Welcome to AFP’s Liquidity Management Guide to Mobilizing Global Cash.

In today’s volatile and dynamic market environment, global treasury operations are consistently being challenged with optimizing liquidity. Prudent departments have instituted fundamental cash visibility and forecasting structures to assist in addressing these challenges. For leading, multinational treasuries, deploying optimized cash mobilization structures through notional or physical cash pools proves to be the key to unlock liquidity and mitigate risk.

With new risk areas continuing to surface across the enterprise, treasurers must carefully monitor and mitigate the risk landmines of today’s financial environment. When mobilizing cash, danger areas such as liquidity risk, credit risk, country risk, continent risk, currency risk, counterparty risk, tax

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“This guide provides key insights into common treasury objectives on mobilizing global cash and the factors that are leading so many organizations to examine how they optimize cash and manage risks.”

Jason Torgler, Reval
risk and operational and compliance risk can rear their ugly heads. Without transparency and visibility into those cash structures you can leave yourself exposed to these numerous risks.

Optimized cash pools and structures allow treasurers the transparency into cash movements, positions and currencies thus providing visibility into your risk positions and allowing you properly to assess your risk tolerance.

This guide provides key insights into common treasury objectives on mobilizing global cash and the factors that are leading so many organizations to examine how they optimize cash and manage risks, and the transformational changes they need to undertake. This guide also outlines structural diagrams, tax rules, banking considerations, risk awareness and other proven techniques around the ‘how-to’ of sweeping and notional pooling.

There is no perfect structure. Each organization has unique elements that require mixtures of models and shifting of structures over time. The benefits are well worth the effort. Organizations that mobilize and optimize global cash benefit from:

- reduced borrowing costs;
- maximized opportunity for investment;
- reduced transaction and administration costs;
- improved control of group cash;
- optimized foreign exchange hedging and risk management; and
- a better understanding of the opportunities for the strategic deployment of cash via, for example, acquisitions, stock buyback, business reinvestment and business divestiture.

Banks and technology partners serve as strong allies in your analysis and deployment. Lean on them for insight and assistance – the upside is tremendous.

Jason Torgler, Vice President, Corporate Strategy @ Reval

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It’s a new generation of treasury management solutions.

In a world where crisis is the norm and regulatory change responds in kind, treasury continues to evolve into intelligence-enabled organizations. Focus on risk management and global visibility is no longer just a concern but a strategic priority. New world priorities require new world TMS solutions.

Built for change and the way companies need to operate in the new world, Reval’s single-version, SaaS solution for treasury and risk management (TRM) seamlessly integrates cash, liquidity, risk management and hedge accounting allowing treasury to perform optimally, nimbly and with the strategic, long-term vision a shifting global economy requires.

For today, for tomorrow, for evolving treasury and risk needs, the answer is Reval.
Introduction

Treasury practitioners are under tremendous pressure to manage cash efficiently, while at the same time minimizing any risk to their organization. For those in international businesses, the challenges involved in managing cash are multiplied by the complex nature of international regulation, and varying local banking practices around the world.

The core challenge for all treasury practitioners is to ensure visibility of their group’s positions globally. Having clear knowledge of each operating entity’s cash position can help to ensure it is funded as economically as possible, and that any surplus cash is invested safely. Additionally, complete and accurate visibility into cash positions also helps the group treasury to identify how the group is exposed to risk, and to develop strategies to manage those exposures.

For an organization which has few transactions outside its home market, it is possible to manage all payments and collections without opening bank accounts in other countries. In such a case the cost of operating and managing bank accounts abroad may not be justified, even though managing cross-border payments can be expensive and time-consuming.

However, once an organization has an appreciable number of cross-border transactions, or has a physical presence in different markets, it becomes more cost-effective to open bank accounts outside the home market to manage these transactions. Where such bank accounts are opened by the local operating entity, the organization’s central treasury may find it difficult to obtain accurate, timely information on cash balances and foreign exchange positions in each foreign location.

The greater the number of a group’s bank accounts, and the number of currencies in which they are denominated, the harder it is for the group treasury to keep track of the balances on those accounts.

Mobilizing cash on a global basis via the use of notional and physical cash pools can help the group treasury operate more efficiently. These structures allow balances on the various bank accounts to be aggregated, typically by currency, so that the group can more easily identify those accounts with cash surpluses, and those which require funding. Where cash is pooled on a cross-border basis, intercompany transactions are part of the structure, allowing entities with a cash requirement to be funded automatically.

At the same time, such structures help the group treasury to understand its foreign exchange positions and to ensure that they are hedged appropriately.

This paper looks at the reasons for mobilizing global cash, identifies the main techniques used to do so, and outlines the main barriers to using these techniques. The paper then provides a guide to the key stages in developing an appropriate global cash management structure for meeting an organization’s objectives. It concludes with an appendix outlining the availability of physical and notional pooling in key markets around the world.
Why Mobilize Global Cash?

Any organization with operations outside its home market will need to decide how to manage those operations. In the past, there was little choice, especially with respect to cash management. Today, however, changes in banking practice, improvements in communications and the effect of steady regulatory change mean that organizations now have many different options when making that decision. At the same time, treasury practitioners are under greater pressure than ever to reduce operating costs, while simultaneously taking steps to manage risk as effectively as possible.

In this context, treasury practitioners are expected to use cash as efficiently as possible within their organizations. For organizations operating in a number of different countries, this requirement can be translated to mean using cash as efficiently as possible, on a global basis.

Although global cash management is now possible, there are still some major challenges for treasury practitioners seeking an efficient solution. Decisions may vary according to the underlying purpose of the group’s cash management structure. It is important that the treasury practitioner has a clear understanding of the core objectives before establishing a new global cash management structure (or when reviewing an existing one).

Companies seek to mobilize global cash for a variety of reasons, including:

- improving the efficient use of cash;
- reducing borrowing costs;
- maximizing opportunity for investment;
- improving control of group cash;
- better foreign exchange risk.

**Improve the efficient use of cash**

One of the most significant potential benefits from a global approach to the use of cash is the opportunity to reduce the costs of processing. This can be achieved even if the organization decides against implementing a wider cash pooling structure.

The seemingly simple act of making and receiving payments across an organization can be made extremely efficient. This can be done by working to reduce operational cost. This arises in two main forms:

- **Transaction costs.** There are costs associated with any transactional activity, whether making or receiving payments. In any organization with operations abroad, there is necessarily a greater volume of cross-border payments. Cross-border payments tend to be much more expensive to make than equivalent in-country payments, even if no foreign exchange transaction is required. As well as the transaction cost charged by the bank, there will be additional costs associated with the transaction. Cross-border payments often take much longer to process than in-country equivalents, and this is reflected in the different value dating rules applied by banks in these circumstances.

  For example, cross-border check payments can take many days to clear. During this time, banks are usually not prepared to give value, or even to allow the funds to be used, until final settlement has been achieved.

- **Administration costs.** As well as the processing costs, there are also costs associated with the administration of bank accounts and payments. In a global organization, there can be significant duplication of both personnel and technology. The need to have appropriate segregation of duties will have implications for staffing levels in each entity with control of bank accounts. In addition, each such organization will have a treasury platform to maintain control of these bank accounts (even though a platform may simply be a set of spreadsheets, with all the risk factors they entail).

  Adopting a global approach to the mobilization of cash can help to reduce operational cost in a number of ways.

- **Transaction costs.** Transaction costs can be reduced by ensuring that as many payments as possible are routed as cheaper, in-country payments. Instead of sending a series of expensive cross-border payments, technology allows companies to send a single cross-border payment file to a bank in a particular
country. The file contains instructions to the bank to make a series of less-expensive in-country payments to recipients in that country.

- **Administration costs.** The twin costs of personnel and technology can be reduced via the use of treasury workstations and cash management systems. These systems increasingly allow treasurers to establish payment authorization protocols which allow personnel in different locations to approve payments automatically. These systems also enable treasury departments to view many different bank accounts in different locations on the same platform. For a global organization, the platform will need to be sophisticated enough to manage cash flows and bank account positions in a number of different countries and different currencies. The challenge for the treasury professional is to reduce the complexity of this task.

- **Bank account management costs.** In a company with a global view of cash, one of the key objectives is to exercise a degree of control over the opening and maintenance of bank accounts. Once bank accounts are open, there can be significant costs associated with identifying every bank account held by the group. This is a core task, if the treasury professional is to achieve visibility of cash. In this context, it is appropriate to review every bank account and evaluate whether or not it should remain open. One reason for this is that, although approaches differ between banks, they generally levy an annual fee for maintaining bank accounts, on top of the transaction fees. Reducing the number of bank accounts may also allow the company to negotiate better transaction fee levels (as volumes through each account may well be higher).

Even where local entities have the authority to open and operate bank accounts, the central treasury should try to develop a clear policy governing the use of bank accounts (the circumstances in which accounts can be opened, the level of authorization required), even if, in a decentralized organization, following that policy is not compulsory.

**Reduce borrowing costs**

In an ideal scenario, an organization will avoid any situation where one group entity is borrowing from external lenders when another group entity has surplus cash to invest. By putting in place a cash mobilization structure, any internally generated surplus cash can be made available to support group entities with funding requirements.

Although the organization will have to respect transfer pricing rules in relevant jurisdictions, and offer arm’s-length funding, any internal cash recycled through the business in this way will be cheaper than arranging external funding from banks or other sources. This is because the internal funding will not attract the risk premium external finance providers would need to charge. These funding streams will be relatively reliable (assuming accurate internal group forecasts), as they will not be subject to covenant restrictions and other factors which can lead to banks withdrawing funding.

Even if the group as a whole is a net debtor, with little or no surplus funds available to be recycled through the business, it should be possible to use a cash structure to reduce borrowing costs. This is because borrowing requirements can be aggregated at the group center. In most organizations, as long as the group has a better credit rating than the group entities, the central treasury will have access to funding at better rates. This applies for two reasons. Firstly, the group treasury will be able to leverage its credit rating to obtain better financing rates from its banks than are likely to be available to individual group entities in their different locations. Secondly, by aggregating the funding requirement, non-bank financing techniques, such as a commercial paper program, may become viable. This will have the additional benefit of diversifying the group’s sources of funding. (However, by centralizing funding, the group may lose access to some of the local funding sources, which would themselves have been a source of diversification.)

**Maximize opportunity for investment**

Once any available cash has been recycled within the business, the remaining cash is available for external investment. If a group has previously
been simultaneously investing and borrowing, any return earned on net invested funds will be higher than before. This is because any investment returns would have been reduced by the higher cost of the simultaneous borrowing.

Consolidating balances (even when precautionary balances are left in-country) may give the central treasury team access to greater levels of funds to invest. Having a greater pool of funds to invest may justify the employment of a specialist investment manager (either within the treasury team on a full-time or part-time basis, or in an outsourced arrangement). A larger pool of funds may give the group access to a wider pool of potential investment instruments, helping to diversify risk. Moreover, when combined with an effective forecasting system (see the previous title in this series), a central treasury may have the opportunity to invest some of the surplus cash for longer periods. This may offer an enhanced return, and will reduce the operational risk associated with the process of investment management, although the group will have to accept a loss of liquidity in return.

However, by creating a larger pool of funds, the group may thereby expose itself to a greater counterparty risk, requiring a tighter focus on investment management. While a loss of principal when funds are invested at a local level would have an impact on the local entity, a loss of principal when investing at group level would affect the group as a whole. (The next title in this Liquidity Management Series will look at techniques to manage this investment risk.)

**Improve control of group cash**

One of the core benefits of a cash mobilization structure is that it can give group treasury a greater visibility, and therefore control, over group cash. By pooling cash to one or more header accounts (either physically or notionally), the group treasury only has to monitor those accounts, rather than the multitude of group accounts that an organization might hold. Even if circumstances dictate that pooling to a single global account is neither possible, practical, nor desirable, a central treasury can still gain greater insight from a series of pooled accounts. The implementation of a group structure, even if it only ever applies at country level, will allow bank accounts to be linked and balances consolidated between those accounts. At the same time, any action to reduce the number of bank accounts held by the group will also act to improve visibility and control over group cash.

**Better foreign exchange risk management**

A global approach to cash mobilization also offers the opportunity to manage foreign exchange transactions and risk more effectively. Without a global approach, each entity will be responsible for managing its own foreign exchange positions. Just as a group may find it is simultaneously borrowing and investing, it may also find it is simultaneously long and short in the same currencies. Implementing a global structure will allow the group to reduce the amount of external foreign exchange transactions in such circumstances. This will reduce the costs associated with the transactions. There will also be a reduction in transaction risk, as fewer transactions are necessary.

The central treasury may also be able to identify more natural intra-group hedge relationships as a result of tighter control over cash, reducing the need to take external hedge positions.

There are a number of different approaches to managing foreign exchange risk in a global cash mobilization structure. At one extreme, there is the required use of an in-house bank. In such circumstances, all participating group entities hold bank accounts only with the in-house bank, in their own operating currencies. The in-house bank then manages any foreign exchange transactions and positions on behalf of the group entities. It will require significant investment in terms of time and resources (notably technology) to implement such a system. However, once established, it should aid efficiency by avoiding the need for each participating group entity to manage its own foreign exchange.

Other organizations require group entities to consolidate cash in group operating currencies (typically the USD or the EUR) on a cross-border basis. Group entities are able to maintain their own accounts in their own local currency. These accounts can still be pooled on an in-country
basis to provide group treasury with visibility over positions in those currencies.

It is also possible to implement structures to manage any internal foreign exchange positions. For example, the use of an intra-group netting system for any intercompany payments can help to reduce the need for foreign exchange transactions.

Adopting a global approach to cash mobilization can also help the group treasury implement and get group entity support for a clear policy regarding the use of local and foreign currency bank accounts. As discussed, there can be significant costs associated with identifying, managing, and controlling activity on an organization's bank accounts across the world. Central treasury may be able to restrict the ability of local group entities to open foreign currency bank accounts for particular purposes, or even to prohibit foreign currency accounts altogether.

**Conclusion**

The key for any treasury practitioner is to identify the required objectives of cash mobilization, before implementing or reviewing a structure. Any structure should be assessed against these objectives.
Techniques

For any organization seeking to mobilize cash, there are two fundamental techniques available: physical pooling (also called sweeping, or cash concentration) and notional pooling. These fundamental techniques are varied in some locations to allow banks to offer pooling services in ways which are compliant with local regulations.

Physical pooling

Physical pooling involves the physical movement of cash from one account to a header or master account. All cash balances on participating bank accounts are physically transferred to the header account. This header account is usually held in the name of the group treasury or headquarters, or in the name of a separate treasury company.

There are a number of different ways to operate a physical pooling structure:

- **Automated sweep.** At a specified time towards the end of the day, balances are automatically swept from participating accounts to the header account. The size of the transferred balance can be varied. The simplest form of sweep is a zero-balancing pool. This has the effect of reducing all balances on participating bank accounts to zero (where a bank account is in deficit, the transfer takes the form of a payment from the center). Alternatively, treasurers can decide to set target balances for each participating bank account, for precautionary reasons or because of observed inaccuracies in the forecasting systems. This is known as target balancing, with the effect that any transfers result in the bank accounts having the target balance (rather than zero).

- **Compulsory participation in an in-house bank.** Requiring group entities to participate in an in-house bank results in a de facto physical cash pool. Cash is concentrated at the in-house bank as group entities are required to hold bank accounts with the in-house bank, rather than with any external banks. Depending on the way the in-house bank is structured, group entities might hold mirror accounts with the in-house bank for accounting and other reasons.

This diagram shows a simple physical cash pool relationship, in which three group subsidiaries participate. The master, or header, account is typically held in the name of the group treasury. Transfers between the subsidiary accounts and the master account will either take place as internal bank book transfers (if the accounts are held with the same bank) or as external electronic funds transfers (this can be a domestic or cross-border payment). Group subsidiaries participating in a physical cash pool do not have to hold bank accounts with the bank operating the master account.

If the group subsidiary accounts are in deficit (or below a target balance), they will be funded by the master account. If the accounts have surplus cash (either a positive balance or above a target or threshold balance), this will be transferred to the master account.

If a physical cash pool incorporates bank accounts in more than one country, it is common for cash to be pooled to local master accounts in each country first, before being pooled to the center.
This diagram shows a core in-house bank structure. Two subsidiaries are shown participating in the in-house bank. Both have suppliers who are paid in USD, EUR and GBP. They would ordinarily choose to hold bank accounts denominated in the three currencies. With an in-house bank, the participating subsidiaries do not hold external bank accounts. Instead they hold one or more bank accounts with the group in-house bank. In this example, the in-house bank is structured such that each subsidiary holds mirror accounts in each of the three currencies. (In some cases, group subsidiaries only hold one account with the in-house bank, denominated in their operating currency.) The in-house bank then holds external bank accounts in as many currencies as necessary, in this case USD, EUR and GBP. These accounts are used to pay the group subsidiaries’ suppliers and to make and receive other external payments.

This concept can be expanded to include many different group subsidiaries and currencies, although the platform used to operate the in-house bank needs to be robust enough to cope with the volume of activity, as well as being sophisticated enough to meet the different legal, accounting and regulatory requirements which apply in each relevant jurisdiction.

- **Discretionary participation on periodic basis.**
  
  In some circumstances, it is not appropriate to operate an automatic sweep. If balances are low, but in credit, it may not be cost-effective to concentrate cash to the center on a regular basis. In some locations, exchange controls or other regulations make automatic sweeping impossible. In addition, some organizations prefer the decision of whether to remit funds to the header account to remain with the local entities. In all of these situations, operationally it may be more efficient to implement a discretionary cash pool, where balances are pooled when cash surpluses reach a certain level, or on a weekly, monthly or quarterly basis, at the discretion of an authorized individual.

  The most common variation of physical cash pooling is balance netting, also known as single legal account pooling. In this structure, the group holds a single external bank account (the single legal account), often in the name of the group treasury or similar entity. All transactions on behalf of the participating entities are processed through this single account. Participating entities hold mirror accounts with the group treasury, in
BALANCE NETTING

A small Norwegian group with subsidiaries in Denmark, Norway and Sweden is able to take advantage of its bank’s balance netting service. It operates a single legal account for the group denominated in Norwegian krone. Each subsidiary participates in the single legal account, such that there are three main sub-accounts in the system: one denominated in Norwegian krone (NOK), one denominated in Swedish krona (SEK) and one denominated in Danish krone (DKK).

Each subsidiary can use the sub-account in the same way as a traditional bank account. Subsidiaries make and receive payments and view account information in their own operating currencies. The group headquarters can also view the positions on all three sub-accounts. The bank also notionally translates the Danish and Swedish balances into NOK in real time, giving the group treasurer a single group position across the single legal account.

which all their transactions are recorded. This form of pooling is popular in the Nordic and Baltic regions, and is offered on a cross-border and multicurrency basis.

In some jurisdictions (notably China), intercompany loans are not permitted. An entrusted loan structure has been developed in which a bank acts as the trusted partner to both group entities. The bank sits between the participating entities, so that the two entities do not have a direct relationship and yet one entity can effectively lend funds to the other.

DIAGRAM OF NOTIONAL CASH POOL

This diagram shows a basic notional cash pool structure. Three group subsidiaries participate in the notional cash pool and hold bank accounts with the bank operating the notional pool. The notional cash pool incorporates three memo accounts in the name of each participating subsidiary and a master account. The memo accounts simply reflect the balances in each subsidiary’s bank account. There is no physical movement of funds either between the subsidiary account and the respective memo account or between the memo account and the master account. The bank charges or apportions interest to the cash pool, based on the aggregated balance of the master account.

For example, if Sub X had a positive balance of EUR 450, Sub Y had a positive balance of EUR 220 and Sub Z had a negative balance of EUR 370, the notional cash pool would have a net positive balance of EUR 300 (450 + 220 − 370). The bank would apportion credit interest on the EUR 300. Subs X and Y would receive an interest payment; Sub Z would be charged interest on the overdraft.

This structure is most commonly found on an in-country, single currency basis, although cross-border and cross-currency notional cash pools are available in some jurisdictions.
Notional pooling

Unlike a physical cash pool, a notional cash pool does not involve any physical movement of cash balances. Instead, a bank notionally aggregates balances participating in the pool, and allocates debit or credit interest to each participating bank account as appropriate. Unlike a physical cash pool, all participating entities must hold bank accounts with the same bank.

Because there is no physical movement of cash, no decisions about the timing or level of participation need to be made. Instead, all participating bank accounts will be notionally pooled on their whole balance (whether positive or negative), at the appropriate time.

A notional cash pool means that participating entities retain control of their bank accounts. In addition, there are no fees associated with movement of cash from one bank account to another.
Issues affecting pooling

The availability of different forms of cash pooling, both in-country and on a cross-border basis, depends on the local interpretation of a number of key issues. These issues can affect both the legality and financial viability of cash pooling solutions. As a result, it is vital that appropriate legal advice is taken before a cash pooling structure is implemented.

Bank capital adequacy rules

Bank capital adequacy rules vary in their application around the world. They are most likely to affect the availability of notional pooling as, in some jurisdictions, banks are not allowed to offset credit and debit balances for capital adequacy reasons. While some banks are still prepared to offer notional solutions in these countries, they are unlikely to be cost-effective for the client. This is because the bank will still charge a larger margin on any debit balances than it offers on credit balances, and the benefit of pooling is lost without any physical movement of cash.

Cross-guarantees

A requirement for cross-guarantees can also add cost to a pooling structure. Where banks are permitted to offset credit and debit balances, they may still require cross-guarantees to be in place between all participating entities. (This may be a bank requirement or a regulatory requirement.) This applies most often when bank accounts held by different legal entities participate in the same structure. A cross-guarantee is an undertaking that any participating entity will make good any loss of funds from another participating entity. The cross-guarantee gives the bank assurance that it can reclaim funds from a group in the event that a participating entity becomes insolvent.

Cross-guarantees affect the efficiency of pooling structures in two ways. Firstly, they can be costly to agree and implement, especially if a large number of entities from a large number of jurisdictions are part of the same structure. Legal fees may be significant. The bank (and its auditor and regulator) will also need to accept the validity of all cross-guarantees to set up the structure. It can be difficult and time-consuming to obtain approval for cross-guarantees from tax authorities.

Secondly, the existence of a cross-guarantee can have wider implications for an entity’s ability to raise funds from external sources. This is because potential lenders may consider the guarantee to be an existing charge on the entity, limiting the potential security for future finance.

In these circumstances, treasurers should think carefully about the potential costs and benefits before pursuing a pooling structure. Drafting and obtaining approval for any cross-guarantees can be the most difficult element of any pooling structure. For these reasons, many international organizations leave at least some entities outside of their pooling structure.

Exchange controls

The existence of exchange controls can affect both in-country and cross-border pooling structures. Exchange controls can prevent cross-border pooling structures from including bank accounts that are held in jurisdictions which apply certain controls. Even when participation is strictly possible, the level of documentation required to support a cross-border transaction can make pooling too expensive to implement. Some countries require group entities to repatriate profits within a certain period of time, which effectively prevents participation in a cash pool.

Exchange controls can also affect in-country pooling in a number of ways:

- **Restrictions on bank accounts.** There may be restrictions on the nature of bank accounts that different entities can open, and the ways in which entities can use them.

- **Restrictions on participation in cash pooling structures.** A number of jurisdictions prevent resident and non-resident bank accounts from participating in the same cash pooling structure.

- **Restrictions on cross-currency pooling.** Regulations may make it difficult or impossible to pool balances in-country if they are denominated in different currencies.
Finally, in some locations, the lack of availability of foreign currency can prevent cross-currency pooling, even in the absence of any local regulations.

Central bank reporting requirements
Many central banks require companies (or their banks) to submit details of cross-border transactions, including transfers between resident and non-resident bank accounts. Where such requirements apply, they can impose an operational burden on the company (especially if supporting documentation is required), which realistically prevents physical pooling.

Tax rules
Local tax rules can have a significant impact on the viability of particular structures and on the participation of individual group entities. The most common rules which affect cash pooling are explained below.

Withholding tax
Withholding tax can reduce the efficiency of a pooling structure, as the interest is usually withheld at source. The application of any withholding tax will vary according to the residency of the participating entities, the nature of those entities (branches often have a different tax treatment to permanent establishments), and the residency of the bank offering the pooling service.

In some cases, a company is able to recover any withheld interest, often under the terms of a double taxation treaty. However, this will place an administrative burden on the company, often in the form of additional record-keeping requirements to ensure funds can be recovered: some banks may be able to support the company in this regard, although not all banks can. In addition, the company will lose the benefit of the withheld sum until it is recovered.

In a cross-border structure, any pooling structure can give rise to dividend payments (rather than interest payments), depending on the assessment of the local tax authorities.

It is also important to recognize that not all payments in a pooling structure are liable for withholding tax, even if there is a general requirement. Examples of exemptions in different jurisdictions include interest payments between entities with the same beneficial ownership, and interest payments on loans if the length of the loan is less than one year.

Thin capitalization
The issue of thin capitalization arises if the tax authorities consider a participating entity to be undercapitalized as a result of debt funding being provided by other group entities. To avoid thin capitalization questions, pooling structures usually must be set up with interest rates set according to arm's-length rules, typically with interest rates tied to an index, plus or minus a spread (thus guaranteeing interest income for entities with surplus balances). Arm’s-length rules should still allow group entities to benefit from reduced borrowing costs (or greater investment returns), as the central treasury does not have to apply the risk premiums charged by banks. Failure to apply arm’s-length rules may result in the pooling transactions being treated as a dividend payment by the tax authorities, and therefore taxed as income.

Cross-border structures are often subject to greater scrutiny by tax authorities, to protect against tax evasion. Tax authorities are particularly sensitive to suggestions that a cash pooling structure artificially favors entities in high tax jurisdictions by moving tax liabilities to low tax jurisdictions. Tax authorities will often assess this by the use of relative debt-to-equity ratios, where a thinly capitalized entity in a high tax jurisdiction may be seen as trying to evade tax.

In addition, tax authorities will be looking to identify any more permanent elements in a cash management structure. If one participant is permanently cash-rich, and another permanently being funded from the pool, a tax authority may consider this to be a long-term intercompany loan, rather than a short-term arrangement, and this may affect its assessment under thin capitalization rules. This may also alter treatment under withholding tax as well.

Transfer pricing
Transfer pricing arrangements will also be scrutinized by tax authorities when assessing global cash management structures as part of their role of
protecting their own tax bases. Much of the scrutiny can be avoided by the use of arm’s-length pricing in any pooling structure. However, tax authorities will also look at the other aspects of any cross-border structure. They will want to ensure that the entity operating the header account is suitably rewarded for managing the structure. If any cross-guarantees are in place to meet capital adequacy requirements, tax authorities will also want to make sure their cost is adequately reflected in the structure.

It is important to recognize that cross-border cash pools incorporating foreign exchange transactions should also be assessed against the above criteria. The arm’s-length principle should always be followed in internal foreign exchange transactions, and a benchmark market rate should be documented in advance. These can be recorded from commonly available market information systems, or taken when external transactions are made. Again, tax authorities will be looking to ensure that transfer pricing rules are not breached. Bear in mind that it may be difficult to identify an appropriate market rate for less commonly traded currency pairs, if the structure incorporates accounts denominated in such currencies. (These are rare, both because the currencies themselves are rare, and because it is difficult to establish structures incorporating them.)

**Stamp duty**

Some countries apply a stamp duty on intercompany loans. This will also add cost and complexity to any cash pooling structure.

**Importance of documentation**

Because of the complexities involved in any pooling structure, especially one operating on a cross-border basis, it is vitally important that all decisions when setting up a structure are fully documented. In particular, the applicable interest rate on both credit and debit balances must be fully documented to avoid, as far as possible, action from tax authorities. These documented rates must be applied consistently and recorded carefully in an appropriate record-keeping platform. Both treasury workstations and treasury management systems have the functionality to manage record-keeping. This may also be possible in some ERP systems, and in bank-provided cash management systems. If possible, it is worthwhile obtaining approval from tax authorities before a pooling structure is implemented. Auditors should also be asked for approval of the record-keeping process.
Structures

The challenge for the treasury practitioner is to select an appropriate mix of these techniques to create a global cash mobilization structure.

When designing a structure, there are a number of key issues which need to be considered, including:

- which currencies to pool;
- how to incorporate different national banking practices;
- how to comply with different regulatory practices;
- where to locate the header account(s);
- how many banks to use;
- how the structure affects the group's risk profile; and
- how to future-proof any new structure.

Which currencies should be pooled?

The treasury practitioner should start by determining which currency or currencies should be pooled. If the company decides to pool more than one currency, it may be possible to do so within a multicurrency cash pool, rather than having a set of individual single-currency cash pools. There are no set rules for making this decision, other than that it should be reached on a cost-benefit analysis basis.

As an illustration, the following are all techniques followed by some global organizations:

- **Cash pool in main operating currency.** Many companies choose to maintain a global cash pool in the company’s main operating currency, which may also be the currency in which its main borrowings are denominated. This can be supported by a series of in-country pools in the respective local currency accounts around the world.

- **Regional cash pools in important currencies.** It may also be appropriate to pool currencies on a regional basis. For example, a group with three geographic regions (Americas, Asia and Europe, Middle East and Africa) may decide to pool USD in all three regions, while also having an EUR-denominated pool in EMEA. As before, this structure can be supported by a series of in-country pools.

- **Pool all currencies, where possible.** As treasury management software has become more sophisticated, group in-house banks have become more popular. These can allow a group to pool all currencies by only permitting group participants to hold bank accounts with the in-house bank, denominated in their operating currency. This is a de facto multicurrency cash pool where all foreign exchange transactions are managed by the in-house bank.

- **Operate a regional multicurrency cash pool.** In some locations, notably the Nordic countries, regional banks offer cross-currency, cross-border currency pooling in all the regional currencies (SEK, NOK, DKK and EUR). In the case of Nordic cash pools, they usually operate using a balance netting technique.

- **Overlay solution.** In many cases, companies need to work with more than one bank. This applies when the group entities need access to local banks’ branch networks (and retain the authority to select their own local banks), while the group entity wants to consolidate cash on a global basis. A number of global banks operate overlay structures. These use both physical and notional pooling techniques to build a structure which allows the group entities to maintain their existing bank relationships and to pool balances to one location. The pooled funds are then physically transferred to a different bank (the overlay bank), which then consolidates balances on a cross-border basis, often on a notional, or book transfer, basis. This transfer to the overlay bank is usually via a domestic transfer to the overlay bank’s branch in each country, or to a partner bank (in those locations where it does not have a branch).
This diagram shows a core overlay structure. There are two stages in an overlay structure. Cash is pooled, either physically or notionally, at country level first. Then each country pool is combined to the overlay pool, again either physically or notionally.

This diagram shows how the physical and notional pools illustrated earlier can be combined in an overlay structure. On the left hand side, a physical cash pool is used in country 1. On the right hand side, a notional cash pool is used in country 2.

Once cash has been pooled in-country, the funds are transferred to accounts held with the overlay bank.

Wherever possible, these overlay accounts are held in the same country as the in-country cash pool, so that this initial transfer is a less expensive, domestic transfer. The overlay accounts are then pooled, either notionally or physically as internal bank book transactions.

MULTINATIONAL MANUFACTURING COMPANY HEADQUARTERED IN EUROPE

Headquartered in Europe with operations in over 100 countries around the world, the company decided to appoint a number of core banks to give its subsidiaries access to local banking expertise. At the same time, the treasury team wanted to concentrate its cash back to its Swiss headquarters to fund group entities wherever necessary. Because of the number of different banks employed, the most efficient way of concentrating cash is an overlay structure. Wherever possible, the company operates in-country zero-balancing physical cash pools. The master accounts are then transferred to overlay accounts held at one of the company’s core banks. These overlay accounts are then zero-balanced to a master account based in Switzerland.
How should different national banking practices be incorporated?

One of the major challenges for any international treasury practitioner is coping with the different banking practices around the world. Despite some efforts to standardize practices, there remain significant differences in the payment formats used around the world. Realistically, pooling is much more effective if electronic payment formats are used. However, to ensure straight-through processing and to reduce the risk of error, payments need to be prepared in a format suitable for processing through domestic payment clearing systems. There are a number of tools available to support treasurers to prepare payment files in different formats. Treasury workstations and some bank cash management systems have the ability to prepare payment instructions in a range of different formats. These can be submitted to banks for onward processing in the appropriate local systems.

Some companies operate payment factories or payment consolidation programs, to prepare such payment files at a central location. This structure will allow the group as a whole to prepare payments in local payment formats without having to employ specialist staff in each operating entity. The payment factory will have the ability to submit payment files directly to the group’s bank or banks, which will then be able to route these payments through the appropriate local payment systems to minimize cost and also risk of delay (and contract breach).

Where should the header account(s) be located?

Selecting the location of the header account (or accounts, if more than one pool is operated) is a key question. The most important factor is whether pooling (physical or notional) is permitted at all. If so, the treasury practitioner will have to establish whether there are restrictions on resident and non-resident bank accounts, and accounts held in the name of different legal entities participating in the same cash pool.

In theory, it is possible to operate a single global cash pool under one header account, subject to any constraints set by local regulation. However, just because it is possible, this does not necessarily mean it is desirable. A number of other key factors must be considered before selecting the location of the cash pool(s).

- **Time zones.** While it is possible to have a single cash position in a particular currency each day, managing the pool can involve complex authorization procedures. It is possible, for instance, to manage cash pools on a handover basis. For example, each day, practitioners in an Asian regional treasury in Hong Kong will manage the pool for the first few hours, before handing control to a European team based in Brussels, which then hands over to an American team based in San Francisco, before the cycle starts again. While this ensures cash is always being monitored, the handover process needs to be managed carefully to ensure clear lines of responsibility at all times and with a clear audit trails. Moreover, such structures risk overcomplicating what could be a straightforward issue.

- **Currencies.** The decision regarding which currencies to pool will also have an impact. For example, if a decision is made to pool USD and EUR-denominated accounts, it may be appropriate to pool USD balances to the US, and EUR balances to a header account in the eurozone. However, tax treatment of repatriated profits may make it more appropriate to pool both currencies to offshore locations, to allow companies to invest short-term cash in offshore investment instruments.
such as money market funds. On the other hand, if a company has EUR borrowings, it would be prudent to pool at least some funds to a location from which repayment obligations can be easily met. The same applies if many of the core suppliers are based in the eurozone.

For less important currencies (in terms of proportion of cash flows or surplus cash), the company may choose to pool those in-country until such time that it is worthwhile repatriating a cash surplus to general operating requirements.

Company focus. Another variable is the structure of the company itself. The largest multinational corporations typically organize in one of two ways – by function (production, distribution, sales, etc.), and/or by location (EMEA, Americas, Asia-Pacific, etc.). Depending on the degree of integration, this structure may determine the underlying financial structure and the degree to which treasury decision-making power is centralized.

However, the majority of organizations operating globally will continue to generate a significant proportion of their income and profits in their home markets. It is not uncommon, for example, for a North American company to have a North American division and an international division. In these circumstances, the North American division will have a domestic focus and the international division will have an international focus. Here, domestic US regulation may well be the driver for the company to try to impose control over the non-US portion of the business, rather than any intention to consolidate the international business into the financial structure of the group as a whole.

US MULTINATIONAL IMPLEMENTS EURO CASH POOL

Historically, this US multinational concentrated cash in USD and CAD, reflecting the origins of the group. As the group expanded into Europe and then Asia, it operated on a country by country basis, with local finance managers repatriating funds to the US central treasury on a discretionary basis.

As EUR-denominated sales grew, treasury decided to implement a EUR-denominated cash pool to allow a more efficient use of that cash. The company decided to put in place a series of automated sweeps of EUR balances to a header account in London, held with one of the group’s core banks. Where a local subsidiary does not use the core bank, bank accounts are first pooled to a master account with the subsidiary’s bank in that country, before the balance is swept to London.

This decision must always be taken in the context of the organization’s objectives. If the core objective is to strengthen control over cash, it may not be necessary to pool globally at all. Regional or even in-country pools will provide the organization with a clearer view of positions across a group, and allow them to be managed more effectively. Such an approach will still offer the opportunity for in-country funding of group entities where appropriate, and to invest any surplus funds more efficiently.

How many banks should an organization use to pool cash?

Once the organization has determined its objectives, the next step is to appoint the bank (or banks) to work with. Unless the requirements are straightforward, most organizations will run a tendering process to appoint their banking partners. This can be a useful exercise, as it will require potential banking partners to provide details of how they can best meet the organization’s objectives. Their solutions to the problems will vary and be driven by their particular strengths and networks.
When considering new bank relationships (or extending an existing one) at group level, the treasury practitioner may be constrained by the degree of autonomy that local entities have to open and maintain their own bank relationships. Whatever the relationship is, it is important to include the local entities in the decision-making process, to ensure their requirements are understood and met, and to help any implementation go as smoothly as possible.

Unless the organization operates in a small number of countries which all happen to be serviced by a single bank with networks in each one, it will not be possible for most operating companies to be serviced by the same bank. Their daily banking requirements will vary. Many operating companies will need access to a local branch, although increasingly this access requirement has been reduced via the use of electronic banking techniques and via the outsourcing of, for example, the collection of notes and coin to specialist organizations. It must be recognized, too, that some countries require operating companies to open bank accounts with local banks for specific purposes such as paying tax or to receive repatriated profits from abroad.

Any change to existing cash management practices may have an impact on relationships between operating companies and their local banks. Without a global approach, an operating company may invest any cash surpluses locally. If the operating company participates in a wider structure, such cash surpluses may be pooled to the center, losing revenue for the local relationship bank. It is also important to consider other factors which may have implications for the operating company as a result of participation in a group cash pooling scheme.

■ **Access to local funding.** One of the benefits of in-country bank relationships is that group entities may arrange their own credit lines. While this is likely to be more expensive than raising funds centrally (group headquarters generally enjoy higher credit ratings), it does diversify the source of funds for the group as a whole. Treasury practitioners will want to consider whether this loss of diversity will be outweighed by the opportunity to arrange lower-cost funding.

■ **Relative competence of banking partners.** In most cases, the local banking partners will have been chosen because of their branch network, access to local payment systems, and the ancillary services they can provide. Before replacing the local partner, the group and the local partner will need to establish that they can receive a similar level of service from any new banking partners. Bear in mind that this evaluation should cover all the services provided by the local banking partners, not just those associated with cash management. For example, a local bank may provide a subsidized service for coin collection or for processing letters of credit, because the operating company keeps a proportion of its surplus cash in local investment instruments. The withdrawal of some business by the local entity may result in the local bank charging higher (non-subsidized) fees for the remaining tasks. In some cases, the local bank may even withdraw those services as a result of the change.

■ **Sometimes change is not possible.** In many cases, the local entity may need to maintain some form of domestic bank account. This is likely to apply when the local jurisdiction applies exchange controls, which make the free movement of cash in and out of the country difficult where an underlying trade is absent.

**How does a global approach to cash mobilization alter the risk profile?**

When considering whether to implement a global cash management structure, treasury practitioners should also consider the impact on risk faced by the group as a whole and by participating group entities. It is worthwhile reassessing potential benefits of any structure to ensure that any gains are fully understood and not overestimated. As an example, a decentralized approach may be inefficient in terms of the overall cost of borrowing for a group which is in net debt. By adopting a global approach, a company may lose the benefit of funding diversification available through a presence in a number of local markets. A loss of investment diversification is a risk for a cash-rich organization.
How can a new structure be made future-proof?

One of the key risks for any treasury activity is that a structure becomes inefficient over time. Because a new global approach to cash can take significant time and cost, treasury practitioners will want to try to avoid a situation where a new structure is not used efficiently after an anticipated event or lacks the flexibility to respond effectively to an unexpected event.

There are three main areas where events can affect the long-term efficiency of a structure:

- **Company change.** The first objective is to ensure that any cash management structure can be adjusted to meet the future cash management requirements of the company. This may include adding additional entities in existing locations via acquisitions, additional entities in other locations, or expanding the structure to incorporate additional currencies. Just because the structure is optimal for current use does not mean it will be optimal for future use. It may be appropriate to implement an efficient structure which meets most of the group’s objectives, knowing it has sufficient flexibility to incorporate change, over a solution which is currently optimal but may be difficult to change. The risk is that future change may only be possible via the introduction of an inefficient bolt-on solution which requires different processes or systems to be used.

- **Regulatory change.** Regulatory change always has the potential to alter the efficiency or, in some cases, the legality of cash management structures. The first way to protect against this risk is to ensure that the primary objective of any structure is not to reduce the tax bill. While a tax reduction will be welcome, global cash management structures should always be viewed as tools to manage liquidity and risk, in the first instance.

  There are two main regulatory threats to global cash management structures in the current environment:

  - **Changes to banking regulations.** The ongoing uncertainty over the financial strength of a number of banks in various locations continues to drive regulators to consider changing bank regulations. This could affect the viability of cash management structures in two ways. Firstly, it is possible that banks may no longer be permitted or prepared to offer notional pooling solutions, if regulators tighten rules covering the offsetting of credit and debit balances. This could have repercussions for locations where notional pooling remains permitted. Cross-border notional pooling may become even rarer in the future. Much depends on the way central banks, regulators and governments decide to strengthen their domestic banking markets. Secondly, in some countries, there is a continued pressure to reduce the size of banks themselves. This is most likely to affect those larger banks which can offer a wider range of services to both institutional and retail clients. This may result in some banks withdrawing from the provision of cash pooling services, or an increase in fees for transmission services, as the opportunity for the cross-subsidization of bank relationships reduces.

  - **More restrictive exchange controls.** Recent years have seen a gradual relaxation of exchange controls throughout the world. This has had the effect of increasing participation in global cash management structures, along with the expectation that further relaxations are likely. However, the global economy’s current problems show no signs of disappearing any time soon, and their effects continue to impact on some countries more than others. As these countries’ economies come under pressure, there may be political and other pressure to reintroduce some forms of exchange control, whether overtly or in the form of hidden costs (such as changes in reporting or documentation requirements). Any such reintroduction of exchange controls will make the global mobilization of cash more difficult.

    There are a number of examples where public policy changes (whether or not as a result of a change of government) have resulted in the imposition of additional rules which have made the repatriation of cash more difficult. For example, Venezuela’s exchange controls have been tightened since their initial imposition in 2003.
Market events. Finally, unforeseen market events always have the potential to reduce the effectiveness of a cash management structure. In terms of risks to cash management structures, these include:

Bank failure. Any bank failure will have an impact on the cash management structure itself. It is not uncommon for individual banks to have processing issues affecting the ability of their computer systems to process instructions. In extreme cases, the collapse of a bank will result in major problems for many of its customers. As institutional clients, companies typically do not enjoy the same degree of protection as retail customers. Consequently, some companies operate with more than one banking partner, as part of a business continuity plan. Any such approach will reduce the potential effectiveness of a single cash management structure.

Exchange rate movements. Any cross-currency cash management structure will be exposed to the effect of exchange rate movements. Companies will need to consider the degree to which they should protect themselves against that risk. Some choose to operate single currency cash management structures primarily because it is easier from a regulatory and record-keeping standpoint. However, such an approach also allows foreign exchange risk to be managed at group level through the use of aggregated balances. Multicurrency cash pools can make it more difficult to identify and therefore manage any foreign currency risk.

What are the risks of managing cash in the eurozone?
The introduction of the Single European Payments Area (SEPA) is part of the European Union’s plan to transform the EU into a single domestic market. The EU has devoted significant resources to ensuring the free movement of goods, labor and capital throughout its member states. However, until the introduction of SEPA, companies trading within the EU still had to manage cross-border payments. This meant they faced the same problem of choosing between operating bank accounts from their home country (and processing expensive cross-border payments) and opening bank accounts in all the countries in which they do business (which added operational cost).

The introduction of the euro was part of the plan to develop this single payments area, although a number of EU member states have not adopted it, including Denmark, Sweden and the UK. As part of this process, some pan-European payment clearing systems were introduced. The TARGET2 system allows for the transfer of interbank funds, and was intended primarily to support the execution of monetary policy within the eurozone. The EBA Clearing’s STEP2 system is the most prominent of a small number of European cross-border payment systems for retail payments. More recently, the introduction of SEPA payment instruments for credit transfers, direct debits and card payments has allowed companies to initiate payments from one bank account that are addressable to other bank accounts within the SEPA area, and which are considered to be domestic payments. (Checks remain purely domestic instruments and are not covered by SEPA rules.) Banks within the EU have to accept SEPA instruments, although full functionality is required only by February 2014.

Over time, SEPA could allow companies to manage EUR-denominated payments and collections from a single bank account within the EU. If so, the elimination of duplicate bank accounts will automatically eliminate the requirement for complex cash management structures in the countries covered. However, companies may need to maintain a local banking presence in different countries for a variety of reasons: for example, a company receiving a significant number of check payments in some locations (such as France) may decide to maintain a bank account there. Treasury practitioners with responsibilities for activity in the eurozone do need to plan how best to take advantage of SEPA. This includes making decisions on which bank accounts the organization needs, and when to make the changes.

The other major issue for treasurers is the impact of uncertainty within the eurozone. There has been some discussion for some time about the possibility of
one or more countries leaving the eurozone. Prudent treasury professionals should have a contingency plan, in the event that one or more countries do so. It is impossible to predict with certainty whether this will take place or, if it does, which countries would leave. If such an event does take place, it is likely to be effected quickly. For example, work may be done over a long weekend, with banks in affected countries not opening on the Monday. Short-term exchange controls would be likely in such circumstances, making it difficult to move cash on a cross-border basis. There will also be a foreign exchange impact, as cash balances may change in value relative to external currencies (such as the USD), as the market tries to establish the value of any new currencies as well as that of the EUR (if it remains).
Conclusion – Identifying Best Practice

It is important to state first that there is no single ideal best practice for mobilizing global cash, from a structural perspective. It is crucial for treasury practitioners to keep an open mind and to focus on their core objectives from cash management.

Set clear objectives

Understanding the purpose of any cash management structure is central to its effectiveness. Setting clear objectives will help to determine the requirements of any project, and the detail of any request for proposal sent to banks.

The project should be viewed primarily in operational terms. The following questions can help to define the objectives:

- How will the project make the treasury operation more efficient? How can this be assessed?
- What is the desired net impact on operating costs? This should set the costs of implementing any new structure (investment in technology, management time, legal costs) against the benefits of implementation (reduced personnel costs, lower transaction fees). This cost benefit analysis should also be set against the costs of continuing to operate as before. Bear in mind that there are other non-monetized benefits and costs which can be included in this assessment – notably any improvement in the management of risk.
- How will central treasury support local operating entities? If an in-house bank or other more centralized structure is adopted, this will require central treasury to perform services on behalf of the local entities. If decision-making is more decentralized, how can a new structure improve the efficiency of treasury operations in the local entities?
- To what extent should cash be pooled? At what stage is it no longer worthwhile to try to incorporate entities into a structure? It may be just as beneficial for the group to consolidate some bank accounts on an in-country basis, given regulatory or other restrictions. A compromise may need to be made between the ideal of a single cash mobilization process, and the effort required to achieve that.
- If a decision is made to pool cash, what is the best location(s) for the header account? Why has that location(s) been chosen?
- How will the new structure help central treasury to identify cash positions and manage risk? How will the group manage risk in locations which have to remain outside the structure? Are any other changes needed to support the structure? For example, will a treasury department need to improve its forecasting system to take full advantage of the opportunity to reduce external borrowing?
- How will a new structure affect the risks faced by the organization? The structure should provide better visibility over cash positions and a greater understanding of foreign exchange positions, for example. However, it may also introduce a concentration risk in terms of cash management activity or funding. When setting the objectives for a cash mobilization structure, these additional or new risks should be identified and considered.

Answering these questions will help the treasury team to establish their objectives from a cash mobilization structure.

Identify available solutions

Once cash management objectives have been set, the next step is to identify what is possible. There are a number of constraints. These include the nature of the cash flows within the business and with suppliers and customers, the locations in which and between which these cash flows occur, the applicable regulations, and available infrastructure in those locations.

While it is good practice to establish preferences when trying to identify available solutions, any request for proposals from banks should always ask for their ideas. Although their responses will tend to focus on their own strengths, they may also include suggestions which can be incorporated into the preferred solution. Treasury technology providers are also a good source of ideas, especially in terms of implementation and execution issues associated with, for example, cross-border capabilities.
Assess available solutions against objectives

The final stage in the process of designing a new cash mobilization structure (or reviewing an existing one) is to assess all possible solutions against the group’s original objectives.

Treasury practitioners should bear in mind the following considerations to maximize the chances of a successful project:

- Can a single bank offer the range of services required in the locations the company needs it to do so? If not, what is the best way to structure bank relationships?
- Work with banks and other partners to develop a clear structure within the regulatory and infrastructure constraints already identified.
- Take legal and tax advice to ensure a correct interpretation of those regulatory constraints has been made.
- Take references from preferred banks’ clients to ensure the bank can deliver what it promises.
- If a bank is developing a new service to meet particular requirements, be clear on the level of expectation from the project, and agree these with the bank.
- Discuss project objectives with existing technology providers to ensure there is sufficient capability both to meet current requirements and to retain flexibility into the future.
- Establish whether any new technology is required. Although a new technology project may add time and cost to the process of redesigning a cash management structure, it may more cost-effective in the long term.
- How will the treasury and operating companies interact with the bank (or banks)?
- Work with local operating entities to ensure their requirements are fully incorporated into the new structure, and to help with its implementation and ongoing operation.
- Make sure that the project has clearly defined limits in terms of the scope to incorporate entities, given local requirements. Ultimately, it may be preferable to have a six-month project which incorporates 80% of the group entities, than an ongoing project seeking to incorporate all.

Consideration of these matters should help to ensure an appropriate and cost-effective solution is chosen which meets the group’s objectives.
Appendix – Cash Pooling Availability Internationally

The following table is a brief indication of the availability of the two main types of cash pooling techniques in 32 different countries. The table indicates whether physical and notional pooling is available in each country and whether cross-border structures are permitted.

This table provides only a headline view of the availability of the different techniques. A number of different factors can affect the availability and cost-effectiveness of the techniques, including the selection of the location for the header account for a cross-border structure. It is always important to take appropriate tax and legal advice before establishing or changing a cash mobilization structure.

The information is taken from the AFP Country Profiles. Further information on the availability of the techniques, as well as tax rules and other payments and liquidity management information, is available at www.afponline.org/countryprofiles/

<table>
<thead>
<tr>
<th></th>
<th>Physical Pooling</th>
<th>Notional Pooling</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Argentina</strong></td>
<td>Pooling is available on a domestic basis, but it is subject to a 0.6% financial transactions tax. Salary payments and transfers between accounts with the same tax identification number are exempt from this tax, providing limited scope for cash concentration within single entities.</td>
<td>Not permitted.</td>
<td>Special collection accounts (cuenta recaudadora) are used to consolidate nationwide customer payments into a single account.</td>
</tr>
<tr>
<td><strong>Australia</strong></td>
<td>Available on domestic and cross-border basis.</td>
<td>Available on an in-country basis. It is not generally practiced on a cross-border basis.</td>
<td>It is possible to include resident and non-resident accounts, as well as accounts from different legal entities, within the same structure.</td>
</tr>
<tr>
<td><strong>Belgium</strong></td>
<td>Available on domestic and cross-border basis.</td>
<td>Available on domestic and cross-border basis.</td>
<td>Each company that participates in a structure must be treated as a separate legal entity. Both resident and non-resident bank accounts can participate in the same structure located in Belgium.</td>
</tr>
<tr>
<td><strong>Brazil</strong></td>
<td>Available on a domestic basis. Local firms may establish cross-border cash concentration structures in which one multi-currency account acts as a header account, but BRL-denominated accounts or domestic bank accounts may not be included.</td>
<td>Not permitted.</td>
<td></td>
</tr>
<tr>
<td><strong>Canada</strong></td>
<td>Available. Physical cross-border sweeping with USA common. Pools denominated in CAD and USD.</td>
<td>Available for accounts with the same beneficial ownership.</td>
<td>A number of Canadian banks also provide interest compensation structures.</td>
</tr>
<tr>
<td><strong>Chile</strong></td>
<td>Available on a single currency basis only. Cross-border cash concentration is available.</td>
<td>Not permitted.</td>
<td>The cuenta recaudadora is a special collections account that enables companies to receive all customer payments in a single account.</td>
</tr>
<tr>
<td></td>
<td>Physical Pooling</td>
<td>Notional Pooling</td>
<td>Comments</td>
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<tr>
<td>----------------</td>
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<td></td>
</tr>
<tr>
<td>China</td>
<td>Available to residents via entrustment loans. Entrustment loan agreements require regulatory approval. Available to qualified non-residents on an in-country basis. Some foreign currency cash concentration is also permitted.</td>
<td>Notional pooling is now possible in China, both in RMB and foreign currency, domestically and cross-border.</td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Available. Cross-currency only to accounts in the name of same legal entity.</td>
<td>Available, although it can be difficult to arrange cross-guarantees.</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>Available on domestic and cross-border basis.</td>
<td>Available on domestic and cross-border basis, although it can be difficult to arrange cross-guarantees.</td>
<td>Interest rate enhancement schemes also used.</td>
</tr>
<tr>
<td>Germany</td>
<td>Available on domestic and cross-border basis. Different legal entities and both resident and non-resident bank accounts can participate in the same structure.</td>
<td>Available but no legal right of set-off, so expensive.</td>
<td></td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Available on a domestic and a cross-border basis.</td>
<td>Available on domestic and cross-border basis. Different legal entities and both resident and non-resident bank accounts can participate in the same structure.</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>Available. Most cash is managed on a domestic, single-entity basis. Multiple legal entity pooling is subject to tax and restrictions on intercompany loans. Cross-border pooling is restricted by exchange controls.</td>
<td>Not permitted.</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>Available on domestic and cross-border basis.</td>
<td>Available on domestic and cross-border basis.</td>
<td>Accounts held by resident and non-resident entities may participate in the same liquidity management structure.</td>
</tr>
<tr>
<td>Israel</td>
<td>Available on domestic and cross-border basis. Different legal entities and both resident and non-resident bank accounts can participate in the same structure.</td>
<td>Available on domestic and cross-border basis.</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>Available on domestic and cross-border basis. Different legal entities and both resident and non-resident bank accounts can participate in the same structure.</td>
<td>Permitted, but rare.</td>
<td>Some banks provide domestic multibank liquidity management services.</td>
</tr>
<tr>
<td>Country</td>
<td>Physical Pooling</td>
<td>Notional Pooling</td>
<td>Comments</td>
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<td>-------------</td>
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</tr>
<tr>
<td>Japan</td>
<td>Available on domestic and cross-border basis. Both resident and non-resident bank accounts can participate in the same structure.</td>
<td>Permitted, but rare.</td>
<td>Companies tend to hold multiple collection accounts across several local banks which allow customers to make internal transfers through their bank.</td>
</tr>
<tr>
<td>Korea, South</td>
<td>Available for accounts held in the name of the same legal entity. Some cross-border concentration is available, but only in foreign currency.</td>
<td>Not available.</td>
<td>Different legal entities and both resident and non-resident bank accounts can participate in structures based in Luxembourg.</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>Available on domestic and cross-border basis.</td>
<td>Available on domestic and cross-border basis.</td>
<td>Cross-border pooling only within NAFTA.</td>
</tr>
<tr>
<td>Mexico</td>
<td>Available. Cash concentration is permitted for resident and non-resident accounts held in both MXN and USD. It is possible but rare to include accounts held by different legal entities within the same group.</td>
<td>Not permitted.</td>
<td>The group interest box scheme applies a 5% tax rate on income from interest payments between companies belonging to the same corporate group.</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Available on domestic and cross-border basis.</td>
<td>Available on domestic and cross-border basis.</td>
<td>Interest rate enhancement schemes are popular.</td>
</tr>
<tr>
<td>Poland</td>
<td>Available for accounts held in the name of the same legal entity because of the impact of stamp duty.</td>
<td>Available but expensive, although it avoids stamp duty.</td>
<td>Interest rate enhancement schemes are available, especially on a cross-currency basis.</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>Available. Resident and non-resident accounts can participate in the same structure.</td>
<td>Not available.</td>
<td>Finance and Treasury Unit regime established to attract regional treasury centers to Singapore.</td>
</tr>
<tr>
<td>Russia</td>
<td>Available in RUB only. Accounts held by resident and non-resident entities may participate in the same cash concentration structure. Cross-border concentration is permitted but is not common.</td>
<td>Available in RUB only, usually for accounts held in name of same legal entity. Cross-border notional pooling is not available.</td>
<td>Interest rate enhancement schemes are available for resident and non-resident accounts and on a cross-currency basis.</td>
</tr>
<tr>
<td>Singapore</td>
<td>Available on domestic and cross-border basis.</td>
<td>Available on domestic and cross-border basis.</td>
<td>Finance and Treasury Unit regime established to attract regional treasury centers to Singapore.</td>
</tr>
<tr>
<td>Sweden</td>
<td>Available on domestic and cross-border basis.</td>
<td>Not permitted.</td>
<td>Interest rate enhancement schemes available, especially on a pan-Nordic basis.</td>
</tr>
<tr>
<td>Country</td>
<td>Physical Pooling</td>
<td>Notional Pooling</td>
<td>Comments</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Switzerland</td>
<td>Available on domestic and cross-border basis. There is no distinction between resident and non-resident bank accounts.</td>
<td>Available but expensive because there is no legal right of set-off.</td>
<td>Swiss and international companies have established centralized treasury operations in Switzerland under the business coordination center regime, a tax-efficient structure.</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Available on an in-country basis.</td>
<td>Only permitted between accounts held in the name of the same legal entity with government permission.</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>Available on an in-country basis. Cross-currency pooling is not permitted. Cross-border pooling is difficult because of exchange controls.</td>
<td>Not available.</td>
<td></td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>Available on domestic and cross-border basis. Both resident and non-resident bank accounts and separate legal entities can participate in the same structure.</td>
<td>Available on domestic and cross-border basis.</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Available on domestic and cross-border basis.</td>
<td>Available on domestic and cross-border basis.</td>
<td>Different legal entities and both resident and non-resident bank accounts can participate in the same structure.</td>
</tr>
<tr>
<td>United States of America</td>
<td>Available, primarily on a domestic basis.</td>
<td>Recently permitted. Not common.</td>
<td>Physical cross-border sweeping with Canada common. Pools denominated in CAD and USD.</td>
</tr>
<tr>
<td>Venezuela</td>
<td>Available on an in-country basis to resident entities for VEF only. Residents may only participate in cross-border cash concentration structures located outside Venezuela.</td>
<td>Not permitted.</td>
<td>Exchange controls make cross-border liquidity management difficult.</td>
</tr>
</tbody>
</table>
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