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 banking 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: Risk exposure from Banking as a Service offerings**

**What could go wrong?**

Banking as a service (BaaS) increasingly relies on application programming interfaces, introducing vulnerabilities that can pose risks for banks. The risk is growing because:

- Customers’ sensitive data and funds may be at risk from phishing and social engineering attacks
- Flawed APIs might provide a back door for hackers to penetrate banks’ systems
- Noncompliance with data privacy rules by BaaS providers might expose partner banks to reputational risks

This risk could become systemic if, for example, a malicious actor launches a distributed denial-of-service attack on a BaaS provider, keeping customers from accessing their accounts or making transactions.

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

- A complex BaaS technology stack
- Limited redundancy measures
- A lack of input validation, enabling attackers to upload malicious code into a bank’s systems through its APIs

**How can the industry mitigate it?**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Mitigation opportunities</th>
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| Strong security for BaaS platforms and API connectivity | • Use input validation protocols  
• Apply network segmentation and access control measures |
| Properly vetted BaaS partners | • Improve due diligence on BaaS providers |
| Institutional knowledge transfer from banks to BaaS partners | • Help BaaS and other fintech providers get better at risk management and compliance |
Risk 2: Inadequate stability mechanisms for stablecoin arrangements

What could go wrong?
Stablecoins mimic fiat currencies but without the backing of a central bank, heightening the probability of a run. The risk is growing because:

- Governance and regulatory gaps could perpetuate illicit activities that might threaten the integrity of the broader financial system
- The novel technologies used for minting and managing stablecoins are exposed to security risks
- The absence of a stability mechanism like deposit insurance increases the risk of a run

This risk could become systemic if, for example, a significant stablecoin issuer fails to promptly honor large customer withdrawal requests, touching off a run and eventually collapsing the stablecoin arrangement.

What sectoral and regional forces could amplify the risk?

- A less mature regulatory environment
- Stringent capital controls, which may encourage individuals in those jurisdictions to park their assets in global stablecoins
- Unsecure systems and poorly managed internal processes

How can the industry mitigate it?

<table>
<thead>
<tr>
<th>Goal</th>
<th>Mitigation opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardization and oversight of stablecoin arrangements</td>
<td>• Requirement for anti-money laundering and “know your customer” processes for stablecoin issuers</td>
</tr>
<tr>
<td>Investor and customer protection</td>
<td>• Offer insurance coverage for stablecoin tokens • Enforce responsible marketing rules and customer education</td>
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<tr>
<td>Transparency of capital reserves</td>
<td>• Periodically audit and stress-test stablecoin issuers’ reserve assets</td>
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