

Closing panel remarks

“Liquidity crises: what can be done to address them?”

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Introduction

- Pleasure to have been invited to this conference
 - takes me back to the late 1980s-early 1990s, when I was discovering and exploring payment and settlement system (PSS) issues
 - particularly exciting times intellectually
 - hardly anyone was doing work in this field
 - need to develop basic conceptual frameworks to better understand the nature of the risks and their interconnections
 - enormous progress made since then, as confirmed by this conference!
- Topic of this panel is, however, a bit broader:
 - how to prevent and manage liquidity crises (LCs)
- What I will do
 - having defined the term “LC”
 - list **8** propositions about
 - the nature of LCs
 - how they might be addressed
 - in the process, highlight the role of PSSs
 - and will try to be deliberately provocative...
- ...which makes the usual disclaimer all the more important!
 - the views expressed are my own and should not be interpreted as those of the BIS
- **Definition of LC**
 - sudden and possibly prolonged evaporation of both market and funding liquidity
 - with potentially serious consequences for the stability of the financial system and the real economy
 - **Market liquidity (ML)**
 - ability to trade an asset/instrument at short notice with little impact on its price
 - **Funding liquidity (FL)**
 - ability to raise cash (or cash equivalents) either via the sale of an asset or by borrowing
- **P 1: Beyond obvious idiosyncratic elements, all LCs share at least 2 key characteristics**
 - **1.** once materialise, at the core of their dynamics is a mutually reinforcing feedback between ML, FL and counterparty risk (CPR) -- or Credit Risk (CR) more generally
 - sometimes initially $\downarrow ML \rightarrow \downarrow FL$ (eg, recent turmoil)
 - others initially $\downarrow FL \rightarrow \downarrow ML$ (eg, LTCM 1998)
 - in all, CPR either triggers or amplifies the original disturbance

- induces withdrawal from transactions, ↓ credit lines and funding and ↑ in variation margins/haircuts
 - **2.** LCs are **not** like meteorite strikes from outer space, but the endogenous result of the build-up in aggressive risk-taking and associated overextension of balance-sheets over a prolonged period (“financial imbalances” (FIs))
 - unmistakable signs: growth of (overt and hidden) leverage; unusually low risk premia and volatilities (eg, 2 cases above), buoyant asset prices
 - I am excluding, of course, those episodes due (and seen to be due) to purely technical factors (eg, Y2K, 9/11)
 - far less disruptive precisely because recognised as such
 - **corollary:** build-up characterised by “artificial liquidity”
 - self-reinforcing process between liquidity and risk-taking implies that both ML and FL look highest precisely when they are most vulnerable
 - ↑ FL → ↑ RT & ML → ↑ asset prices → ↓ volatilities & risk premia → ↑ FL etc.
 - the build-up sows the seeds of its own destruction
- **P 2: Role of PSS in preventing LC is important but limited**
 - **important** because badly designed PSS exacerbate LCs once they materialise: 2 ways
 - amplify concerns about CPR
 - no DVP; no PVP; no central counterparty; even no knowledge of identity of counterparties or even own positions (eg, assignments and lack of trade confirmation in CDS market)
 - amplify uncertainty about cash flows, receipts and payments
 - no certainty that pending payments will be executed with finality (eg, previous unwinding provisions in Large Value Fund Transfer Systems)

=> Some excellent work done over the years to address these limitations, not least under the aegis of the Basel-based Committee on Payments and Settlement Systems
 - **limited** because of 2 reasons
 - **1st:** some mechanisms to address CPR, **by design**, put more pressure on liquidity, which needs to be properly managed
 - DVP, PVP, RTGS
 - **2nd:** above all, fool-proofing PSSs **cannot** address the build-up in risk-taking and underlying asset quality problems that almost invariably hide behind LCs
 - in most serious cases, LCs are just the harbinger of more serious and damaging asset quality/debt problems linked to the down-legs of oversized credit cycles (as in the current case!)
 - in the limit, fool-proofing could even be counterproductive, if confidence in strength of infrastructure induces market participants to take on greater risks
 - just as improvements in the state of the roads (eg, smoothing the surface) can make people drive faster!

=> Indeed, PSSs functioned very well during the current severe liquidity crisis, thanks to previous efforts!

- **corollary:**
 - need to complement the strengthening of PSSs with other policies.
 - Continuing the analogy with policies towards road safety:
- **P 3: need to improve buffers** (eg, car bumpers, guard rails). 2 ways
 - **buffer type 1:** higher capital adequacy
 - up to a point, higher capital buffers can enhance liquidity, because of the critical role of CR/CPR in liquidity crises
 - eg, it was concerns with potential losses on thinly capitalised Off-Balance Sheet (OBS) vehicles (conduits and SIVs – the so-called “shadow banking system”) which *triggered* a run on them
 - their (high) liquidity transformation simply allowed this to happen and exacerbated it
 - watch out for the “parallel banking system” (money market mutual funds), given the high leverage implied by the “no break-the-buck” promise (underestimated issue)
 - => Had Basel II been implemented, OBS vehicles would have been ultimately supported by better capitalised institutions!
 - **buffer type 2:** liquidity buffers per se
 - **1:** need to strengthen risk management to ensure that liquid resources are commensurate with the liquidity risks taken on
 - a recent Basel Committee report finds lots of room for improvement in stress-testing and contingency planning
 - **2nd** way: use regulation and supervision to ensure that buffers are high enough
 - when designing them, however, I would personally caution against reliance on **time-invariant** minimum liquidity ratios
 - only amounts **in excess** of these ratios can act as buffers!
 - as the LC strikes, binding minima could raise the imbalance between the SS and DD for liquidity (act “procyclically”)
 - indeed, as with minimum capital requirements, the likelihood is that size of the buffers over the minima could decline as risks build-up
 - since mis-pricing of risk lies at origin of the problem in the first place!
 - thus, **2 potential issues:**
 - **1,** (specific) time-invariant minima would fail to address the endogeneity of risk with respect to the collective behaviour of institutions and could add to procyclicality of the financial system
 - **2.** (more general) stronger buffers, like improving the state of the roads, may also lead to faster speeds!
 - not uncommon view among market participants:
 - “what’s the point of a better risk management system unless one can take on more risk?”
 - if so, speedometer, not a brake!

- **P 4: desirability of putting in place (variable) speed limits**
 - **principle**
 - slow down the build-up in risk-taking (overextension/FIs), by increasing the resistance to it as imbalances develop (a kind of “dragging anchor”).
 - allow the speed to pick up faster following any strains that do materialise (by “releasing the drag”)
 - ⇒ act as a stabiliser in both upward and downward phases of the credit cycle
 - Technically, the shadow price of the measures would increase with the build-up in risk-taking and fall as risk materialises
 - **in other words**
 - need to think how to induce a greater degree of **counter-cyclicality** in the prudential framework (including buffers) to offset the potentially excessive **procyclicality** of the financial system
 - not an easy task!
 - but various instruments, including capital and liquidity
- **P 5: CB framework for liquidity-provision is a double-edged sword**
 - **trade-off**
 - o.t.o.h. acts as a buffer
 - o.t.o.h. may also act as an accelerator!
 - ex ante knowledge of its presence may induce faster speeds/greater risk-taking (“moral hazard”)
 - **corollary**
 - need to balance the two aspects
- **P 6: in a LC, technically the key to effectiveness is not the net amount of liquidity provided [narrowly defined as “additions to stock of reserve balances with the central bank (CB)/monetary base”] but its distribution in the system**
 - despite what we often read in the press or some observes note,
 - what CBs put in with one hand, they take away with the other!
 - current serious dislocations to the interbank market (IBM) are no exceptions (BIS Quarterly Review article)
 - key is to ensure that liquidity reaches those that most need it and are unable to obtain it at sufficiently attractive terms in the market (ie, “**intermediation role**” of the CB)
 - hence the ↑ in the range of eligible counterparties and collateral and the ↑ in the maturity of the operations
 - **corollary**
 - by necessity, terms will need to be more favourable than the market’s
 - **justifiable** either if (a) better information (not always the case) or (b) solve coordination failure/externality (quite possible)
 - concern: CB may take too much risk ex ante and, if liquidity operations are large and prolonged, as recently, they may get locked in (“**exit problem**”)!)
- **P 7: need to develop principles for liquidity provision to address such market-wide liquidity disturbances**
 - there is a body of generally accepted principles in context of *solvency crises* of banks
 - how to restructure the institutions and what the supporting role that liquidity from the CB should be

- but no equivalent consensus where problems initially take the form of **market-wide liquidity disruptions**, as in recent IBM dislocations
 - where problems are much more diffused
 - so far, CBs have largely been de facto shaping those principles through their actions; but more reflection is needed and is indeed under way!
- principles would need to
 - consider the relationship between operations in normal times and at times of stress
 - balance liquidity support with moral hazard risk
 - develop “exit strategies”
- **P 8: need to reconsider also possible role of monetary policy (interest rate setting) in prevention of LCs**
 - key: link between the level of policy rates and risk-taking. 3 questions:
 - **1st**: to what extent have the unusually low policy rates in current upswing induced greater risk-taking?
 - my personal answer: “their effect should not be underestimated”
 - in recent paper with H Zhu we have argued that the “risk-taking” channel is an important but neglected aspect of the monetary policy transmission mechanism
 - **2nd**: should monetary policy lean against the build-up of risk-taking and associated FIs *even if* near-term inflation appears under control?
 - my personal answer: “yes”
 - another “speed limit”, possibly the most important of all
 - **3rd**: is there a risk of an excessively strong and prolonged easing in response to the unwinding of FIs, itself the consequence of previous risk-taking?
 - my personal answer: “yes”,
 - there is a potentially serious **exit problem** here too
 - eg, experience in Japan and elsewhere
 - in answering all of these questions, as in the case of liquidity operations, moral hazard considerations loom large.

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