Module 3

# The Role of Global Capital Markets

## Liquidity Crises
## (When prices go stale)

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## What is liquidity?

**Corporate liquidity** = how quickly a firm can engage in financial transactions
(e.g. selling assets or issuing money market securities) to cover a mismatch in asset-liability, or to settle a debt.

> Financial statements distinguish assets and liabilities on their liquidity/currency <>1 year.

**Investor liquidity** = how quickly an investor can liquidate (sell to other investors) a large asset volume at fair value on the secondary market.

## Measures of market liquidity

Market liquidity is the ability to transact large asset volumes quickly with minimal impact on price – as captured by the following dimensions:

- **Tightness** – low transaction costs (buy, sell)
- **Immediacy** – speed of order execution
- **Depth** – abundance of orders
- **Breadth** – size of orders
- **Resiliency** – minimal market impact on price, away from fundamental/intrinsic value.

## Measures of market liquidity

These liquidity concepts are measured by a large number of metrics:

- Volume
- Transactions
- Turnover
- Bid-ask spreads
- Volatility.

Which tend to be highly correlated, except when things go wrong…

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## Measures of market liquidity

| Liquidity Metric | Kellogg's | Mondelez |
|---|---|---|
| **Bid-Ask Spread** = $P_{ASK} - P_{BID}$ | \$64.90 – \$63.39 = \$1.61 | \$40.00 – \$38.01 = \$1.99 |
| **% Bid-Ask Spread** =$(P_{ASK} - P_{BID})/((P_{ASK} + P_{BID})/2)$ | 2.4% | 5.1% |
| **Average Daily Volume** = number of shares traded | 2.20m | 10.79m |
| **Float** = number of shares outstanding | 256.88m | 1.59b |
| **Turnover** = float / average daily volume | 117 days | 147 days |
| **Held by institutions** | 72.6% | 77.6% |

## What determines liquidity…

**Microstructure factors**

- Traded asset design
- Market participants
- Trading systems/ platforms
- Trading rules
- Clearing/settlement
- Regulatory framework.

**Macroeconomic factors**

- Economic stability
- Monetary policy stability
- Legal enforcement.

## The new: hidden liquidity

**Block trades** – off-market institutional trading volume (40%+ in US).

**Dark pools** – private exchanges/forums to transact block trades.

>10% of London equity trading volume.
≈ 15% of US equity trading volume.

*Why?*

- Better execution
- Reduces price impact
- Lower transaction costs, but…

- Lack of transparency
- Vulnerable to conflict of interest, and…
- Retail trades are now also moving to dark pools!?

## What happens when it's gone…

Common during market stress:

Deteriorating liquidity measures indicate an increasing lack of investor interest due to fear or diminishing intrinsic value.

Depth and breadth disappear from one side of the market.

Prices no longer reflect fundamentals (sell at any price…).

Market structure may change – moving from electronic trading to dealer platforms (transparency disappears – market fragments).

## A liquidity crisis

*Long Term Capital Management (LTCM) in 1998*

Arbitrage and speculative trading strategies that assumed that liquidity would be there for misaligned prices to return to fundamental value.

Illiquidity in fact caused the misalignment to increase – and LTCM's need to liquidate positions to offset losses, made matters worse.

*And then there's the Global Financial Crisis…*

## Source list

Slide 5:

Measures of market liquidity. Table prepared by Sean Pinder from data obtained from Yahoo!7 Finance (https://au.finance.yahoo.com/).

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