Cross-border payments: success factors and remaining challenges

1. An ambitious 19 building block programme led by the CPMI and supported by an unprecedented political will at the global level

The Chair explained that the topic of cross border payments received new momentum starting in 2019 when it was noted that the cost of cross border payment was not really going down, and the global average cost of sending remittances was still estimated at around 6%. The topic was moved to the top of the G20 agenda under the Saudi Arabian presidency, and the Financial Stability Board (FSB) then took the lead to organise the work. There are 19 building blocks.

The Chair asked about the CPMI work, what has been achieved and what has still to be achieved. An official stated that we consider the 19 building blocks the necessary elements to improve cross border payments. From a small standard setting body perspective, the initiative is a large load, but we have made some great progress. We are working together with the FSB, the IMF, the World Bank and the Financial Action Task Force (FATF) on taking forward all these different elements.

The 19 building blocks can be split in several ways. There are high focus groups, but there are some very technical and standards oriented building blocks such as ISO 20022 or application programme interface (API). There are some very fundamental policy issues harmonising regulatory frameworks and more; the CPMI is mainly leading the more technical sides of those: ISO, API, payments versus payments (PVP) and liquidity bridges. Those technical issues are related to improving existing payment systems, but there is also a set of building blocks about building new systems. This would be related to multilateral platforms, central bank digital currencies (CBDCs) and stablecoin arrangements. Importantly, the political will really exists for this programme. G20 leaders are strongly behind it.

1.1 After a ground-clearing phase, it is time to implement projected changes

An official stated that we monitored our progress in October 2021, and it was published. This will be done again in 2022. We will start in August and September in order to assess our progress to be wrapped into the FSB report on that to be published in October or November 2022. We have published several reports and done considerable ground clearing. We is starting to implement the changes.

An official stated that she is very excited about two reports that we is bringing out on building blocks 10 and 12. The building block 10 report is about expanding access to payment systems and the building block 12 report is on extending and aligning opening hours. The first report is a framework for best practices to consider expanding access to payment systems to non bank payment service providers. The other report looks at the benefits of three scenarios for extending and aligning the operating hours of payment systems. Both reports should be out in May, and it is going to be exciting to see how we can implement some of these changes.

1.2 One essential challenge is to systematically factor in the current of forthcoming payment arrangements, a multilateral and international dimension, which requires standardisation efforts

The Chair asked which building block is the top one, what the most important ones are, and which ones particularly matter within the EU.

A Central Bank official stated that the building blocks directly affecting central bank operations are the most important ones. Notably, building blocks 10 to 12 concern access to and operations of central banks' payment infrastructures.

Major improvements in cross border payments might only be possible with further and more improvements and involvements of the public sector. For example, central banks might be required to broaden their scope. That could mean that we facilitate setting up a multilateral platform, as already envisioned in building block 17, and factors international dimensions into the CBDC designs. That is also very important for all central banks in the euro system.

Standards are key. The migration of TARGET2 to ISO 20022 will enable banks to send and receive more information, resulting in better straight through processing and automated payments. Furthermore, harmonising ISO 20022 messages might be able to transmit harmonised know your client (KYC) information across borders with a global Society for Worldwide Interbank Financial Telecommunication (SWIFT) migration to ISO 20022. TARGET2 will be interoperable with other real time gross settlement (RTGS) systems in Europe and very important around the globe.

1.3 Improving cross-border payments will also benefit the EU

A Central Bank official stated that the payment market in the EU is already deeply integrated, but there could still be a profit for the intra EU cross border payments from the current developments. There is still room to improve payments between euro and non euro countries. For example, sharing the TARGET Instant Payment Settlement (TIPS) infrastructure and enabling the settlement of non euro payments in TIPS will help to further integrate the European payment landscape. Cross currency payments could further deepen the integration as the next step. TIPS could position itself as a pan European hub for interoperability.

1.4 Adopting improved settlement processes is also essential to reducing risk given the ever-growing volumes and political sensitivity of certain currencies

The Chair stated that CLS has been a great success, so ever bigger volumes are being settled securely. Nevertheless, the unsettled part has also been growing. The Chair asked why and what solutions are proposed. An industry speaker stated that CLS is celebrating its 20th anniversary in September 2022. We are settling 18 currencies. For those 18 currencies, we are covering 90% of the addressable transactions within them. On average, over $6 trillion USD equivalents of transactions are settled every day with liquidity needs of only less than 1%. It works very smoothly. We have just released a new technology on it, so it is addressing issues.

Three dimensions are important. The biggest one is that we settle only 18 currencies, so there are currencies that we do not settle that are becoming more and more systemically important. Setting up an appropriate mechanism to provide PvP settlement in line with building block 9 from the CPMI work is challenging. It is more complex than a pure technical issue and will require some efforts on the regulatory and legal fronts and calls for public-private partnership.

There is also a growing part of the market that is coming from what we call 'same day activities'. It is not real time activity because we are in the field of FX. We cannot really speak of real time, contrary to the RTGS context, where there are money market transactions that are settling through delivery versus payment (DVP) mechanisms in which collateral is being delivered through payments primarily in the same currency as their local currency. In our case it requires different processes because it is necessary to have the ability to pay in different currencies than the banks home currency. This creates different processes and challenges that needs to be answered. We have developed a trusted market solution relying on usage of capacities to generate liquidity in other currencies at time of settlement, and we are looking for further adapting it to meet future market needs.

The third element to bringing in new currencies into this very efficient settlement mechanism is to require them to comply, legally and regulatorily, to the high level of standard that we are providing through our system. This is compatible in particular with the Bank for International Settlements (BIS) regulation and principles for financial market infrastructures (PFMI), to which we have to comply.

1.5 Enhancing the accessibility of CLS to certain non-banks is also necessary

An industry speaker stated that the last element is certain non bank entities that cannot access our services today. Such entities are not banks, and therefore cannot access our services as prescribed within the CLS Rule Book (based on rules of law for finality of settlement) under which we operate. These non-bank entities include counterparty clearing houses (CCPs) or more exotic firms that are not eligible to participate in CLS. We are considering possibilities of removing those potential barriers.

1.6 Enabling effective Straight Through Processing (STP) and early information on payments are essential targets that require sustained efforts and stress the size of the data challenge ahead

The Chair stated that SWIFT addresses networks and messaging standards for international payments. The other G20 countries have also worked on message standardisation. The Chair asked if the content of messages is sufficiently rich for allowing cross border STP. He also asked what SWIFT has been doing in the last five years and what is expected in the next five years.

An industry speaker stated that there are hopefully no borders in the world of cross border payments. We started our journey in 2017 with the Global Payments Innovation (GPI) programme. At present, 44% of the payments process is hopefully completed within about five minutes.

In the past, a payment was sent, and we did not know when it arrived. That is no longer the case, and 90% of the payments are confirmed to credited accounts, so we know exactly when they are confirmed. We has the information on the fees, so we know exactly how much a payment cost. We believe that transparency is a big component of further developing and improving payments.

Challenges remain. The current transparency is post fact. We believe that we need to bring that transparency before the payment is even sent. The questions are what we believe is going to happen and where we should invest in the next five years.

The first place to invest is the data layer. There will not be instant payments if there is friction in the chain, and a very good report from the BIS and the CPMI explains the friction points and the data behind it very well. The data is the first prerequisite to develop and improve.

There is a question around the data issue. We are going to invest into richer data, but it needs to follow end to end from any ecosystems. We hear a great deal about new developments and digital currencies or interlinking of MI. This will not work if the data that flows between these ecosystems is not complete. We is investing in that data layer considerably.

The second issue is removing the friction with our projects such as pre validating a payment. We learned a great deal from other companies about how important the customer experience is. Together with the banks, they are investing a great deal in their front end. That experience is going to make the difference in the next five years.

Europe is in a unique position because of this early migration on rich data format. Whether it is in a high value payment system or low value in automated clearing house (ACH) or an instant payment system, it is going to be the same standard. This is fairly unique. Even in CBDCs, everybody is talking about the same standard of data.

1.7 Cost, speed and transparency are key progress areas for improving customer experience that should impose effective regulatory harmonisation and leveraging innovation

The Chair stated that Western Union is one of the leaders on the retail payment side. He asked what the key building block regarding this segment of payments is, and what needs to happen to make the business more efficient in the interests of the people. An industry speaker stated that focus on the consumer is definitely a key driver in the retail space and digital spaces. From a consumer perspective, the three key concepts are cost, speed and transparency.

On cost, we have several compliance laws in place that are not harmonised. When there is a new money laundering (ML) directive, the colleagues of an industry speaker at his US company ask what is different, what they have to implement and what the new European rules and set of standards are. They also ask for the standard so they can start to work together. However, they need to wait because there is not one standard for Europe. It is necessary to multiply for each member state because everyone has a certain degree of flexibility around when they are going to implement the ML legislation. The standards are critical because we will help consumers. We will help companies to work more efficiently and help to build the best in class of compliance in order to help companies invest back into the system.

The second point is on speed. These are real time payments. We need to remember that the last mile integration is absolutely critical if it is connected to real-time or partner banks, as is the time to the market. Several innovations can be implemented. We also need to be mindful of requiring a certain ability to implement all these changes in a timely manner, and also in terms of interoperability. We have a lot of changes that can allow us to leverage technology. Electronic ID and KYC are much more advanced and secure, but work happens at different speeds.

An industry speaker stated that the central bank of Sweden has the ability to KYC customers practically in real time in every country. Italy still has processes designed around retail. We even need to send documentation by post in 2022. This is really not acceptable. It could help to invest back into the financial services sector, announce the payment infrastructure and guarantee much better quality in terms of control, customer experience and wealth for the entire system.

A level playing field was also expected. All actors and non bank providers would have access to intra bank payments, clearing, settlement infrastructure and sometimes more transparency of the regulation in place.

There are opportunities with Covid because interoperability and the capacity to implement faster new use cases is possible in Europe. A Covid pass contains a simple QR code that can be used and scanned across every single European country, but it seems impossible to do that in terms of financial systems.

1.8 PSD2 illustrates that delivering harmonised rules and practices and futureproof legislation is challenging, even within the EU

The Chair explained that Amex is a truly global company, and the G20 work is also truly global. National laws are also relevant. The Chair asked which EU legislation also matters from the cross border perspective and what is most important there.

An industry speaker highlighted the Payment Services Directive (PSD). Some lessons can be learned from it. There are some very sound objectives, and great progress has been made.

Some lessons can be learned from challenges at the rulemaking level on implementation details. As PSD2 was implemented, there was variation across markets. Some markets prohibited surcharging. Others allowed it, but only in certain circumstances like the use of a consumer card. For a business or corporate card, surcharging was allowable. In other instances, there were even markets where surcharging was subject to contracts. This variability creates confusion for the merchant and the consumer that could play out in cross border travel and online transactions.

The second example of sound objective implementation that could have been somewhat smoother is around strong customer authentication. The goal was reducing fraud in the areas of 'card not present' transactions. This is more of a case of designing a regulation that might not be futureproof and is specifically related to requirements about dual authentication. Some ways that can reduce fraud do not rely upon it. If the legislative goal had been to reach a certain fraud level, flexibility from payment institutions and issuers of cards in achieving that would have been a better way to implement the provision.

Third, open banking is a great success story for PSD2. However, we came out of PSD2 with multiple forms of API for banks or institutions to connect to in order to transmit data. A focus area would be harmonising that. It is advisable to bring industry players together to drive towards greater standardisation of a single API to achieve the scale effect across the EU and beyond. This holds great promise.

2. The optimal mix of improvements of existing tools and adoption of innovative arrangements

The Chair advised remembering that card payments are still the key instrument in cross border retail payments. He asked for the most important building blocks in which the most energy should be put into.

2.1 Close public and private sectors cooperation and the current effort for improving existing tools are innovation enablers

An official stated that the building blocks of PVP, ISO, APIs and multilateral platforms are closely related to the improvement of existing platforms. All of these are foundational, which means allowing us to build something that we can build upon.

We donot only have political support to progress; there has also been clear commitment by public sector and private sector individuals. Nobody can improve cross border payments alone. We have been having several conversations with different entities and has committed to working with the private sector.

A Central Bank official stated that a number of building blocks in the G20 roadmap address the need to harmonise anti money laundering (AML) and KYC standards. Those issues must be solved independently.

An industry speaker stated that it will first be necessary to solve 'real-world problems'. The question is what is to be improved. Sometimes, the shortcomings of a new technology are the same: the AML, checks and consistency. The new technologies have the same problems that can be improved, and that is what is very likeable about the work by the BIS and CPMI. It is very pragmatic.

2.2 Choosing between improving existing infrastructure and innovation requires a better perception of actual anticipated benefits and an effective adoption

An industry speaker stated that the question of how to flip between improving existing systems and new ones is the big one because central banks and private firms will have to make the decision on where to invest. This is a good question that is going to have to be decided by central banks and firms, but we are going to need to make investments in both of those areas. The question will then be how much, where and when.

The second point is ensuring that this is not about just a new system, but also the adoption. When there is new data to adopt, SWIFT takes a great deal of time. It is about 7,000 banks. The banks have a great deal to deal with and they need to absorb all this new technology. It is necessary to find a way because SWIFT cannot do anything alone. It does this with its member banks, the PSPs and everybody connected on SWIFT. We have to try to make sure that this adoption problem is resolved, and that comes with reuse.

When considering new solutions, it is advisable to consider them as modular. If the problems are made too great, there will be an adoption challenge. If SWIFT thinks about pre validation, we have to look at domestic initiatives that are already pre validating. The question is how to ensure that the banks do the job so that the bank account becomes the 'best digital wallet'. If the data is right, it is possible to get there. It is advisable to think about that modularity and global solutions. It is not advisable to consider this beyond one jurisdiction. These are going in the right direction.

SWIFT is building the new rails. They are based on rich data, so we want to reuse that. It should be ensured that those rails are instant. They will be API based, but they should also be able to settle on correspondent banking accounts, MI accounts or new wallets.

2.3 Strengths and limitations of CBDCs in improving cross-border payments

2.3.1 To improve cross-border payments, CBDCs should leverage the fact that they start from a clean slate, although most related projects are of domestic reach

The Chair asked about CBDCs in Central Banks in the coming years. He also asked about the potential of stablecoins against CBDC.

A Central Bank official stated that CBDC projects are advancing all around the globe and there is great potential for improving cross border payments if cross border interoperability is considered from the start when designing a CBDC. Transaction chains should be shortened. Payment messages could definitely be further standardised, and the overlap between opening hours could also be maximised. There is a chance to start from a clean slate. It could be possible to create global standards for cross border CBDC use before the majority of countries have finished their own projects.

2.3.2 Any international dimension for CBDCs comes with a host of additional challenges

A Central Bank official stated that most CBDC projects currently have a more domestic scope, whereas cross border use is more of an afterthought. Furthermore, an international dimension for CBDCs comes with a host of new challenges depending on the level of adoption. Countries could become more interconnected, increasing the risk of transmitting shocks. The currency substitution could also be an issue. Measures would have to be taken to prevent this, which may elongate CBDC projects.

Besides the big picture, there is also an element of how to make retail CBDCs interoperable. Several promising prototypes are trying to offer real time DVP settlement via wholesale CBDC.

2.3.3 Global stablecoins are projected but are not for tomorrow, and their closed-loop nature reduces their added value to the cross-border payment challenge

A Central Bank official stated that timing will be a huge challenge. Following Meta's withdrawal from its Diem project, no global stablecoin solutions will seemingly arise in the near future. Nevertheless, this is not to be taken for granted because there is still considerable noise around stablecoins. Other big players have started new stablecoin projects. Meta is also continuing its Novi digital wallet project.

CBDCs will probably try to be as open as possible, whereas stablecoin providers might try to develop closed loop solutions to ensure as many users as possible on their platform. That would not be an efficient structure for the global payment landscape.

2.4 Finally, the likely outcome would be many different cross-border payment models

The Chair asked if there is a risk of fragmentation among new players, CBDCs and private solutions for correspondent banking. An industry speaker stated that a world with many different payment models is foreseen. We is preparing for that world. We should keep correspondent banking improvements and discussions on the interlinking of market infrastructure on track. We see explorations moving onto many stages on CBDCs as well.

2.5 The main priority would be to anticipate undue fragmentation, notably by improving connectivity, accessibility and regulatory consistency (in particular within the EU) and preserving the data conveyed

An industry speaker clarified that fragmentation is already a reality. The question is how to ensure movement in the right direction. The work of the BIS and the CPMI and global attention on cross border payments banking are helping because these discussions will converge on many elements.

The issue is sometimes not the length of the processing chain. Data from the BIS report showed that 85% of cross border payments have one intermediary and 98% of the payments just have two intermediaries. For the majority of the time and the friction, 80% of the delay is at the receiving bank. Operating hours, currency control or batch processing might be able to solve it. However, it is advisable to look at the data.

An industry speaker would like a world in which we could make the chain longer and connect together. A transaction can originate in one system and another one. If the data and the processes are the same, the chain can be even longer. It will be possible to achieve the same goals that we set for ourselves if we design that with no data truncation and the same transparency and compliance processes. An industry speaker is fairly positive about what we are going to achieve together. It is advisable to be realistic because adoption takes time, so it is advisable to do it in blocks and in the same direction.

The Chair asked an industry speaker what is on top of his to do list for EU policymakers and legislators. An industry speaker stated that he sees a great deal ongoing in a positive way. Especially at a central level with the European Central Bank (ECB), the European Banking Authority (EBA) and the European Commission (EC), there is a consensus that it is necessary to elevate the payment industry with more standards that will help everyone.

Going a step further would probably mean moving some of this legislation and making it directly applicable across Europe by moving that to regulation. At that point, it will be much easier to implement a standard. We will be sure that, when we take something, it can be moved across countries and sectors, creating a frictionless experience. CBDCs are another critical point.

There was some discussion about PSD3 or PSD revision. It is desirable to see it guarantee access to banking services to all known banking operators. At the moment, it is a recommendation in PSD2. Some of those critical services are being removed from some of the operators, especially for those that deal with some so called 'risky business'[1]. There is a complete risking of an entire industry, and this should not be acceptable. This should become much more enforceable with real tools that are not present in the legislation because it is more of a general recommendation.

2.6 Innovation should introduce both opportunities and further competition

The Chair stated that instant payment is an emerging topic, and CBDCs might be a little more remote. The Chair asked if these two are competitors or an opportunity. An industry speaker stated that instant payment and CBDCs are both. They are 'frenemies'. We are a global card scheme operating in more than 130 countries. There are instant payments opportunities for us, but all the same themes have been touched upon throughout the conversation: harmonisation, interoperability standards and common standards. To get the scale out of instant payment systems, it will be necessary to lure new competitors and create new products.

We have created new products since the adoption of PSD2 in Europe. Payment initiation creates competition and choice for the consumer to the extent that the scale and ability to do this in a cross border context exist. Because the instant payment systems are connected and interoperable, it is only going to provide the necessary scale to grow those types of innovations again. The time lag for CBDCs to be really disruptive in payments will probably be a little longer.

3. Defining the right tools and approaches requires clarifying the market's needs and making clear political choices

3.1 Effective innovation in retail payment services requires refining many components, which will eventually define the actual service

An industry speaker stated that the challenges are not only those of harmonisation, interoperability, and standard setting in order to create frictionless, fast, cross border, inexpensive movement of funds. Many other questions need to be answered around the balance between privacy and AML banking secrecy act (BSA) requirements, the impacts on the banking system and the capability of the central banks to manage accounts. There is a question around what that would do to the deposit base of banks.

There are several other questions to resolve, including whether this will become a direct competitor to debit oriented products as opposed to credit products with greater protection. The ability to borrow funding for some time means there are liquidity benefits, but there are also chargebacks and more. There are some complicated issues, and whether this is simply a replacement for cash is to be determined.

3.2 On the wholesale space, policy makers must consider wholesale specificities and provide the necessary impetus

An industry speaker stated that he does not see beyond the building blocks because the first part of the building block policy is regulatory driven. The solutions that are positive for retail are not the same for wholesale. The problem of liquidity management requires different answers.

It is necessary to understand market needs and how to define what is needed. From there, it is possible to build solutions and choose a technology at the end. However, it should not be done the wrong way around.

The need for the wholesale market FX is to accommodate the larger currencies not currently settled in CLS. Those currencies are presumably members of the FSB so it should be possible to create a mechanism that allows for exchanging existing exposures, trades and swaps in a safe environment with a PVP mechanism, even during geopolitical tension. Institutions would be protected

1. Some high risks associated with debit and credit cards and other forms of electronic payments specific to certain types of merchants

from the Herstatt Bank risk[2] on those transactions. There is a responsibility on the public side and from a private sector side who cannot resolve it alone.

CLS is ready to build a safe harbour or Switzerland type global financial market infrastructure (FMI) channels that can safely help it to deliver those and put those systems in place. Only public private sector partnerships will be successful in this endeavour, so we need the public sector on that. We really need a strong message from the authorities and central banks to say yes to the market and tell the other side to find a solution. The authorities should mandate banks to use PVP market solutions, which are providing safety and taking away the remaining systemic risk deriving from FX trades.

2. Herstatt risk' occurs when one party may not be able to receive another party's currency after delivering its own due to the delivery lag between the two currencies traded in the foreign exchange market. This risk can be approached by assuming that it is an increasing function of the delivery lag and transaction value.