

## Pushing through undercurrents

### Technology’s impact on systemic risk: A look at payments

As more financial institutions embrace digital innovation, risks emerge that could threaten the stability of the financial system. Some of these risks originate from a single sector. Either way, they could proliferate and become systemic without appropriate management.

To understand what these technology-driven risks look like, the World Economic Forum (the Forum) and Deloitte consulted over 100 financial services and technology experts in the development of a new report, Pushing through undercurrents. This group shared more specific perspectives on the forces behind technology-driven systemic risk in the payments sector. Here’s a summary of what we learned. You can learn more in the [full report from the Forum](#), and the [executive summary from Deloitte](#).

#### Risk 1: Accumulation and securitization of “buy now, pay later” debt

##### What could go wrong?

Easy access to point-of-sale financing, paired with weak underwriting rules, may lead to overborrowing and spill over to the financial system through debt securitization. The risk is growing because:

- Weak credit controls create opportunities for impulse buying and easy accumulation of debt
- Limited reporting requirements for buy now, pay later (BNPL) debt limit the visibility of customers’ total debts
- Securitization of BNPL debts could create contagion in the wider financial system
- The conflicting incentives of protecting customers and increasing sales may accelerate debt accumulation

This risk could become systemic if, for example, a recession hits—affecting customers’ ability to repay their loans—when the volume of BNPL debt is at significant levels and a large percentage is securitized as subprime borrower debt.

##### What sectoral and regional forces could amplify the risk?

- Big Tech companies offering BNPL loans
- An absence of regulations in jurisdictions where BNPL financing is offered
- Low rates of financial literacy

##### How can the industry mitigate it?

Goal	Mitigation opportunities
Customer protection from overborrowing	<ul style="list-style-type: none"> <li>• Establish safeguards to protect against overborrowing and misleading advertising</li> <li>• Develop codes of conduct for BNPL providers</li> </ul>
Transparency on customers’ ability to pay	<ul style="list-style-type: none"> <li>• Improve data sharing among BNPL providers</li> <li>• Include BNPL data with credit bureau reporting</li> </ul>

## Risk 2: Security vulnerabilities of decentralized central bank digital currencies architecture

### What could go wrong?

Central bank digital currencies (CBDCs), that run on decentralized ledger technology (DLT) widens the attack surface for malicious actors. The risk is growing because:

- DLT networks have many participants that hackers could exploit
- A bug or malfunction in a supporting DLT platform could cripple the system
- Side-channel attacks could be used to break into user wallets and steal customer funds

This risk could become systemic if, for example, a rogue nation-state launches a distributed denial-of-service cyberattack on the CBDC payment network of another country, causing outages of critical services.

### What sectoral and regional forces could amplify the risk?

- A complex CBDC network architecture
- Interoperability with other networks
- A large number of participating institutions

### How can the industry mitigate it?

Goal	Mitigation opportunities
User protection and data privacy	<ul style="list-style-type: none"> <li>• Incorporate protection to end-user digital wallets challenges</li> </ul>
Strong access control and network security	<ul style="list-style-type: none"> <li>• Set up a tiered ledger system for CBDCs</li> <li>• Use quantum-resistant algorithms to protect CBDC systems</li> </ul>
Cross-border security standardization	<ul style="list-style-type: none"> <li>• Standardize CBDC security protocols</li> </ul>

To learn more about technology's impact on systemic risk in payments, including examples, please see pages 48-59 of the [full report](#).

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