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FINANCIAL INNOVATION STRENGTHENS CORPORATE LIQUIDITY RISK MANAGEMENT

03/05/2021

As Financial Technology (FinTech) becomes more innovative and sophisticated, non-bank FinTech companies have introduced competition to the cash management business of banks. Gavin Wang, Head of Payments and Cash Management, Societe Generale China, shares his views on how banks can enhance their core strengths and provide liquidity management for enterprises more effectively through financial innovation.

FinTech accelerates the transformation of banking services

At present, the main differences among banks' cash management business – liquidity management in particular – are their client bases, and the investments they put into liquidity management in areas such as manpower, systems, technological research and local network.

Owing to its digital nature, FinTech is not bound by borders. This closes the gap in competitiveness and creates latecomer advantages, for example, by reducing the heavy or long-term costs that were previously needed. This is the reason why FinTech and digitalisation can smooth out the fluctuations in market competition.

Traditional banks in China, especially those with relatively smaller scale, are able to constantly provide new products with comparative advantage through digitalisation and FinTech. One example is the digitalisation of the back-end risk control with the help of big data and system integration. Digitalised risk control capability is extended to frontline sales teams, who are equipped with mobile terminals. As frontline staff collect background information directly from customers and conduct due diligence on them, they enter the information into the system. With these information and a preset risk management model, the customer's risk assessment results can be quickly determined for credit approval. This is a significant edge for banks in issuing microlending products. Frontline staff will only need to pick the relevant preset risk control questions in the system. Taking also data captured in the back-end (such as the client's tax declaration), the risk management model can automatically calculate the customer's credit rating and determine the credit limit. Such practices are highly information-based and timely, with a very low non-performing asset ratio.

When it comes to corporate liquidity management, cash flow to an enterprise is like blood circulation to the human body. Its health can be judged by two key indicators: permeability of the pipeline and the speed of the flow (compared to how fast blood is transported throughout the whole body). Stringent regulatory measures around the world and legacy systems are bringing an impact on the liquidity of enterprises. Liquidity risk of an enterprise can lead to operational risks, credit risk and the risk of capital chain rupture. These risks are getting even complicated in global enterprises involving multiple time zones and regions, as well as different regulatory frameworks across jurisdictions. FinTech can benefit from digitalisation to tackle these cross-border barriers in a more efficient manner, by building flexible and strong liquidity management platforms and enabling quicker and smooth conversion between assets and capitals.

Global banks can address liquidity challenges faced by Chinese clients in their overseas investments

Clients are clear about what they need for liquidity management: timely capital support against the backdrop of globalisation. This is in fact a key capability that many Chinese enterprises are still building. As a global bank, Societe Generale is able to provide clients with comprehensive advisory and recommendations, drawing on its domestic and global experience. Apart from the global network, global banks' track record in liquiditiy management and relevant solution offerings are even bigger consdierations of the client – the ability to provide them with tailored products and valuable advisory.

Under the scheme of "Going Out", the main challenges facing bank clients are immature market regulatory practices, unstable legal frameworks and numerous restrictions in developing countries. The experience and

expertise that global banks have to offer is especially valuable. It is because of the weaker digital capability in developing countries, global banks have the opportunity to export FinTech capability to meet clients' local business demands.

Moreover, these clients cannot rely on just one bank for all of their liquidity management needs in these countries, and often have to deal with the connectivity among several banks – this is one of the areas where global banks excel.

Key challenges in global liquidity management faced by banks

If enterprises have to manage the liquidity of its global subsidiaries, their key challenges will involve working with different regulatory restrictions across geographies, especially in anti-money laundering, anti-terrorism and legal framework. Existing framework can only satisfy basic business needs. Faced with the numerous restrictions in a strict regulatory environment, clients need to be supported by an agile information technology (IT) architecture. Some important concepts are:

- First, **data** - completeness, level of standardisation and timeliness of data. This includes banks' internal and external data: internal data refer to the level of connectivity and standardisation of data among departments, and the standardised external interface that meets the requirement of data system integration; while external data include data from central banks, regulatory reports, international clearing paths, etc.
- Second, **modularity or agility of the system**. Modularisation is built with a solid underlying IT architecture as the foundation, with various agile modules added to it. For instance, while the underlying infrastructure of a bank is stable and cannot be changed easily, yet by adopting application programme interface (API) or Open Banking, more banking functions can be achieved by building modules on top of it.
- Third, **maturity of external infrastructures**, such as the degree of sophistication of the banking clearing system, including connection to domestic or cross-border clearing systems, SWIFT and exchanges. The maturity of telecommunication technologies (4G/5G), and the degree of digitisation as well as openness of external infrastructures also have an important impact on the scalability and development of an enterprise's global liquidity management.

Banks should gradually improve core competitiveness through FinTech

The essence of finance is price discovery and value transfer across locations and time zones. Taking this as the starting point, in the future, banks may not be the only providers of financial services. In particular, when digital informatisation is well developed, there can be various forms of financial services around customer demand, scenarios and other elements.

With the deepening and development of FinTech, the financial eco-system will become more diverse, and its usability, compliance and security will gradually strengthen – even to a level close to that of banks. As FinTech develops to a certain level, these non-bank financial services providers will become highly applicable, such as third-party digital management platform, digital currencies, and some decentralised modules driven by blockchain and smart contract.

It is important for us to ponder what banks' core competitiveness may be in the future. With a broad scope of business, banks can use their core competencies to empower various modules operating in a society. For instance, a multinational bank with operating licences in a number of countries would have strong ability to integrate and allocate transnational resources. It can therefore become a universal financial institution that operates across regions, time zones, assets and markets, and effectively exports these capabilities to society. If a bank is to continue providing clients and markets with excellent services, it must possess an innovative mindset so as to understand the core competitiveness of future banking.

CORRESPONDENT BANKING IS ALIVE AND WELL AND HAS A KEY ROLE TO PLAY IN THE FUTURE OF INTERNATIONAL PAYMENTS

28/01/2021

Time and time again, correspondent banking has been reported dead as technology has advanced and we have moved into a brave new world. Time and time again, it has come back to life and demonstrated its enduring value.

Today's geopolitical and economic landscape might almost have been designed to give correspondent banking a new suite of purposes. In this respect, the key underlying points to consider include:

- the imposition of **international sanctions** - with the inherent complexity that arises from reconciling the demands of competing legal jurisdictions - has become almost commonplace;
- the trend towards increased **sovereignty** in the payments industry and other specialist sectors, a trend that we have seen being reinforced and accelerated by the spread of Covid-19;
- the **enhancement of the role of the euro** as a globally used currency for world trade and as an international reserve currency reserve;
- the future distribution of **central bank digital currencies**;
- the continuing development of **international commerce**.

Profound change

For the past five years, the niche market that is correspondent banking has been undergoing profound change. This is a result of the pressure exerted by **the needs of customers** in terms of **tracking**, **price** and **transparency**, the challenges that a growing number of financial technology firms are presenting to long-established banks, and continuing calls by regulators globally for **lower prices** for the end-customer.

The banking world has taken up the gauntlet and worked hard to address the issues, but there is still much work to be done. Today more than ever there is no room for complacency or self-satisfaction. We must all work harder. Upgrade, upgrade, **upgrade** is a **powerful mantra**. **Services**, **service**, **quality**, is another.

The evidence of the work being done is everywhere, from the **SWIFT gpi initiative** for tracking payments and service level agreement for the same-day processing of international transfers (this means that we have a commitment to process operations within 24 hours and not on the best effort as before) to process optimisation with SWIFT's Case Resolution to ensure the fast release of a payment.

The significance of scale

We do not make any immodest claims to perfection. Larger banks, by the very nature of their size and organisational complexity, are almost inevitably slower than microscopically small financial technology start-ups in certain respects. That lack of speed is, however, offset by a far higher **degree of**

robustness and **resilience** in the **building of industrial-scale solutions** and in **reach** and **liquidity** when offering those solutions to end-customers.

Established **major banks** offer a breadth and depth of **service provision** that new arrivals will long struggle to match. There is evidence available to back this claim. The surge in the sale of British pounds in exchange for euro when the result of the UK's vote to leave the European Union became known set a test for the liquidity of fintech firms.

The more recent collapse into bankruptcy and disgrace of Munich-based payment services provider **Wirecard** serves as another reminder that size, strength and reach remain important factors in the international correspondent banking equation. Post-Wirecard, fintech firms will surely face greater regulatory scrutiny and constraints.

Despite the undoubted advances in technology, **stability**, **reputation** and **trust** retain a certain value.

What happens now?

What, then, lies ahead? We expect to see continuing advances in the delivery of **innovative solutions**, including new **ISO 20022-based formats** that are expected to go live in 2022, more new services and the further enrichment of information within messages, driving up the rate of genuine straight-through-processing. The international correspondent banking network is an essential component of that future vision.

We expect to see **SWIFT** continuing to evolve to cope with the increase in the volume of low value **cross-border payments**, which has now become firmly established as the fastest-growing part of the payments market. Traditional banks need to work out how best to grow their share of that tranche of the market in a profitable way. And should the research projects that are currently being undertaken by central banks bring fully fledged **digital currencies** into existence alongside of, or in replacement of, traditional fiat currencies, we need to be ready.

In conclusion

Our industry has changed, and will continue to change, as it reacts appropriately to the lasting impact of Covid-19.

Banks, as well acting in the capacity of a trusted third party – bolstered by an increasingly enterprising SWIFT network – are well placed to remain at the centre of the **international corporate payment industry**, and even to explore successfully other segments with higher growth potential such as retail and SME payment needs.

We all need to change accordingly and never lose sight of the needs of the most important stakeholders in local, national and international systems alike: **our clients**.

We see a future full of promise as backstage activity injects new capabilities and vigour into international banking systems. We expect to see further concentration and a short-term sacrifice of revenue. The winners will be those who have the capacity and the strength of will to accept the heavy ongoing **long-term investment** that will need to be made if we are to continue anticipating and satisfying client needs.

PRIVACY ENHANCING TECHNOLOGIES (P.E.T), OR HOW TO IMPROVE OVERALL EFFICIENCY AND REDUCE MANAGEMENT COSTS FOR MANY USE CASES IN THE FINANCIAL SECTOR

09/11/2020

Cecile BARTENIEFF, COO and Head of IT & Operations for Societe Generale Global Banking & Investor Solutions (GBIS) took part in SIBOS' November session round table about Privacy Enhancing Technologies (P.E.T).

Maintaining data quality is a real challenge for financial institutions. Beyond the costs involved, data compliance and updating are tasks that require considerable human resources.
Every year, banks purchase data worth hundreds of millions of euros from Data Vendors (firms that specialize in obtaining and reselling customer information for other companies). Data changes and needs to be updated both for business development purposes and to meet the demands of regulators, who pressure financial institutions to maintain their data at the highest possible quality levels.
Since even the Data Vendors are finding it difficult to preserve the quality of their own data, this is a big ask.

This is why, at the beginning of 2018, Societe Generale (via its Global Business Service Unit) joined a consortium called **MADRec** (**M**ass **A**nonymous **D**ata **Rec**onciliation), to launch a platform used to measure the Group's data quality by comparing it with its peers and Data Vendors. Several banks and Data Providers have progressively joined the consortium, attracted by the stakes of the project. Due to a different strategic vision, Societe Generale decided to withdraw from MADRec in September 2019, to set up its own consortium and create, on the same principle as MADRec, a new platform to assess whether P.E.T could enable the creation of a shared solution to :

- **measure the quality of client data against its peers without revealing data and client relationships;**
- **avoid a costly third party to centralize checks;**
- **reduce internal maintenance costs.**

Thanks to the P.E.T, at the beginning of 2020 we've been able to reach the right level of trust among us and run proof of concepts that validate these assumptions. This is the **DANIE project**.

The DANIE project brings together a consortium of banks and data providers collaborating to develop an innovative industry solution that will help improve data quality, reduce costs and drive standardization for critical reference data required for trade processing, risk management and regulatory reporting.
The consortium's objective is to improve data quality by using a distributed reconciliation capability (P.E.T) to securely and anonymously highlight each firm's own data anomalies against equivalent values submitted by peers. The technical solution is provided by a London based startup called **Secretarium**.
DANIE's consortium started with **our first use case to benchmark reference data quality on third parties with our peers via a matching key: the Legal Entity Identifier (LEI)**. All data fields linked to this LEI could then be reconciled with our peers.
Each participant sent his list of LEI to DANIE's platform, anonymously and encrypted, with respect to the format of each data field required by the platform.
Depending on how large the dataset is, it takes from seconds to a few minutes to get a report showing if you are in full consensus with your peers and where you have anomalies.
The major difference compared to the current approach, is that we can compare our data directly with our

peers **respecting privacy and without a trusted third party**.
Three banks and three data providers participated in the POCs. The first one took place in March 2020 with 22,570 LEI on 15 data fields. The second one was done in June: DANIE's consortium extended the volume of LEI to 200K with around 30 data fields. In a matter of seconds, banks were **able to identify 5 to 10% of errors among thousands of data items**, using a user-friendly platform.

The consortium is planning to extend the data set to Anti-Money Laundering (AML) /Know Your Customer (KYC) areas. The DANIE Consortium continues to onboard new Financial Institutions as this solution can only be valuable and efficient if many players/banks join the exercise. Thanks to the scalability of the confidential computing provided by Secretarium, we need to think of DANIE as a platform where we can add several applications. A data quality Benchmark is the first application, but **we can think of applications for Anti-Money Laundering, Counter Financing Terrorism regulation, Market Data etc., as this new technology paves the way to many opportunities**.

> ***" I believe in Privacy Enhancing Technologies (P.E.T): the desire for privacy is not a passing trend. Whether led by Government, regulations or consumer demands, we must be ready to operate in a world that prioritizes data security and privacy. P.E.T deliver technical solutions to this challenge. Thanks to these technologies, which allow us to collaborate directly with our peers, we will improve overall efficiency and reduce costs for many use cases in the financial sector. "***
>
> **Cécile Bartenieff**
> **COO and Head of IT & Operations for Societe Generale Global Banking & Investor Solutions**

THE IRRESISTIBLE RISE AND RISE OF CENTRAL BANK DIGITAL CURRENCIES

05/10/2020

The creation, development and implementation of central bank digital currencies (CBDCs) is beginning to look inevitable. A growing number of major central banks around the world have now launched investigation and experimentation initiatives and it is surely only a matter of time before they achieve greater recognition, respectability and, essential for any successful form of currency, wide acceptance.

As in other spheres of activity, Covid-19 has accelerated a trend, in this case towards the **replacement of cash** that was already in place. Fears that cash might literally be dirty and infected have helped drive **digitisation of money** to hitherto undreamt - of levels, as debit cards, credit cards and other forms of digital payment have gained a firm foothold at much lower levels of transaction value than were previously accepted as a minimum for non-cash.

To use, or perhaps even misuse, a popular metaphor, the **CBDC** (Central Bank Digital Currency) train has left the station and is gathering pace. Anyone who fails to board will be left well and truly behind in one of the potentially most significant geopolitical and macroeconomic advances of our age.

The question of certainty

There are a number of reasons – ranging from political and philosophical considerations to the economic and technical – why this is unfolding. Very little is certain at this stage, but we believe that we can state that whatever the eventual timing of the delivery of CBDCs might be, it will be dependent upon the successful development of suitable infrastructure at the national and international level, and that this is expected to be built on a highly sophisticated public sector/private sector collaborative model requiring the highest level of technological expertise and understanding. Depending on the form CDBC will take (eg: retail value reserve only? international currency ambitions? …), **heavy investments might be required**, and it could take at least **three to five years**.

The history of **cryptocurrency** to date has been rooted purely in private sector initiatives. The origins of the most prominent, and best known, **Bitcoin**, remain shrouded in uncertainty, if not downright mystery. We still do not know the true identity of its supposed creator (Satoshi Nakamoto), despite the varying claims that have been made in recent years. One cannot help but be reminded of the famous scenes in a certain pseudo-historical moving picture, in which a number of men stand up in turn and claim to be the rebel leader, Spartacus. Or even Monty Python's Life of Brian.

The growing number of investigations and experiments launched by the likes of the US Federal Reserve, the European Central Bank, the Bank of England, the Bank of Japan, the Swiss National Bank and the People's Bank of China means this will change. All are, of course, important to their various supporters, but as committed Europeans, we believe it is vital for the ECB's efforts to be at least as successful as the others.

Sovereignty still matters

If nothing else, it is a question of **sovereignty**, centred on the **monetary policy control of a currency** within one's borders and the share of a currency in international transactions. We think these considerations on their own will drive the development of the digital euro and the digital dollar.

Facebook's proposals for its **Libra** 'stable coin' came as a shock to central bankers, who immediately saw a threat to their currency sovereignty. The prospect of Mark Zuckerberg displacing central banks and staking a leading claim

in the digital currency universe with Libra or a future successor to Libra is almost literally unthinkable. Even the 'stable coin' mooted by the globally respected JP Morgan could prove too hard for central banks to swallow.

The harsh reality is, however, that Facebook has a well established and apparently highly loyal international user community that is almost 10 times the size of the population of the United States of America. That alone gives some cause for concern.

Some thorns will persist

Not everything in the garden will be rosy. Some thorns will persist. While CDBC could help international payments to be **faster** and **cheaper**, but payment systems in developed countries broadly meet customer needs already, and we should not believe that CBDCs will represent a panacea, or universal cure.

They will not solve existing **foreign exchange limitations** (including, for example, currency controls and the operating hours of central bank settlement systems) and filtering issues due to worldwide non-harmonized **AML processes** in payments that can create friction when managing international payments flows. Moreover, as Sweden has found, the disappearance of cash can lead to even higher levels of financial and social exclusion than are currently prevalent in a number of countries.

In conclusion

Despite the bullish sentiments being expressed by many cryptocurrency fans, the overarching impression is that no single CDBC would be adopted worldwide tomorrow and that we would end up with the same fragmentation as today, with local CDBC being only additional currencies to manage, a widely available alternative to existing currencies and their underlying systems rather than a complete replacement.

It is important to **test and understand CDBC mechanisms** so that we do not miss an exceptional opportunity to develop a public/private co-operation that could be beneficial to the entire economic ecosystem. But the essential fundamental question remains: **how far should we go with currency digitalization?** Perhaps the answer will be clearer by Sibos 2021…

What is a CBDC ?

Bank for International Settlements Definition: a CBDC digital form of CB money that is different from traditional reserve balances held at a CB by financial institutions or in settlement accounts.

Current CB initiatives aim at digitalizing (i) reserves held at CB by FIs and (ii) physical cash used by individuals and companies.

CBDCs would constitute a third form of money, 100% backed by the good faith and credit of the state and its ability to levy taxes. "