ANALYSIS

Payments must be smooth under all circumstances

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For a financial system to be reliable, payment systems and securities clearing and settlement systems must operate smoothly. This financial system infrastructure has undergone a radical change in recent years. Finland has become increasingly dependent on international systems in the new millennium. It is therefore important to ensure that, for example, payment transfers and card payments also operate when data connections with other countries are down.

Payment and securities clearing and settlement systems are fundamental for the functioning of the economy and the stability of the financial markets. Financial infrastructure is needed, for example, for the transfer of funds between individuals or businesses. Securities trading, in turn, requires systems for transferring securities from seller to buyer and funds from buyer to seller.

As a background function in the economy, financial infrastructure – if operating smoothly – is often unnoticed. Should problems occur, day-to-day life in society would quickly become difficult. Finland's financial infrastructure has operated reliably over the past year.[1]

The financial infrastructure has, however, changed significantly in recent years. In particular, payment methods and systems used in Finland have undergone a swift internationalisation process over the past 15 years. The first stage involved a changeover of cash currency from the markka to the euro. This was followed by the vanishing of domestic bank cards, with people beginning to use international payment cards and SEPA credit transfers. At the same time, the underlying domestic payment systems were replaced by international ones. Securities post-trading systems have also changed markedly. Finland uses, for example, the services of international central counterparties[2] and plans to migrate to the pan-European platform for securities settlement (Target2 Securities, T2S).

Internationalisation and integration of systems increases efficiency. From the perspective of cost

efficiency, it may not necessarily be reasonable for a small country such as Finland to maintain all systems by itself. From the viewpoint of continuity and contingency, however, dependence on international data communication networks and systems is problematic. Better preparedness is needed for situations in which we cannot trust the operation of international systems.

Payment transfers between banks and card payments should also operate in times of payment disruptions or crisis. People must receive their pensions as agreed and salaries on payday. They must also be able to use the funds on their bank account for paying, for example, their electricity bills or food purchases and medicines. Smooth operation of card payments and bank transfers is crucial in modern society.

In Finland, people have begun to ask how regulation should better cater to, for example, the operation of payment transfers in the event of serious disruptions. The Ministry of Finance has set up a working group to propose essential changes to regulation concerning the statutory duty to prepare for exceptional circumstances in the financial sector.

In addition to international dependency, systems also entail other risks which have their origins in the very nature of the systems themselves. For example, some systems entail credit risk between the participants. In such a case, there is a risk of non-payment, should one of the banks fail, for example. Liquidity risk, in turn, means that a counterparty temporarily runs out of funds and cannot make a payment on the due date.

The management of credit and liquidity risk is particularly important in regard to instant payment systems. Such systems are also being launched in Finland this year. Naturally, operational risks are also of key importance. Systems can become non-operational due, for example, to an unexpected technical problem or human error.

Digitalisation has brought about new kinds of vulnerabilities. There is increasing discussion about cyber risks that threaten various societal functions. Cyber risks are global in nature, and countering them requires international cooperation. It is of utmost importance to also focus resources on cyber security of payment and securities settlement systems.

A severe cyberattack targeted at a key financial infrastructure could powerfully paralyse society. Operations could become disrupted or – even worse – information on, for example, personal debts and assets could become distorted. Distrust of bank account balances would significantly complicate the handling of many everyday practicalities.

Criminals can make cyberattacks for disruptive purposes, but also with the aim of making money. For instance, counterparties using the services of SWIFT, the leading financial market messaging service, have been under cyberattack, and SWIFT has taken several measures in response.[3]

As technology advances, systems are also modernised and updated, which entails its own risks and challenges. For example, the Finnish central securities depository, Euroclear Finland, has been working on a large-scale project to overhaul its systems. The project has been ongoing for several years, and the timetable has been revised a number of times. Finnish markets will not be able to join the T2S platform according to the original schedule. As part of its oversight function, the Bank of Finland is monitoring the system overhaul closely and contributes to supporting the migration of Finnish markets to the T2S platform.

Management of various risks and sustained confidence are essential for the operation of systems. Confidence can be lost in an instant, but rebuilding it after a cyberattack, for example, takes a long time. Bank of Finland oversight seeks to ensure the soundness of systems both in normal times and during periods of stress.

Preparedness for unforeseen situations requires collaboration between the authorities and the private sector, because smooth operation of systems depends on all parties. The importance of commonly agreed contingency measures is underlined by the fact that operation of the infrastructure is vital for society as a whole.

Digitalisation, which is at present strongly shaping the landscape, poses an additional challenge for continuity arrangements (see Kari Kemppainen's article 'Payments becoming increasingly real time and less visible'). Payment and securities clearing and settlement systems must also be sound and secure in the ever-changing world of the future.

Notes

1. For further information on the systems in use in Finland, see https://www.suomenpankki.fi/globalassets/en/financial-stability/oversight/infrastructure-critical-to-the-finnish-financial-markets-20170505.pdf. ↑
2. In securities clearing, a central counterparty interposes itself between the counterparties, becoming the buyer to the seller and the seller to the buyer. ↑
3. See https://www.swift.com/myswift/customer-security-programme-csp_. ↑

Key words

contingency planning, cyber security, payment systems, securities clearing and settlement systems