Goldman Sachs | TRANSACTION BANKING

Virtual Accounts and In-House Banks

Funding

Cash Management

Risk Management

Business Units

In-House Bank (IHB)

Banks

Working Capital

Netting

Liquidity Management
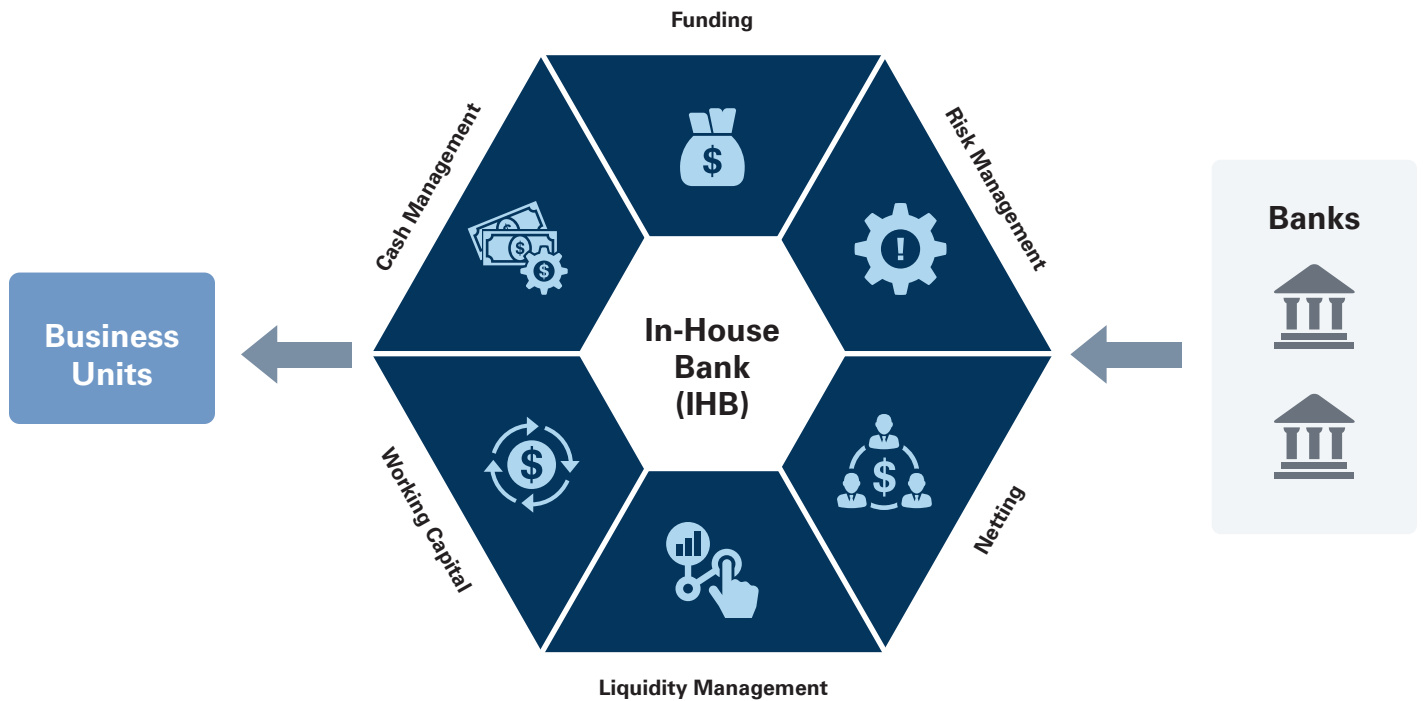
━━ An In-House Bank (IHB) represents a powerful treasury structure that has gained popularity in Europe and Asia.

However, there is now increasing talk among corporates about its potential in the United States. The same is true of a virtual account—rarer in the United States but more common outside it. This paper examines the emergence of these two trends in the United States and the opportunities they present to U.S. treasurers.

An IHB centralizes and insources a range of treasury functions that would otherwise be disbursed throughout the organization or performed individually by banks. A typical IHB contains the following basic elements:

- Centralized funding for the entire group
- Risk management, including foreign exchange (FX), interest rate, and commodity hedging
- Intercompany FX netting

- Liquidity management and cash pooling
- Working capital management, including centralized payments and receivables management
- Intercompany bank accounts that reduce the need for external bank accounts

In summary, IHBs can increase capital efficiency, operational efficiency, and liquidity efficiency, *and* they can reduce costs, including risk management costs.

IHBs perform an important role in centralizing payables and receivables activity, through shared service centers called payment factories and receipt factories. A payment factory is a centralized hub that manages an organization's payment processes and flows. It delivers greater efficiency through better automation, better straight-through processing, better reconciliation, and reduced FX costs by consolidating cross-currency payments. A receipt factory delivers similar efficiencies to the accounts receivable process, while also improving working capital through faster cash application.

In-House Bank

Receipts allocated to VA/C # 3559398187 on behalf of Subsidiary 1

Intercompany ledger

Intercompany ledger

Intercompany ledger

Subsidiary 1

Subsidiary 2

Subsidiary 3

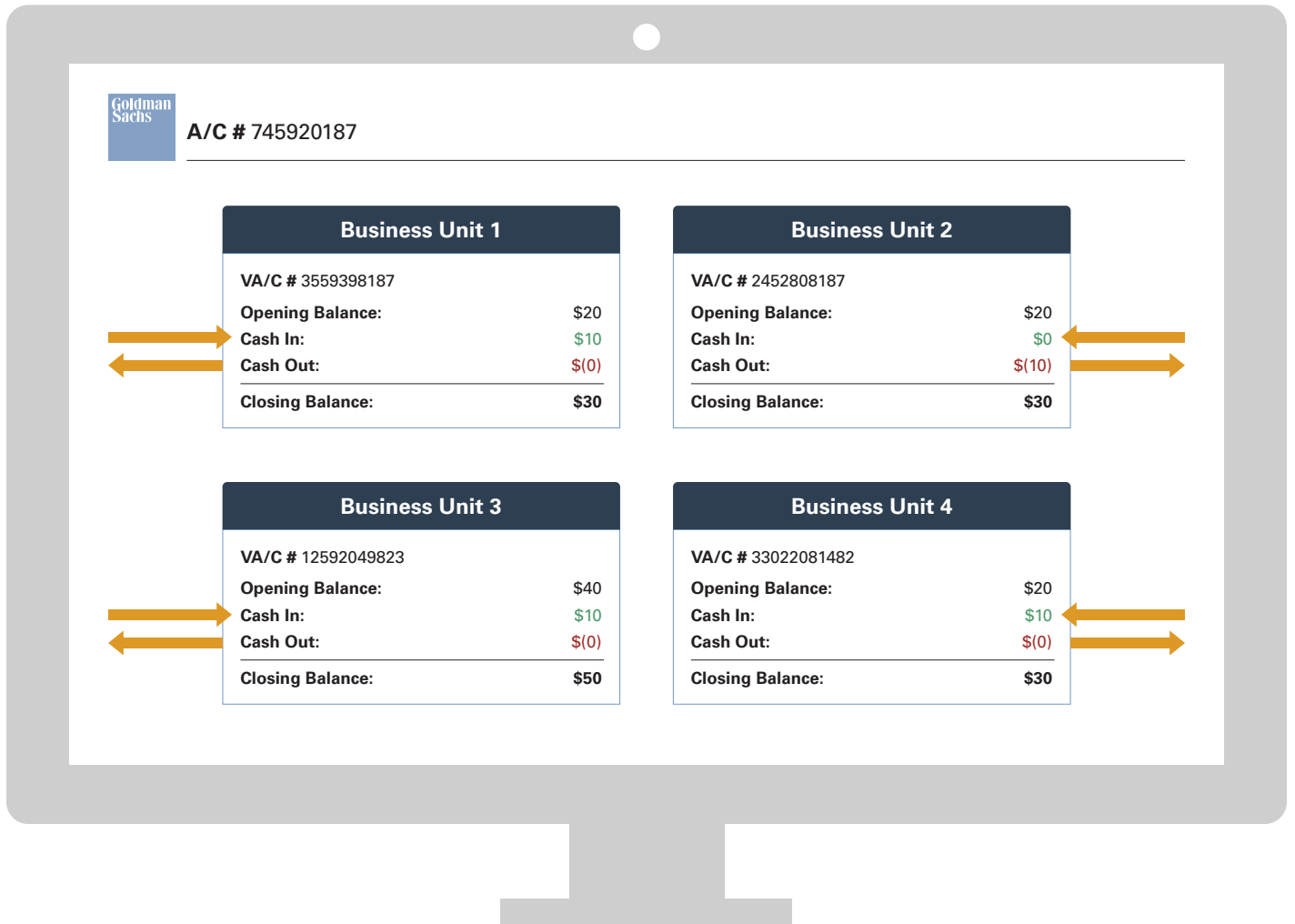Payments designated from A/C # 2453908145 on behalf of Subsidiary 3

When an IHB makes a payment on behalf of another group entity, it creates an intercompany position. The cash has gone out of the bank account of the IHB on behalf of the other group entity, so that other group entity now owes the cash to the IHB. Similarly, when an IHB receives cash on behalf of another group entity, it owes that cash to the other group entity, creating another intercompany position.

IHB intercompany positions are recorded on ledgers, which must accurately track and report all intercompany transactions, and correctly administer the interest receivable or payable. These intercompany ledgers necessarily operate on an arm's-length basis and replace traditional bank accounts or traditional bank borrowing. In other words, other group entities have accounts with the IHB instead of bank accounts at external banks, or loans from external banks.

Bank-issued virtual accounts can be a very effective way for corporates to manage these intercompany ledgers. Virtual accounts can act as those intercompany ledgers, with a couple of additional advantages. First, the bank does a lot of the "heavy lifting," for example in reporting and intercompany interest management. Second, bank-issued virtual accounts can drive even higher rates of straight-through reconciliation, particularly in receivables processing, through the use of clearing-recognizable account numbers.

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A/C # 745920187

Business Unit 1	
VA/C # 3559398187	
Opening Balance:	$20
Cash In:	$10
Cash Out:	$(0)
Closing Balance:	$30

Business Unit 2	
VA/C # 2452808187	
Opening Balance:	$20
Cash In:	$0
Cash Out:	$(10)
Closing Balance:	$30

Business Unit 3	
VA/C # 12592049823	
Opening Balance:	$40
Cash In:	$10
Cash Out:	$(0)
Closing Balance:	$50

Business Unit 4	
VA/C # 33022081482	
Opening Balance:	$20
Cash In:	$10
Cash Out:	$(0)
Closing Balance:	$30

Virtual accounts are subledgers that exist within a traditional or "physical" bank account. They divide the balances within a physical bank account and attribute all transactions to the correct virtual account. Each virtual account has an opening and closing balance, and records all incoming and outgoing transactions. Crucially, the total of all the virtual accounts always equals the total on the physical account. So virtual accounts report the same information that a physical account reports, but they are just subledgers within a physical account.

Each virtual account has a unique reference number, and each transaction into and out of the physical account carries a virtual account reference number. The bank's virtual account engine recognizes the virtual account reference number on each transaction and thereby attributes it to the correct virtual account.

One critical advantage bank-issued virtual accounts have over other types of virtual accounts or intercompany ledgers is that they can be configured as clearing-recognized account numbers. In other words, they can have the same structure as a physical account number. This means that customers can be issued their own unique virtual account number for remittances. When a remittance from that customer is received by the bank, the virtual account engine recognizes it as a virtual account number and posts it, simultaneously, to the correct physical account and to the virtual account for that customer.
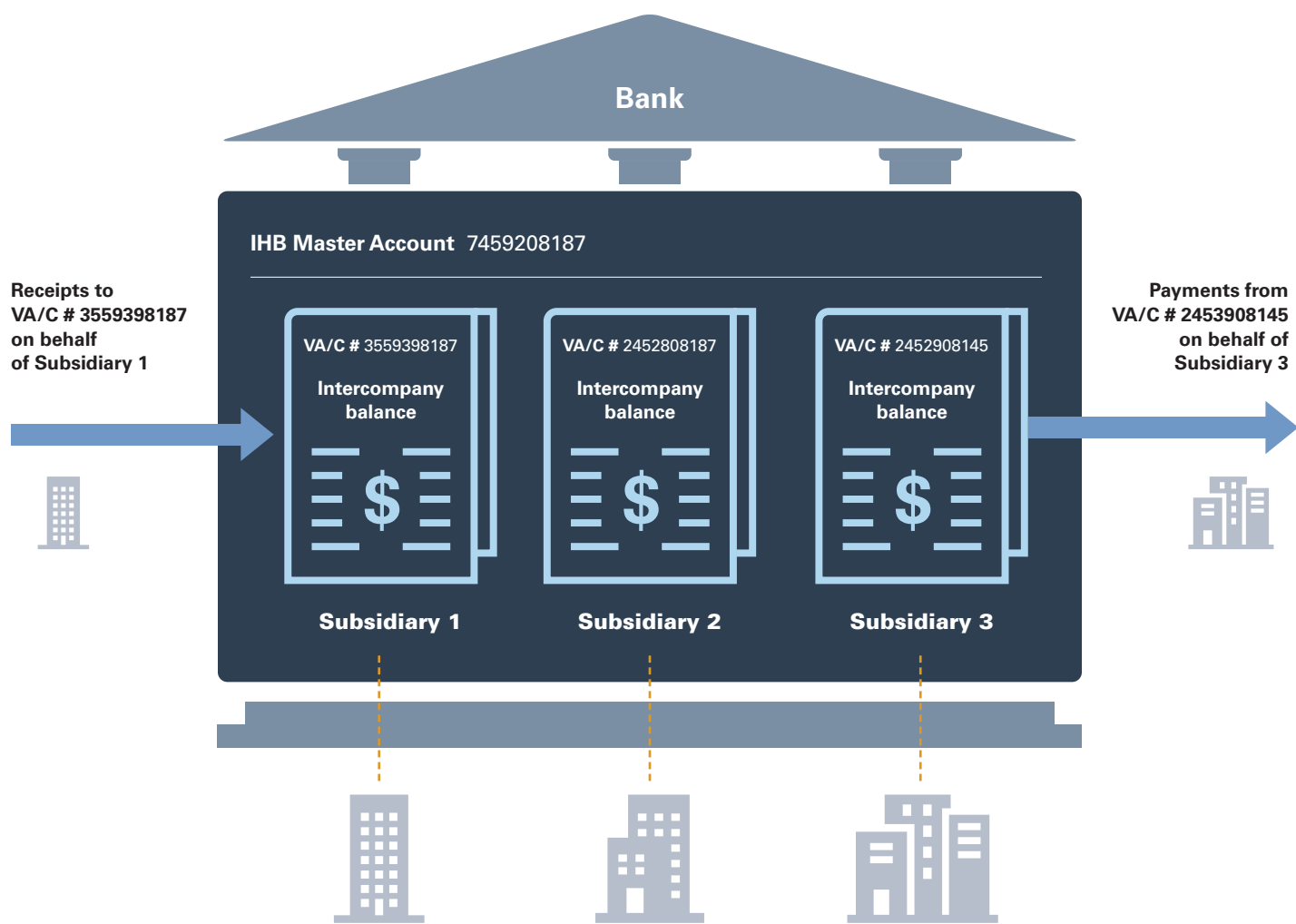
This is better than issuing customers a physical account number and a unique reference number, because the reference number can be omitted or transposed. In those situations, manual intervention is required, because the payment will still post to the physical account, but the remitter will not be automatically known. However, when the virtual account number is the customer reference, the remittance will either straight-through-process to the correct virtual account or be rejected.

Outgoing payments will also carry the virtual account number of the virtual account from which the debit was attributed. This simplifies payable processing and reconciliation, while suppliers will still recognize the account number on the incoming remittance.

Because of their ability to segregate and organize data within one physical account, virtual accounts can sit at the heart of an In-House Bank, operating as the intercompany ledgers. When an incoming receipt for subsidiary A is received by the IHB, the IHB's bank will credit the IHB's physical account, and it will credit (simultaneously) the virtual account associated with subsidiary A. This creates the intercompany payable between the IHB and subsidiary A. Similarly, if the IHB makes a payment on behalf of subsidiary B, the IHB's bank will debit the IHB's physical account, and (simultaneously) it will debit the virtual account of subsidiary B. This creates the intercompany receivable between the IHB and subsidiary B.

IHBs can increase capital efficiency, operational efficiency, and liquidity efficiency, *and* they can reduce costs, including risk management costs.

Bank

IHB Master Account 7459208187

Receipts to
VA/C # 3559398187
on behalf
of Subsidiary 1

VA/C # 3559398187
Intercompany balance
$

VA/C # 2452808187
Intercompany balance
$

VA/C # 2452908145
Intercompany balance
$

Payments from
VA/C # 2453908145
on behalf of
Subsidiary 3

Subsidiary 1   **Subsidiary 2**   **Subsidiary 3**

Virtual accounts can synchronize not only inter-company payments and receipts but also supplier payments and customer remittances in a "grand orchestration." Each incoming remittance from a customer to subsidiary A can be attributed to a virtual account that is unique to both the customer and to subsidiary A. Similarly, each outgoing payment to a supplier from subsidiary B can be attributed to a virtual account that is unique to the supplier and to subsidiary B. The external bank's virtual account engine orchestrates the attribution of the incoming and outgoing transactions, driving straight-through processing, straight-through reconciliation, and significant reduction in treasury team workload.

While virtual accounts track intercompany transactions and descriptions, they can also administer intercompany interest receivables and payables, further reducing the burden on the treasury team.

In-House Banks are an extremely powerful treasury solution that can drive significant efficiencies throughout the organization. Although the effort required to set up an IHB shouldn't be understated, bank-issued virtual accounts can help with implementation, while delivering ongoing improvements to straight-through processing and straight-through reconciliation. ■

For more information on virtual accounts and In-House Banks, contact a treasury specialist at Goldman Sachs Transaction Bank—gs-txb@gs.com.