

## Box 18 Sources of risk in payment systems

### **Credit risk**

The financial risk that a counterparty will not settle an obligation in full, either when due or at any time thereafter. In exchange-for-value systems, credit risk is generally defined to include replacement cost risk and principal risk.

### **Liquidity risk**

The financial risk that a counterparty (or a participant in a settlement system) will not settle an obligation for full value when due. Liquidity risk is usually temporary. It does not imply that a counterparty or participant is insolvent, since these may be able to settle the required debit obligations at some unspecified time thereafter.

### **Foreign exchange settlement risk**

The risk that one party to a foreign exchange transaction pays the currency it sold, but does not receive the currency it bought. This risk is also known as Herstatt risk.

### **Legal risk**

The risk of loss arising from the unexpected application of a law or regulation or because a contract cannot be enforced.

### **Technical/operational risk**

The risk of human error (including system management failures), deficiencies in information systems (e.g. as a result of a breakdown of some component of the hardware, software or communications systems or a terrorist attack) or failure of internal controls which are crucial for settlement. Technical/operational risk may cause or exacerbate credit or liquidity risk.

### **Systemic risk**

The risk that the failure of one participant in a transfer system or a disruption to the system itself or in financial markets will result in other participants in the system or financial market participants not being able to meet their obligations when due (the so-called domino effect). Systemic risk is a consequence of the materialisation of (non-) financial risks.