit the check into the local banking system as quickly as possible.

Collecting checks on a regional basis has value over transcontinental mailing and the subsequent collection process. Not only does an international lockbox reduce mail, processing and availability float, it also minimizes transaction exposure by reducing the time it takes to collect a foreign currency. These services are beginning to be available in both Europe and Asia.

#### In the Real World

A number of foreign currency checks still find their way into the hands of cash managers in the U.S. The collection process can be long and there are no international regulations on how quickly such items have to be handled. In addition to lost availability, the delay increases foreign exchange exposure.

Many banks offer to negotiate the check and provide immediate availability at a discount to the face value of the item, depending on the amount, the currency, and the importance of the corporate customer. The discount will reflect the bank's past experience in the length of time it

takes to collect and will normally be on a recourse basis. However, the cash manager will have limited the transaction exposure.

#### <u>Liquidity Management Tools</u>

After risk management, liquidity management is one of the primary objectives of the international cash manager. Liquidity needs to be addressed at both the local country level as well as cross-border in order to realize maximum efficiency of working capital. The following sections describe three of the major tools for managing international liquidity.

#### **Pooling**

Pooling (also known as interest allocation) is a bank service that, on a daily basis, offsets debit and credit balances of a company's separate accounts to calculate a net balance. The bank pays interest on a positive overall position or charges interest on a negative net balance. Because the individual balances never physically move and there is no commingling of funds, this is also referred to as *notional* pooling. Pooling is available in most countries with a well-established, nationwide banking system.

Pooling is a calculation performed entirely on the books of the bank. It can significantly cut the costs of borrowing for a company and improve returns on any cash surpluses. All balances have to be within the same bank network, which also contributes to rationalization of the banking structure. There is usually a requirement that the subsidiaries be reallocated debit or credit interest on an "arm's-length" basis, i.e., at or close to market rates.

Pooling provides a good tool for cash managers to manage intercompany liquidity. However, there are some issues with regard to pooling that vary by country. In some jurisdictions only accounts of wholly owned subsidiaries can be pooled. In others, resident and non-resident balances cannot be commingled or pooling is prohibited entirely. Although the demand today from the corporate world is for cross-border, multicurrency notional pooling, tax and legal issues become considerably more complex, and so this is not easily accomplished.

#### **Cross-Border Concentration**

Cross-border concentration is used when pooling is not available or the cash manager wants to consolidate the surplus positions in currency accounts. Cash concentration is often confused with "pooling" because cash pools are created through the concentration of funds. Because there is a physical movement of funds, often from a resident account to a non-resident concentration account, there is an additional cost for the

transfers, the possibility of availability delays, and increased administrative and reporting burdens.

Some banks offer an automated service where they will draw down balances to a concentration account both for balances within their network and third party banks. More often, however, the cash manager has to initiate the transfers manually, based on the balance reports and cash forecasts. The SWIFT MT 101 message type is becoming a valuable tool for effecting cross border concentration.

Concentration is the technique most often used by companies who want to concentrate different currencies cross-border, as it allows maximum flexibility in managing liquidity. However, concentration also entails a number of the tax and legal issues associated with inter-company lending, such as withholding taxes and thin capitalization.

#### **Netting**

Netting is a process that allows entities to offset total receivables against total payables. The concept has already been discussed in the context of clearing and settlement systems. Each entity either receives or pays the net amount to the netting center in their local currency. Exhibit 7.3 illustrates the process.

## [Insert Exhibit 7.3 here]

- Before netting. Even if each subsidiary does only one trade with each of the others, there are 12 transactions occurring. Each subsidiary sells in its own currency, so there are four entities managing a foreign exchange exposure and paying foreign exchange commissions on the total amount of the gross payables. The full value of the funds in transit results in a loss of availability of two to four days.
- After netting. Each subsidiary is involved in a single transaction in its own currency, either to receive from or pay to the netting center the net amount due. The transactions have been reduced to four, which represents a 67% offset ratio. Only one entity, the netting center, is involved in purchasing foreign exchange.

The most significant quantitative benefits result from the foreign exchange commissions being paid on a net value of transactions and the elimination of all collection float. Other benefits include reduction in treasury duplication, as the netting center can now act as the focus for cash flow, exposure and reconciliation management. Treasury is also in a position to negotiate better exchange rates due to the magnitude of the amounts

being traded. Initially developed to reduce the costs and exposures of intra-company payables, modern netting systems increasingly accommodate third party payables, receivables and FX matching, which offset the foreign currency needs of subsidiaries.

A number of industries that are characterized by commoditized product offerings and large numbers of bi-lateral payments and receipts among participants have established industry-wide netting programs. For example, the International Airlines Transport Association (IATA) operates a netting center between more than 200 airlines for both commercial and cargo flight payments. Another example is the world's GSM mobile phone operators, which net their incoming receipts and payments through an industry-netting center. These netting systems can produce over 80% offset ratios, resulting in significant cost savings to the industry.

Netting systems are relatively easy to establish, requiring a computer program within a treasury center. However, their success depends on the involvement of all the parties. Many companies are putting such applications on their Intranet or Web for input. This provides direct access to the software, prompt resolution of discrepancies, and faster notification of changes to all participants. Using a Web-based system also puts the cost of netting within the reach of smaller companies. As with pooling, some countries impose restrictions on the use of netting or require prior approval.

## **Treasury Structures**

There are various models for structuring treasury to manage international flows. The trend is towards greater centralization on a regional basis to realize economies of scale and reduce duplication of systems, people, and functions.

#### Tax Advantaged Centers

A number of countries offer tax incentives and other benefits to attract multinational businesses to manage their treasury and other shared functions in a local subsidiary. Attracting the international business into the country provides revenue and employment. Some of the major vehicles are the International Financial Services Company (IFSC) in Ireland, the Belgian Coordination Center (BCC), Swiss and Luxembourg Holding Companies, and Singapore's Operational Headquarters (OHQ).

#### In the Real World

It should be noted that centers within the Economic and Monetary Union (EMU) are under considerable pressure to phase out the benefits of these

vehicles in favor of greater standardization and harmonization of tax regimes within the union. In the future, companies seeking the benefits of a tax-advantaged vehicle from which to manage their treasury may be forced to consider locations outside the EMU.

## Reinvoicing Centers

Reinvoicing centers are used by the larger multinational companies to centralize all intra-company buying and selling. Subsidiaries no longer deal directly with each other, but place their orders through the reinvoicing center. Although title passes to the center, the goods continue to be shipped directly to the purchasing subsidiary. The center gives the company more control over international flows while providing both quantitative and qualitative benefits, including centralization of FX exposure and improved worldwide liquidity management. However, along with pooling and netting, reinvoicing centers are often highly regulated and frequently under scrutiny by local tax authorities for demonstrable arm's-length pricing.

## In-House Banks (IHB)

Many larger companies establish an in-house bank to coordinate and centralize all the banking activities on behalf of their subsidiaries. The in-house bank provides foreign currency accounts, investment, liquidity management, netting and pooling services, and is a source of global funding.

#### Shared Service Centers (SSC)

The SSC is a shared unit within the company serving a number of business units, often managed and owned by the participating business units. SSCs have long been used for such functions as real estate management and travel. It is only relatively recently that the benefits were extended to treasury activities. By presenting a single interface to the outside world for shared activities, the SSC provides the company with economies of scale, rationalization, and streamlining of processes and functions.

The keys to a successful SSC are a common technology platform and responsiveness to business units. Recent changes in the EMU (to be discussed in the next section) have accelerated the use of SSCs by companies as a means of rationalizing their euro-wide banking and liquidity management structures.

Traditionally, SSCs were often located in countries where there was also a tax-advantaged structure, such as in Ireland, the Netherlands, and

Belgium. However, the popularity of these locations has created a shortage of skilled local staff and inexpensive premises. The search for continued efficiencies has led to India, the Philippines, and the Czech Republic becoming increasingly popular locations for SSCs.

## Commissionaire Structure

Certain industries, such as software developers, lend themselves to the commissionaire structure, especially those with one or two regional manufacturing plants that supply a number of subsidiaries. The commissionaire principal, usually located in a tax-friendly country, undertakes all required interfaces with the manufacturing facility, vendors and suppliers. The subsidiaries act as sales agents for the principal, earning a commission on sales. This allows for:

- Concentration of profits in the country of the principal
- Centralization of foreign exchange exposure
- More effective liquidity management
- Circumvention of many of the inter-company lending issues that arise when cash accumulates in subsidiary accounts, as the cash flows belong to and are under the control of the principal

## **European Developments**

In 1999, eleven European Community (EC) countries took the unprecedented step of uniting their economies and currency, forming the Economic and Monetary Union (EMU). Greece joined the EMU in 2001. The European Central Bank (ECB) was established to oversee monetary policy for the EMU. The euro is now the single currency of the EMU. Three EC countries, Sweden, Denmark, and the U.K., decided to defer the decision to join the EMU to some future, unspecified date.

To assist the ECB in managing and implementing monetary policy, the Trans-European Automated Real-Time Gross Settlement Express Transfer System (TARGET) was developed. The RTGS systems of the national central banks link to TARGET to effect euro transfers cross-border real time. TARGET is a communications system, not a money transfer system, and settlement occurs across the interlinking accounts at the national central banks. Access to TARGET is not limited to the central banks of the EMU. Any central bank that has an RTGS system that clears euro can be linked, albeit on slightly restricted terms. As a result, the national central banks of Sweden, Denmark and the U.K. have real-time links to TARGET.

## The Impact of the Euro

These developments have significant implications for cash managers.

- As all EMU countries have the same currency, there is no intra-EMU foreign exchange exposure to be managed.
- FX commissions and transfer costs have been considerably reduced.
- Managing EMU-wide euro liquidity has now become the primary focus.
- Banking relationships are being consolidated. Although there may still be legitimate reasons for retaining some local accounts, such as for more efficient collections or maintaining vendor relationships, there are significant opportunities for rationalizing the banking structure.

With the emphasis turning from FX exposure management to liquidity management, companies have been greatly assisted by the new clearing systems that allow same-day cross-border transfers. Prior to TARGET, the only way to accomplish a same-day transfer was through branches of a global bank.

## New Euro Payment Systems

While TARGET remains the principal vehicle for the central banks to manage liquidity and for urgent high-value cross-border payments, other, less expensive payment systems, have been established (or are in development) for the corporate world.

- The Euro Banking Association (EBA) operates a high-value net settlement system for members called *EURO1* that clears through TARGET at the end of the day and settles through a settlement account at the European Central Bank.
- RTGS<sup>plus</sup> provides real-time gross settlement (through the RTGS<sup>plus</sup> settlement account at the Deutsche Bundesbank) for inter-bank and customer payments.
- The EBA's STEP1 offers a low-value euro payment system.
- There are a number of initiatives underway to provide pan-European mass payments through ACH-like systems, such as the EBA's STEP2 and NACHA's WATCH.

The changes in Europe have provided cash managers with an opportunity to re-engineer their European banking structure and make EMU-wide liquidity management much more efficient.

## Tips For Emerging Global Treasurers

For a company not accustomed to the intricacies of managing the cash flows of a global business, the following guidelines and tips can be helpful when putting together an international cash management system.

#### Basic Tips

- Set realistic expectations about what can be achieved. Be prepared for things to be very different across the border. Do not take services at face value that purport to be "global". It will not be possible to completely replicate the level of U.S. service.
- Stay open minded. Do not underestimate the value of local knowledge. It is possible that local solutions and systems may be more advanced or more appropriate in local conditions. For example, Scandinavia has been using sophisticated Wireless Applications Protocol (WAP) technology for a number of years. "Giro" systems (that often operate through local post offices) can be much more cost-effective than using bank services for low value domestic payments.
- Be sure you need what you ask for. Will the product or service be truly useful and worth the price paid? There is a point at which realtime information becomes irrelevant in a different time zone.
- Keep options broad. When selecting service providers, there are more choices today than ever before. A few "global" banks have dominated the market for many years. Recent innovations mean that through technology and judicious alliances, smaller regional banks, ASPs and other non-bank providers can now offer many international services cost effectively.
- Seek professional advice.

## **Intermediate Tips**

- Take it in stages. Work from the local level first. Start by making cash management as efficient as possible in the local environment before tackling regional efficiencies.
- Managing liquidity on a global scale may not be optimal. Most companies find that managing on a regional basis provides the most efficient solution.
- Review banking structures, services, and costs often and carefully.
   Companies may be reluctant to institute change unless momentous events have occurred, especially as implementations are frequently painful. But as the company or the environment changes, cash management needs should be reviewed.

- Re-examine European banking arrangements in the light of the opportunities afforded by the EMU and euro. Centralize functions, consolidate banks, and manage euro-wide liquidity.
- Negotiate pricing for all euro transfers, both local and cross-border.
   Many companies are insisting that all euro transfers be priced at domestic or near-domestic levels.
- Expand the use of procurement cards to international retail payments.

## **Advanced Tips**

- Use direct debits wherever possible. In many countries, direct debits are used as a routine and efficient domestic collection mechanism. This mechanism can also be used for cross-border collections.
- International ACH is coming. A number of proprietary services already link the U.S.'s domestic ACH with similar systems overseas. However, the latest initiatives will offer open access to cross-border low-value, mass payment systems.
- Outsource non-core functions. International business is complex and requires high levels of expertise, knowledge, and investment in systems and technology. The costs can be high if borne internally.
- Put shared cash management functions on the Web. Balance reporting, bill paying, transfers, letters of credit, and netting are all standard ASP applications available over the Internet.
- Get rid of the paper. Take advantage of the new services that offer electronic letters of credit and documentary collections.
- Be tax aware, not tax foolish. Tax rules and regulations are complex, varied and subject to change without notice. Minimizing taxes paid on a worldwide basis is a worthy goal, but not the only goal.

In conclusion, ask questions, lots of them. Many companies have faced the same issues. Banks are a logical first contact for more information. Local treasury associations or user groups are a good source of knowledge. The Internet can also provide access to the experience of companies that would normally be difficult to reach. The AFP's Standardized RFPs for Global Treasury Services (see Chapter 9 for a summary of contents) is an excellent starting point when preparing an RFP for international services.

## Summary

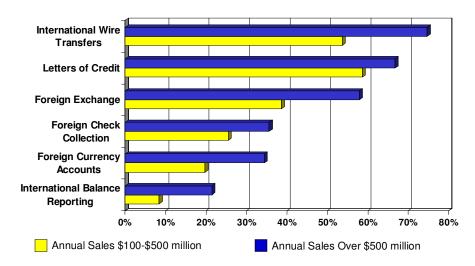
This chapter examined the complexities of doing business internationally. It is not unusual that when a company first starts to "go global", cash management is not a high priority. The numbers are too small, and most

often, global subsidiaries are allowed to retain their autonomy and carry on very much as before. However, as international flows grow to be significant, it becomes important to rationalize the banking structure and manage the risk and liquidity more efficiently.

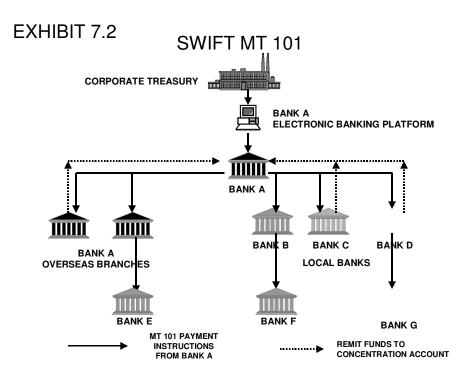
Ric Shaw will have to do a lot of information gathering as a first step before making any changes. Risks have to be assessed, objectives set, and tools evaluated. It is certain that there will be opportunities for managing the liquidity in Europe more efficiently. It is very likely that some of these initiatives will be applicable in other areas as well. At the very least, Ric will be reassessing current banking relationships, services and prices.

## EXHIBIT 7.1

# International Product Usage Domestic U.S. Corporations



Source: 2002 Phoenix-Hecht Cash Management Monitor™



## EXHIBIT 7.3

# Netting

