

Goldman Sachs' Bold Vision for Virtual Accounts and the Future of Cash Management

As it enters the corporate cash management market, Goldman looks to revolutionize virtual accounts with better tech, more familiarization and streamlined processes.

Goldman Sachs is entering the cutthroat and increasingly crowded world of corporate cash management determined to play the role of innovative disruptor—no easy task. A cornerstone of Goldman's strategy is a product whose name is familiar to many corporate treasury professionals but that is not fully understood by all of them: virtual accounts.

That state of affairs has put Mark Smith, Goldman's Transaction Banking head of global liquidity, on a mission to answer every question treasury teams have about virtual accounts, particularly as the bank has just launched its own Virtual Integrated Account (VIA) offering in the US, with plans to roll it out internationally later in 2020. "Virtual accounts are a foundational product for us and we're conscious that awareness and understanding of them is inconsistent," Mr. Smith says. "We're here to change that."

The Basics

Virtual accounts began in the Asia-Pacific region in the early 2000s and started being used extensively in Europe in the last 10 years. In the last five years, they've become more mature in Europe, where there is less dependency on cash. They're a relatively new concept in the US, presenting Goldman with an opportunity to help corporate treasurers who are seeking more efficient liquidity solutions.

"At their most basic," Mr. Smith says, "virtual accounts are simply a way of organizing and reporting data within a real bank account." Traditionally, he explains, companies have organized cash flow information by having separate physical bank accounts. He cites an example of a corporate with 10 divisions, with each division having its own

bank account; in this instance, the cash balance, incoming receipts and outgoing payments can be tracked for each. "But that means maintaining 10 bank accounts," Mr. Smith says. One alternative is to have one bank account and tracking information on an Excel spreadsheet with 10 tabs. The trouble with the Excel model is that "correctly allocating the incoming receipts and outgoing payments can be time-consuming and error-prone."

Unique Identifiers

Virtual accounts organize data within a bank account so that it looks as if it's divided into mini-accounts or sub-ledgers (i.e., virtual accounts). Just like a real bank account, each virtual account has an opening balance, a closing balance, incoming receipts and outgoing payments. The key to achieving this is assigning a unique identifier to each incoming receipt and outgoing payment so that the bank's VIA solution can attribute it to the correct virtual account, and in turn the bank account with which it is associated. These identifiers can be reference numbers, in which case each payment instruction needs to contain the real bank account number and the reference number.

Alternatively, the virtual account identifiers can be configured as a clearing-recognized account number, such as an International Bank Account Number or IBAN. This method means that the payment instruction only needs to contain the clearing-recognized account number; no additional reference number is required. When the bank receives the incoming payment, the VIA system automatically posts it to the relevant real bank account and (simultaneously) reflects it in the correct virtual account. Virtual accounts and the real account are always kept in sync.

Mr. Smith says the benefits of the reporting capability of virtual accounts have helped fuel their growth among corporates. This is particularly true in Europe, where many cite the typical treasury need for better control and visibility over cash and liquidity. But the potential of virtual accounts goes far beyond reporting and visibility.

Rationalization

Virtual accounts are a great tool for tackling the challenge of bank account and bank rationalization. Treasuries worldwide have witnessed a proliferation of bank accounts over the past several decades as customers and supply chains have expanded globally. This has brought with it the time and cost required to open and maintain all those accounts.

With virtual accounts, once the master physical account has been established, any number of virtual accounts can be opened—all with minimal additional documentation, if any. This will be one of the main features of Goldman's VIA offering. "The Goldman Sachs offering is self-service, putting the full power and flexibility of virtual accounts in the hands of the treasurer," Mr. Smith says. This means treasurers "can effectively open and close virtual accounts instantly, and update hierarchies in real time. It's a totally different experience to managing traditional bank accounts."

In certain situations, virtual accounts can eliminate and replace real bank accounts, but with no loss of reporting detail. What's more, Mr. Smith asserts that a virtual account could end up costing at most a tenth of what a traditional account would cost—and in many cases, virtual accounts may be free altogether. Consequently, rationalizing traditional accounts into virtual accounts should save both time and money.

Goldman Sachs' offering can also function across ERP systems. This means users will have the ability to send information using all industry formats; it's also API-enabled and integrated across all the firm's product offerings, real time if required. This is unlike incumbent payment mechanisms, which many banks use, and which use a host-to-host

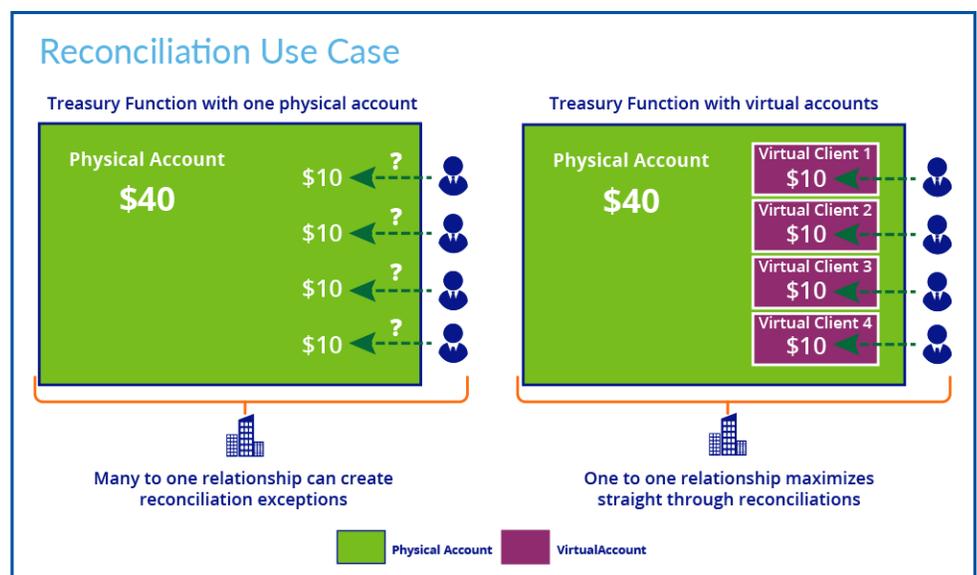
connection or node. Moreover, once the SWIFT structure is implemented, it's hard to change.

More than Just Accounts Receivable (AR)

Arguably the most documented use case for virtual accounts is in receivables management, which is how virtual accounts got started in Asia over a decade ago. Virtual accounts address an inherent problem with traditional receivables structures in which many receipts are received into one bank account, requiring significant manual intervention to reconcile.

Breaking up a traditional bank account into virtual accounts can, Mr. Smith says, drive much higher rates of straight-through reconciliation if, for example, one virtual account is assigned per client. Reconciling receipts vs. open accounts receivable in the one-to-one relationships in virtual accounts is, Goldman says, more straightforward than in the "many-to-one" relationships typical in traditional account structures.

Nikil Nanjundayya, Goldman's Transaction Banking head of emerging products, says that using virtual accounts this way eliminates the need to dedicate personnel to manual reconciliation, resulting in potentially significant cost savings. Furthermore, faster reconciliation can mean faster cash application and better working capital availability. Faster reconciliation can even lead to a better client experience.



Payments/Receipts On Behalf Of (POBO/ROBO)

Virtual accounts also drive significant efficiencies within a given legal entity, but they can be a powerful on-behalf-of tool when applied to corporate structures, Mr. Smith says. Subsidiaries no longer need to maintain their own bank accounts. Instead, they can maintain virtual accounts with a parent entity or treasury center. In this case, the virtual account becomes an intercompany ledger, recording the parent entity's or treasury center's position with the subsidiary, as well as all the underlying transactions.

If a treasury center makes a payment on behalf of a subsidiary, that outgoing payment will bear the subsidiary's virtual account number and will reflect simultaneously in that virtual account and post to the physical account. Incoming receipts similarly can be reflected on behalf of a subsidiary to the relevant virtual account.

While virtual accounts can drive POBO/ROBO structures, clients will still need to organize their payment and receipt operations centrally. This may require a time investment up-front, but the time and cost savings of POBO/ROBO structures will be well worth it and are well documented.

Virtual accounts can therefore sit at the heart of an in-house bank. Here, Mr. Smith is keen to reiterate the advantage of the Goldman Sachs virtual account offering. "Goldman virtual accounts can be configured to be clearing-recognizable, which some other in-house bank solutions cannot," he says. He adds that that other "engines"

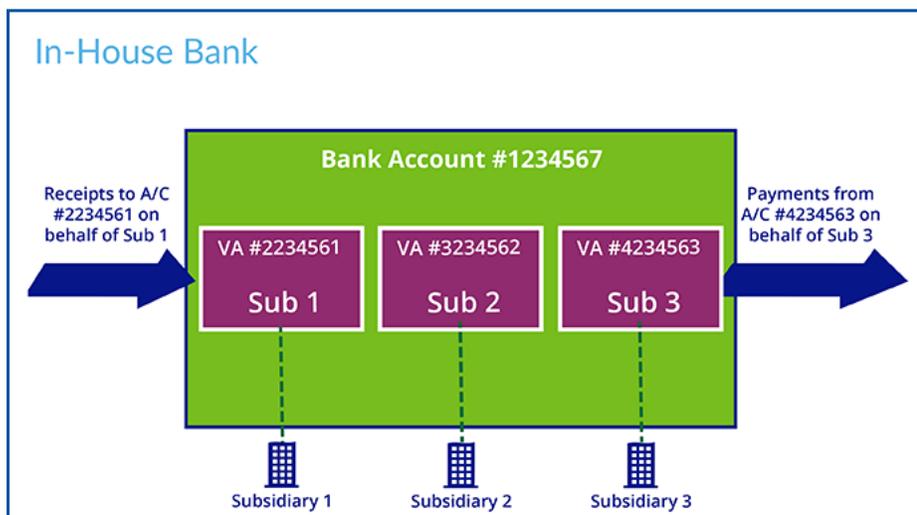
for virtual accounts rely on reference numbers, but those numbers can be mistakenly omitted or transposed, resulting in the inefficiency of manual intervention.

Some European banks, and even European corporates, believe virtual account structures may be a convenient way to address regulatory pressure on notional pooling. In Europe, Basel III requires capital to be held against the gross assets in a notional pool, not the net position. This has made notional pooling more expensive for capital-intensive European banks, which are subject to the supplementary leverage ratio; it has even called into question the future of notional pooling altogether.

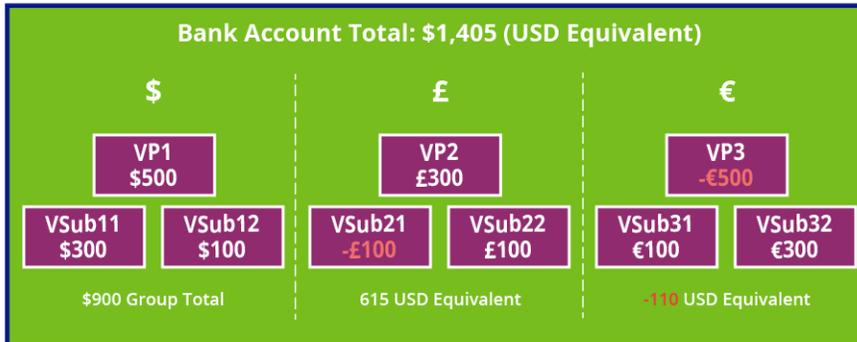
"Single currency notional pools can absolutely be replicated virtually," Mr. Smith explains. This is done by assigning virtual accounts to subsidiaries within the same physical accounts, he says. Mr. Smith adds that individual virtual accounts can be overdrawn, but if the physical account maintains a positive balance, no overdraft charges are incurred. The virtual pool is also self-funding and self-collateralizing. Crucially, only the net balance on the physical deposit is reflected for general ledger and regulatory reporting—including capital reporting. "There's no risk of gross-up as you have with a notional pool," Mr. Smith says. Finally, pooling in this way doesn't require cross guarantees as the bank faces only the one physical bank account.

Pooling Not Out Completely

Virtual multicurrency notional pools should also be possible through multicurrency virtual accounts, in which the parent physical account is denominated in one currency while the virtual accounts represent wallets in different currencies. The currency balance on the virtual accounts is translated into the nominal currency of the parent account but isn't converted via any FX trade—they remain in source currency. The economics should be like a traditional multicurrency notional pool, where net negative balances are charged a cost-effective collateralized overdraft rate. But again, cross guarantees aren't required as the bank faces the net position on the parent physical account.



Multicurrency Virtual Pooling



- Net Balance is \$1,405 (USD Equivalent)
- Overdraft interest on EUR accounts is still reduced because of long GBP/USD Balances
- **AND** Cross guarantees not required

Much simpler to set up and administer

Because cross guarantees aren't required, virtual notional pooling should be significantly more straightforward to establish than traditional notional pooling. Theoretically, more clients should be able to benefit from the cheaper funding costs and lower FX fees as a result, Goldman argues.

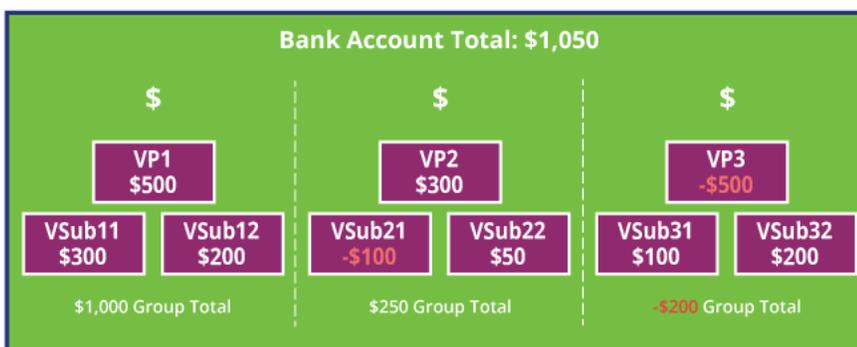
There is one important difference between traditional notional pooling and virtual notional pooling. In a traditional notional pool, there are no inter-company balances between entities. In a virtual notional pool, all participating virtual accounts represent an inter-company relationship with the entity that owns the physical account. For some corporates, avoiding intercompany balances is an important objective in pooling. Such corporates will need to weigh the potential advantage of avoiding cross guarantees against any potential disadvantages of intercompany balances.

KYC Questions

Both banks and their corporate clients have wondered whether virtual accounts can ease the burden of know your customer (KYC) and anti-money laundering (AML) rules when physical accounts are replaced with virtual accounts. The use of virtual accounts may streamline customer onboarding obligations, with a focus on the customer—the physical account holder. Still, it is reported that in South America, local regulations are requiring KYC by legal entity. "A certain level of due diligence will always be required on any participant in the US financial system, whether they participate physically or virtually," Mr. Nanjundayya says.

Mr. Smith and Mr. Nanjundayya maintain that Goldman's VIA is cutting-edge, and will continue to evolve, offering a best-in-class user experience, including full self-service capability as well as the ability to scale. As Mr. Nanjundayya explains, "Clients can open a million or more virtual accounts effective instantly themselves, should they need to—and to close them." Further, he says, Goldman Sachs clients will be able to structure accounts into hierarchies and adjust those hierarchies using the same self-service capability.

Single Currency Virtual Notional Pooling



- Net Balance is \$1,050
- Overdraft interest on USD accounts is eliminated because of net long position
- **BUT** Cross guarantees no longer required

Much simpler to set up and administer

This ability to scale isn't possible with traditional bank accounts, Mr. Nanjundayya says. Additionally, traditional cash structuring, including account opening, typically involves more engagement with the bank than is necessary with virtual structuring.

But Goldman doesn't just want to be at the leading edge when it comes to virtual accounts; it wants to define that leading edge and drive it forward. "We are also future-proofing our product," Mr. Nanjundayya asserts. While the bank is not willing to divulge specifics, Goldman's offering will include capabilities expanding into FX, analytics, cross-border activity and even M&A management.

It's All About the User

Goldman Sachs believes that the benefits of virtual accounts can benefit all clients and that its offering is not a segment-specific solution. That means it is flexible and can be adapted to corporates that have a variety of use cases, i.e., different corporates will use the accounts in different

ways. For example, a property manager may use them to track the cash flows for each building, while a software company may use them to manage developer payments.

Migrating to virtual accounts need only be as complex as changing bank accounts, although structuring them into more sophisticated solutions will need careful planning in partnership with the bank. However, the benefits of moving to virtual accounts should outweigh the costs many times over, Goldman says. In short, the bank says that virtual accounts should be at the heart of treasury transformation.

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