



Business Process Services

White Paper

# Physical Cash Concentration and Notional Pooling: Key Levers to Optimizing Liquidity, Cash Flow, and Earnings

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# Abstract

Treasurers and financial managers of multinational companies are increasingly leveraging cash concentration and notional pooling structures to optimize access to liquidity. Banks offer technology solutions for physical concentration as well as notional pooling. Physical concentration products enable companies to consolidate their unutilized residual balances across countries and earn higher yield on unutilized funds. Likewise, notional pooling solutions help reduce overdraft interest.

Physical concentration and notional pooling thus empower companies to efficiently achieve their cash flow goals including ensuring adequate liquidity as well as maximizing potential income generated by surplus cash investment. The key is to adopt scalable, modular, and replicable solutions that enable organizations to centralize and increase control over all their bank accounts, and implement streamlined and efficient processes.

This paper discusses the various techniques in cash concentration and notional pooling and the benefits of leveraging technology solutions to realize optimized cash flow earnings. We also examine the local regulatory and tax implications and the challenges involved in implementing these liquidity management techniques.

# Contents

<b>Introduction</b>	<b>5</b>
<b>Need for Consolidating the Liquidity Position of an Organization</b>	<b>5</b>
<b>Techniques for Optimizing Cash Balance and Its Use: Physical Concentration and Notional Pooling of Cash</b>	<b>6</b>
Three Key Steps in Implementing Physical Cash Concentration and Notional Pooling	7
Scenario 1: Cash Concentration in a Single Account	7
Scenario 2: Multibank Target Balancing	8
<b>Local Regulatory and Tax Challenges in Implementing the Techniques</b>	<b>9</b>
<b>Overcoming the Challenges: Deploying Effective Automated Solutions</b>	<b>10</b>
<b>Best Practices for Automated Solutions</b>	<b>11</b>
<b>Conclusion</b>	<b>12</b>

## Introduction

Treasurers the world over face the challenge of tracking and mitigating risks associated with currencies, interest rates, commodities, liquidity, and operations. Even as businesses increasingly target global markets for increased growth, they are under immense pressure to manage cash efficiently, optimize costs, and improve margins. Multinational corporations (MNCs) usually have a network of local companies operating in different regions. These affiliated companies tend to be separate legal entities that generate cash flows in local as well as foreign currencies. So the group as a whole generates cash flows in many different currencies. The challenges involved in multi-currency cash flows present opportunities, costs, and risks to the group as a whole. If MNCs allow each affiliate to manage its cash and foreign exchange cash flows locally, the costs to the group as a whole due to exchange rate differential would skyrocket.

The treasury department within the MNC needs to manage cash flow effectively and help achieve the organization's cash flow goals which are:

- Ensuring sufficient liquidity
- Maximizing the potential income that can be generated by investment of surplus cash
- Minimizing the cost of borrowing funds, banking costs, and charges
- Eliminating foreign exchange and interest rate risks
- Optimizing earnings on unutilized account balances

## Need for Consolidating the Liquidity Position of an Organization

Since MNCs operate in different countries and generate cash flows in both local and foreign currencies, they need local bank accounts. As a result, some accounts have a credit balance and others a debit balance, on a daily basis. This often leads to organizations paying high rates of interest for overdrafts, while earning low rates of interest rates on their deposits at the same time. Given the complexity of planning the utilization of surplus funds for multiple accounts, high-yield offshore investment opportunities are often overlooked. For instance, to meet working capital requirements, an organization may take a loan from a bank in one location, instead of tapping into the idle excess funds from a different account at another location. This increases both the interest paid and the company's credit outstanding.

Often, treasuries of such organizations function in silos and lack common financial goals. Such decentralized treasury operations lead to conflicting decision-making, delays, and increased turnaround time (TAT) in consolidating liquidity.

Given the fluctuations in foreign exchange rates and geo-economic market conditions, a lack of centralized operations leaves organizations exposed to currency and interest rate risks.

Fragmented decision-making is typical in organizations that lack real-time tracking of account balances, and timely consolidation of balances across accounts and bank branches globally. This lack of visibility prevents the organization from leveraging opportunities such as real-time investment of funds. This is where physical concentration and notional pooling come into play by helping treasurers address these issues.

## Techniques for Optimizing Cash Balance and Its Use: Physical Concentration and Notional Pooling of Cash

Several banks offer physical cash concentration products that consolidate the company's unutilized residual balances to enable a better yield. Similarly, notional pooling products assist in reducing the interest on overdrafts.

Physical concentration helps treasurers move the company's funds automatically between accounts to achieve a predetermined target balance for each local account. With a target balance maintained, all surplus funds in local or regional accounts are swept into a parent account and all deficits at the local or regional levels are funded by the parent account. This allows the organization to optimize cash balance across different regions and invest it in favorable markets to earn higher yields. Organizations can employ this practice to improve the availability of cash balance for funding payment obligations in local markets as well as to monitor and manage their currency exposure.

Physical cash concentration also reduces the interest expense incurred by organizations, as it helps provide 'internal' funds to subsidiaries and sub-entities to meet their working capital requirements. It also eliminates the need for manually tracking and reconciling multiple accounts across locations.

Organizations can thus centralize operations to take advantage of economies of scale, aggregate buying power, and minimize treasury transaction costs. This in turn provides greater visibility for control and governance.

### Three Key Steps in Implementing Physical Cash Concentration and Notional Pooling

To effectively implement physical concentration and notional pooling, treasuries need to:

**Consolidate end-of-day account balances within the same bank:** Using end-of-day domestic target balancing, the funds need to be swept from source accounts into a central or header account while maintaining the target balance in source accounts. In case of a debit balance, a reverse sweep can be done from the header to the source account.

**Consolidate the end-of-day account balances across multiple banks:** Using intraday or end-of-day multibank target balancing, the funds need to be swept from source accounts using SWIFT interface to a header account at a bank with favorable investment options.

**Make profitable investments:** After consolidating the balance in one account, the company can invest in the money market or in mutual funds or other investment opportunities. Using intraday target balancing, the balance from the multiple accounts can be swept from the source account to the money market omnibus account. From here, the funds can be further transferred to the fund manager's account for investment.

The following scenarios help illustrate these liquidity management concepts.

#### Scenario 1: Cash Concentration in a Single Account

Consider the case in Figure 1. Let's say an MNC has five standalone accounts in different countries with a bank. Account B and E have debit balances that lead to overdraft interest payment, while accounts A, C, and D have credit balances that earn interest. Since the interest earned is less than the overdraft interest paid, the company ends up paying a higher rate of interest.

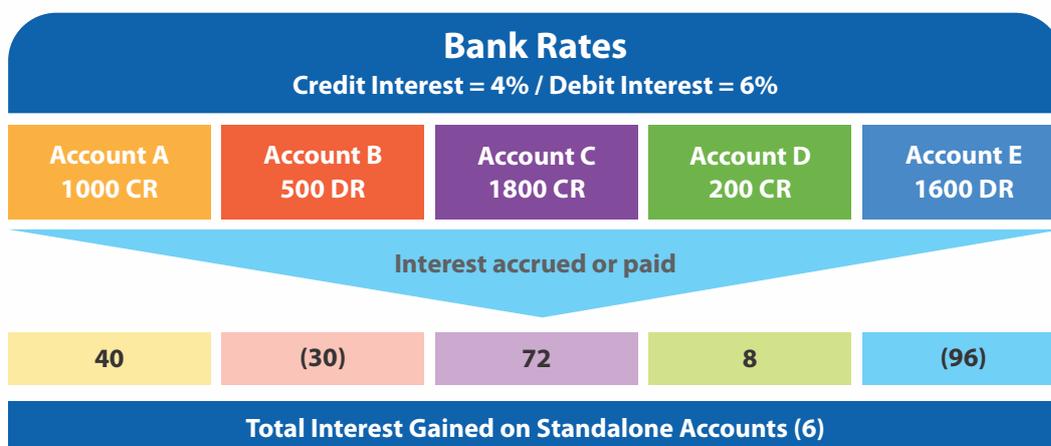
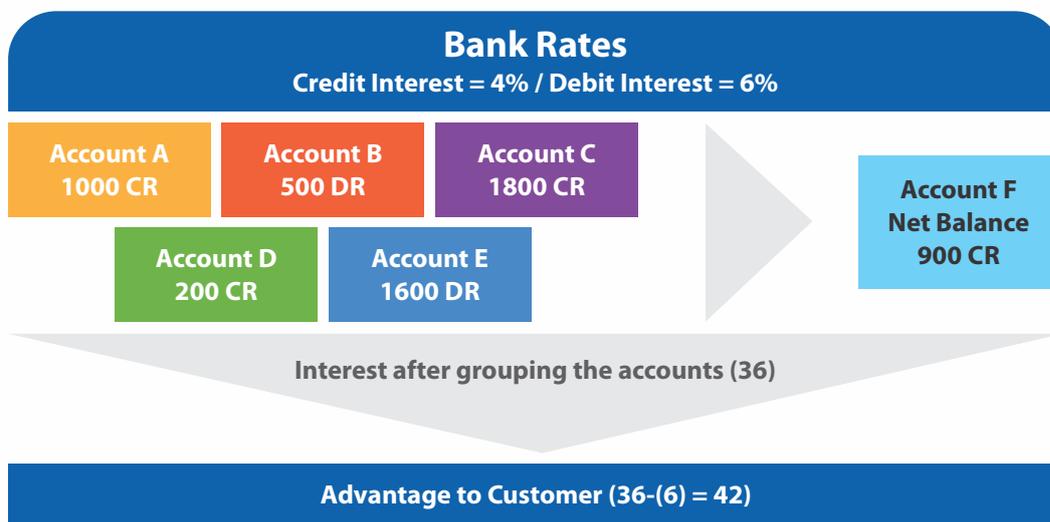


Figure 1: Disparate treasury operations can lead to loss for the organization

Cash concentration services help companies move funds from accounts across multiple locations into one main account. The concentration of balances into one account results in the reduction of charges due to overdraft balance and helps plan appropriate use of funds.

When applied to the above example, cash concentration services pool the balances into another account - say F. Any shortages will need to be fulfilled using this pooled balance, and only the remainder is used to earn the company an interest of EUR 36 (EUR Thirty Six), instead of the company having to pay an interest of EUR 6 (EUR Six) when the accounts were maintained in a standalone format. Hence, the customer gains an overall advantage of EUR 42 (EUR Forty) as shown in Figure 2.



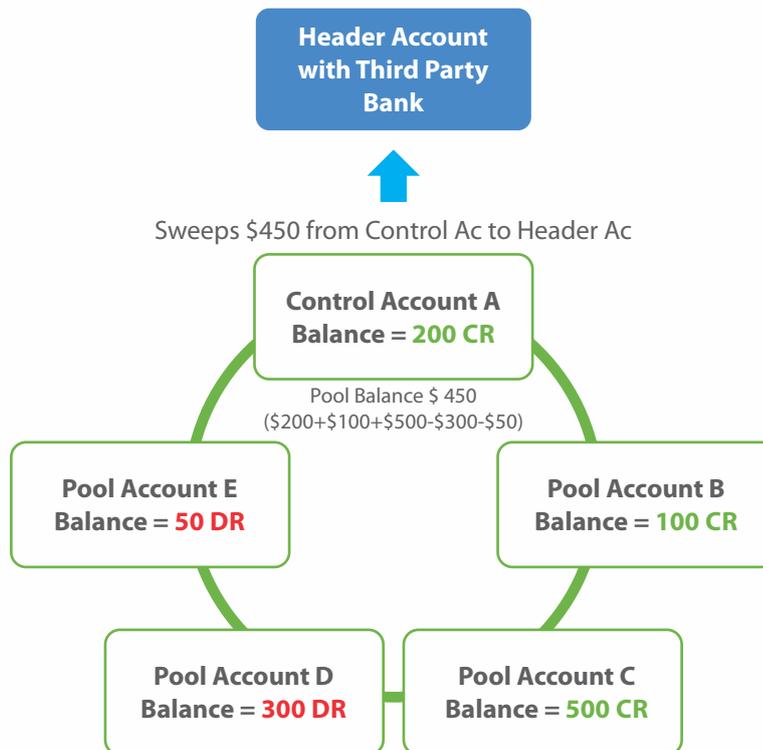
**Figure 2: Centralized operations with cash concentration help optimize cash use**

### Scenario 2 – Multibank Target Balancing

Consider the example in Figure 3. Five accounts are pooled together; account A is classified as the control account in the pool, while all the other accounts are member accounts in the pool. At the designated time of the sweep, the net balance is calculated for each account in the pool. In this example, the net pool balance amounts to EUR 450 (EUR Four hundred and fifty), which is swept from the control account (which acts as a source account) to the header account within the bank or with a third party bank. The pooled accounts could be part of a multicurrency pool or a single currency pool. In case of a multicurrency pool, the notional balance in the currency of the sweep structure is used to determine the target amount to be swept from the designated source to the header. The process for calculating the pool balance and arriving at a single currency position for multicurrency accounts is as follows:

- Determine the balance in all accounts in the same currency within the pool.
- Aggregate all balances in the currency of the sweep source account that is linked to the pool.
- The source account is debited for this aggregate balance and the funds are swept into the header account.

- The cross-currency rates are handled at the payment channel for intraday multicurrency transactions.



**Figure 3: Sweeping balance of a pool of accounts from a designated source account to the header account**

## Local Regulatory and Tax Challenges in Implementing the Techniques

Although physical concentration and notional pooling are practical concepts, they are not easy to implement. Treasuries need to move funds between accounts either physically or notionally. Apart from the operational issues in implementing the transactions required each day, the biggest challenge is in complying with local regulatory and tax implications, which are as follows:

- Physical concentration implies inter-company loans, and therefore any income is taxed as per local regulations
- Additional stamp duty may be levied on cross-border intercompany loans
- If the business recognizes all of its interest income, local tax bodies could raise exceptions, since the cash that generated the income is located at the subsidiary level

- A withholding tax (WHT) may be levied on interest paid through intercompany transactions
- Local regulations may prohibit co-mingling of resident and non-resident accounts, thereby restricting participation in overseas concentration
- Organizations may require cross-guarantees to secure the position of entities that are acting as creditors

**Notional pooling also comes with a challenge:** It works only within the account network of a single bank, since the bank must possess the capability to view all account balances in the pool structure.

### **Reduced regulatory and tax impact**

Depending upon the amount used to generate income, organizations must allocate the interest earned back to the subsidiaries. For cross-border transactions, they should check with the bank to provide solutions in countries that have a network of tax treaties but do not charge WHT on interest, and include those locations for investment as built-in rules within the solution.

The automated solution must have independent documentation in place, and enable transactions to be priced at market rates to satisfy local regulatory bodies.

In the case of central treasury operations for intercompany transaction, borrowing rates and other terms and conditions need to be formalized in the same manner as external commercial banks. There should also be a provision for the parent company to charge a guarantee fee for securing a lower borrowing rate for the subsidiary.

In the case of notional pooling for multiple banks, a separate notional pooling arrangement with each bank or a mix of notional pooling and physical concentration techniques should be enabled.

## Overcoming the Challenges: Deploying Effective Automated Solutions

Implementing automated solutions can help organizations meet the requirements of physical concentration and notional pooling and address the accompanying issues. An ideal solution should come equipped with the following capabilities and features:

### **The choice of one-way or two-way target balancing**

One-way concentration involves the passing of a debit or credit entry to a particular source account with the contra entry passed to a header account. This allows the source account to achieve a specific target balance.

In a two-way sweep, at the end of the investment period with the next business day value, an additional movement that is the opposite of the first returns the source account to its original balance. Interest is calculated daily and is posted to the header account.

### **The choice of credit or debit only targets balancing**

Credit only concentration involves the passing of debit entry to a particular source account with the contra credit entry passed to a header account. This ensures that the positive value dated closing balance on the source account is as specified. If the source account has a negative closing balance, no sweep takes place.

Debit only concentration involves the passing of credit entry to a particular source account with the contra debit entry passed to a header account. This turns a negative value closing balance of the source account into a zero or a specified positive target balance. No sweep takes place if the source account has a positive closing balance.

## Best Practices for Automated Solutions

Some of the best practices for automated solutions, which the enterprises could employ include:

- Deploying cash management hubs that provide centralized visibility across various banking relationships and the flexibility to adapt to new regulations, thereby reducing costs.
- Adopting process transformation to ensure that the best cash management processes are implemented prior to deploying automated solutions.
- Deploying analytics to understand factors such as past patterns of cash usage to optimize cash flows.

## Conclusion

As companies expand beyond their current operating boundaries, liquidity management gains increasing significance and complexity. Organizations can realize optimized results by adopting efficient, streamlined processes, and centralizing and increasing visibility of all bank accounts. Physical concentration and notional pooling of cash are two powerful tools for effective liquidity management that are widely accepted by global corporations. Apart from widespread application to Euro, US dollar accounts, the use of these tools has been extended to local currency structures. Integration of additional currencies and countries into a global framework is primarily being driven by regulatory developments such as withholding tax exemptions; increasing investment opportunities; and the need to meet global funding requirements.

Given the prevailing market conditions, there is a growing need to deploy technological solutions to help address the specific requirements and challenges of implementing physical cash concentration and notional pooling techniques. These solutions should go beyond demonstrating basic capabilities and enable effective cash management in a global marketplace. Treasuries of multi-national entities must therefore consider investing in comprehensive solutions that not only meet all the operational requirements of cash concentration, but also handle regulatory aspects of these transactions.

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Enterprises seek to drive business growth and agility through innovation in an increasingly regulated, competitive, and global market. TCS helps clients achieve these goals by managing and executing their business operations effectively and efficiently.

TCS Business Process Services (BPS) include core industry-specific processes, analytics and insights, and enterprise services such as finance and accounting, HR, and supply chain management. TCS creates value through its FORE™ simplification and transformation methodology, backed by its deep domain expertise, extensive technology experience, and TRAPEZE™ governance enablers and solutions. TCS complements its experience and expertise with innovative delivery models such as using robotic automation and providing Business Processes as a Service (BPaaS).

TCS' BPS unit has been positioned in the leaders' quadrant for various service lines by many leading analyst firms. With over four decades of global experience and a delivery footprint spanning six continents, TCS is one of the largest BPS providers today.

**Contact**

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