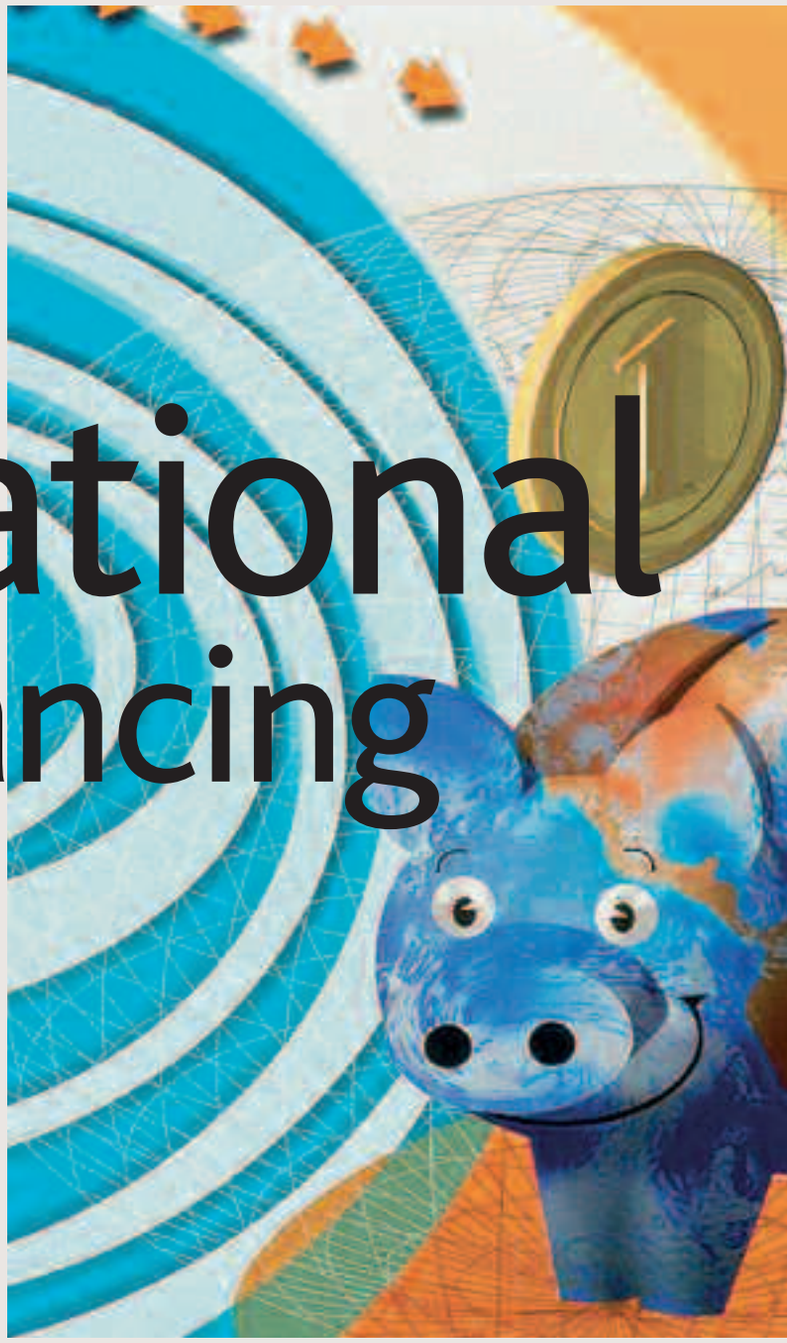
International zero-balancing



The structural model behind 'cross-border pooling' or 'regional liquidity management' is a series of accounts held locally in countries of operation, and then another set of accounts at a single bank in a concentration centre, such as London, Brussels or Amsterdam.

The term 'international zero-balancing' refers to the techniques used to connect the two levels of accounts. The term covers various issues and techniques including:

- Multiple techniques.
- Not always bringing local accounts to zero.
- Not always operating in the same way as domestic zero-balancing.

It is available upon accounts at the concentration centre and its branches and/or its close partners and/or banks nominated by the user. This last point highlights the variety of operational arrangements that sit behind the arrangement, which have their effect upon its efficiency and operational simplicity for the user. The purpose of this article is to discuss the impacts.

TAX, LEGAL AND REGULATORY ISSUES In discussing international zero-balancing is assumed that treasurers are satisfied that this hub-and-spoke arrangement can be made to work for their group from the point of view, for example, of arm's-length terms, withholding tax, thin capitalisation, deductibility of debit interest.

BANKS USED AND ACCOUNT STRUCTURE The user will formulate a picture of the desired account structure in-country, not least based on the number of subsidiaries there and the desire to have separate accounts for different purposes.

There may be a treasury centre. The permutations of the local and of the central account structure are many. (See *Table 1* page 30). These permutations set out in the tables are not the only ones, and there is an element of mix-and-match possible. The connecting thread is that, under any of these permutations, there is a balance sitting on a local account (credit or debit) that needs to be transferred to a designated account at the concentration centre bank. Indeed, there may be several such situations in the same country, although it is more common to centralise balances held in multiple local banks into one local bank. For the purpose of this article, the local account holding the balance is known as the 'header account'. The account to which that balance needs to be moved is the 'target account'.

Executive summary

- International zero-balancing is used to connect accounts held in countries of operation and accounts in a concentration centre such as London, Brussels or Amsterdam.
- The realities of local clearing systems must be addressed in order to know what balance should be moved and assess impact.
- The more banks involved in the scheme the greater the impact on its complexity, risk and efficiency.
- The flavour of partner banking and account structure will also affect the complexity, risk and efficiency of the scheme. Detailed co-operation is required between the banks involved, as is familiarity and trust.

WITH ZERO-BALANCING ALL LIQUIDITY IS SWEPT FROM THE PARTICIPATING ACCOUNTS TO THE MASTER ACCOUNT AND AVAILABLE TO BE INVESTED WITH THE HIGHEST POSSIBLE RETURN. THE PARTICIPATING ACCOUNTS ARE LEFT WITH A ZERO BALANCE, SO NO INTEREST IS DUE TO THE BANK. BUT HOW DOES THAT WORK ACROSS BORDERS? **BOB LYDDON** EXPLAINS.

KEY QUESTIONS There are three key questions about moving balances across banks and borders:

- How does the user know what is in the Header Account, so as to move funds in or out?
- How does the user know what is in the Header Account, so as to move funds in or out when there is a domestic zero-balancing of other accounts into the Header Account, at the same bank?
- How does the user know what is in the Header Account, so as to move funds in or out when there are accounts at other banks in the country that may first roll-up through a zero-balancing at the bank where they are held, and then be moved into the Header Account?

The answers to these questions, if they are to be satisfactory, need to address the realities of local clearing:

- Accounts will be active until end-of-day and, especially where commercial collections are received, book items which are expected within a range of time but have no contractual value date.
- The local environment involves batch processes, the results of which are only posted after end-of-day and are then only visible to the user the next day.
- Local payment instruments which can involve forward- and back-valued items.

WHAT BALANCE IS TO BE MOVED, AND IMPACT ON CREDIT LIMITS
There are two elements deciding what balance is to be moved and the impact on credit limits:

- Available balance – to reduce net interest expense.
- Ledger balance – to reduce balance sheet footings.

Under available balance, the header account may still show a ledger balance. Under ledger balance, funds may be moved out of the header account with today's value that do not arrive there until a later value date, thus causing a value-dated overdraft; or else funds are moved in to cover a negative ledger balance and lie idle, because the negative available position only materialises a day or two later. Value-dated overdrafts sustain the need to have local credit lines as well, or else the position will attract a penalty rate.

SYSTEM SCOPE The more banks are involved in the scheme – especially if there is an attempt to first centralise balances in different banks in-country and then cross-border – the greater the impact on the complexity, risk and efficiency of the scheme.

Complexity means the number of operational actions that have to be initiated to make the scheme work every day, whether these are done by the user or by an IT programme run by a vendor or the bank (the latter case is often referred to as a liquidity engine).

Risk means the non-availability of a report, or the failure of a payment, that results in a balance not being caught up in the scheme that day, at all or partially.

And efficiency means how much of the underlying overdraft and long balances end up being caught up in the cross-border scheme.

USE OF PROJECTIONS AND BALANCE REPORTS Where the service is not acting solely on end-of-day balances as they have been posted to the header account, the movements of money will be based on either projections or balance reports. Projections are as good as the information fed into them, and perhaps as the guesstimates from experience – local experience being very valid. Balance reports are as reliable as the source bank is able to make them, either by posting in real-time to the account, or by creating an emulation of the account as it will look like when all known activity has been posted.

Intraday balance reports become unreliable when activity is not known to the bank until late in the day, or when the bank does not post real-time or make an emulation.

In such cases the viable option is to use the previous day report. In either case:

1. the earlier the header account balance is defined by these methods compared to end-of-day, the less accurate it will be.
2. users will build in a cushion in order not to risk going into value-dated overdraft, which means money is left out of the scheme that day.

If a constant €1 million of simultaneous cash and overdrafts remain

Table 1 Permutations of the local and of the central account structure.

Local Account Structure	Central Account Structure
■ 1 bank ■ 3 subs with one account each ■ Subs' accounts are connected in a domestic zero-balancing ■ The header account belongs to (a) the main sub; (b) the Treasury Centre.	■ The main sub in each country has an account at the centre ■ These accounts are zero-balanced into the Treasury Centre's accounts.
■ Several banks ■ Each sub has multiple accounts with its bank ■ These accounts are connected in a domestic zero-balancing at the bank where they are held.	■ The main sub in each country has an account at the centre ■ These accounts are combined with the Treasury Centre's accounts via a notional pool.
■ Several banks ■ Each sub has multiple accounts with its bank ■ These accounts are connected in a domestic zero-balancing at the bank where they are held.	■ The balances after the zero-ing should then be moved into one local bank ■ Each sub has an account at the centre ■ The balances are combined with those of the Treasury Centre by zero-balancing or a pool.
	■ The accounts at the centre are held in the right of "Treasury Centre re: the subsidiary", and then subjected to a notional pool.

outside the scheme, and the bid/offer is 2.5% p.a., this causes an inefficiency of €25,000 over a year.

CHARACTERISTICS OF ACCOUNT STRUCTURE FOR EFFICIENCY AND OPERATIONAL SIMPLICITY Maximising efficiency requires an appropriate service operating on a streamlined account structure.

The service should run on available balances, and should be one that identifies account balances at end-of-day i.e. after the bank has posted all activity and run the domestic zero-balancing. This dictates in effect using a single bank per country. In addition the cross-border zero-balance operation must occur after the domestic zero-balancing. This is likely to be processed in the very early morning of D+1 but with value D, and to be the last operation before MT940 statements are produced. Settlement of those transfers cannot then be through a clearing system, but must be under a private arrangement between the two banks, which will also cater for:

- bilateral funding.
- reversal in certain circumstances and within given timeframes.
- financial difficulties at the client that manifest themselves on D but before processing is complete.

This requires in turn a detailed cooperation between the banks involved, which is not always the case if the relationship is only established in order to service one or two clients who demand it.

TIMING OF STATEMENTS ON TARGET ACCOUNT Timing of statements on target account is an issue. End-of-day statements on the target account cannot be produced until a point on D+1, if they are to take into account the transfers into/out of header accounts. If a certain target account is linked to multiple header accounts, the target account statement will not be accurate until the transactions with all header accounts are complete.

FLAVOUR OF 'PARTNER BANKING' REQUIRED TO SUPPORT EFFICIENCY AND OPERATIONAL SIMPLICITY There is a pronounced trade-off for the user between, on the one hand, defining the banks it wants to use locally in combination with the desired concentration bank, and, on the other hand, the complexity, risk and efficiency of the scheme. Under the first variant, the concentration bank may have existing operational arrangements with some of the banks – stronger and weaker – and none with others. One can be certain that not all arrangements will be identical in (a) quality of information determined to identify balance to be moved; (b) timing of information; (c) messaging needed to move money; and (d) value-dating and processing of the transfer. Either the user or the bank (through its liquidity engine) will have to deal with the inconsistencies in order to get the scheme to hang together. There are then certain issues that are outside the control of the user, and of the concentration bank itself:

- the size and quality of the banks, and the willingness of the banks to extend credit lines to one another;
- willingness to extend attractive pricing and balance remuneration terms;
- organisational processes and controls around this service, especially if only three or four customers are using it, and even more if each instance is of a slightly different flavour;
- familiarity and trust between the two banks.

The different flavours of Partner Banking may not always come to the fore in the sales process, but they will be visible in production.

THE NEED FOR GREATER EFFICIENCY With Basel II just around the corner and the pressure on users to mobilise their own liquidity, it is not so easy to accept that a regional liquidity management scheme be 70% efficient – if the 30% is €40 million and the opportunity cost is €1 million per annum. As a result it may no longer be acceptable that significant amounts are left out-of-scope. For example:

- accounts not part of the scheme at all;
- accounts where the balance at midday is brought into the scheme but anything happening later is not;
- residual balances at 'underlay' banks, even if the overlay is100% efficient.

Since local banks remain part of the banking picture in order to achieve efficiency and coverage in the in-country activity, it is important to seek out options where such banks deliver cohesive solutions that maximise the efficiency of balance mobilisation, while moderating the risk and complexity for the user.

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