Has the search for efficiency made the financial world less safe?

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Overview

- The search for efficiency
- As good as it gets?
- Could financial imbalances lead to “headwinds”?
- Current financial turbulence
- Conclusion
The search for efficiency

- In the real economy
- In financial markets
- In the conduct of monetary policy
Efficiency in the real economy

- Deregulation in industrial economies
- Productivity and IT
- Transition economies and globalisation
- A disinflationary bias?
Efficiency in financial markets

- Deregulation and technology
- Risk decomposition and risk management
- New products and new players
- Cheaper and better services
Recent growth in the market for structured products

In billions of US dollars

Structured product issuance (global)

- Collateralised debt obligations
- Asset-backed securities
- Mortgage-backed securities

US leveraged loan issuance

Held by:
- Institutional investors
- Banks

Source: IMF
Efficiency in the conduct of monetary policy

- More focus on near-term price stability
- More reliance on market processes
- More attention to communication
As good as it gets?

- Lower and less volatile inflation
- Higher and less volatile growth
- More resilience to shocks
Could financial imbalances lead to “headwinds”?

- 1, 2, 3, ...?
- Efficiencies on the real side keep inflation down
- More efficient central banks conclude all is well
- More efficient financial markets overreach and imbalances build up
Could financial imbalances lead to “headwinds”?

- Credit growth
- Asset prices
- Sectoral imbalances
- Headwinds in history
Credit growth

- Low real interest rates and the Wicksellian natural rate
- Rapid credit growth globally
- The particular case of China
Real interest rates, structural budget balance and output gaps

In per cent

1 Structural budget balance (lhs)\(^1\), 2 Real interest rate (lhs)\(^2\)

1 General government in the OECD countries, 2 As a percentage of potential GDP, 3 Weighted average, based on 2000 GDP and PPP exchange rates, of OECD countries' short-term interest rates deflated by annual consumer price inflation.

Sources: OECD; national data.
Aggregated private credit growth in major industrial countries and global foreign exchange reserves

Sources: IMF, national data.
Investment, money, credit and prices in China

Annual changes, in per cent

1 Domestic credit to the private sector. 2 Three-month moving average.
Sources: IMF; CEIC; national data.
Corporate and government bond spreads

United States

Euro area

Japan

High-yield spreads

Historical US yields

1 Bond index yields against 10-year swap rates, in basis points, except for historical US yields (in %).

Sources: Bloomberg; Merrill Lynch; national data.
Equity prices, profits and nominal GDP
Quarterly data: 1980 – 2010 (semi-logarithmic scale)
Real estate prices
Fourth quarter 1995 – 100; quarterly averages

In nominal terms

United States

United Kingdom

Ireland

Inflation-adjusted

1 Representative nationwide indices.
Implied volatilities of bonds

Ten-year US bond
Ten-year Japanese bond
Euro-BUND

1 At-the-money call implied volatility, monthly averages.
Source: bloomberg.
Sectoral imbalances

- Over extended consumer and household balance sheets
- Large external imbalances
Sectoral indebtedness
In per cent

General government
Budget balance/GDP

Households
Debt/disposable income

Firms\(^1\)
Debt/value added

Debt/GDP

Debt/total assets

Debt/equity\(^2\)

\(^1\) Non-financial corporations.  
\(^2\) Equity defined as the market value of outstanding equities.  
\(^3\) For households and firms, weighted average of France, Germany and Italy, based on 2000 GDP and PPP exchange rates.

Sources: OECD; national data; BIS calculations.
US sectoral financial balances

As a percentage of GDP

Note: 2007 partly estimated; the blue lines represent the 1995–2007 means of the respective financial balances.

Source: National data.
Headwinds in history

- Net private savings
- Credit cycles and financial stress
- “Boom-bust” cycles in historical perspective
Net private saving

Japan

United Kingdom

Australia

Sweden

Norway

United States

Note: The shading represents ±1 standard deviation around the mean of the observation period, and the dots the change in GDP growth two years after the indicated trough. As a percentage of GDP.

Sources: OECD; national data.
Credit cycles and financial stress

1 Private credit as a percentage of GDP; comparability across countries is restricted by differences in the definition of private credit. The shaded areas mark the onset of stress in the financial system.

Boom-bust cycles in historical perspective

- Why history still matters
- Historical examples
- And all without inflation
Current financial turbulence: subprime as “catalyst”

- Implications of the securitisation revolution for participants
- Implications for the financial system as a whole
- Implications for the broader economy
Implications for participants; households

- Easier and cheaper access to mortgage credit
- More options, especially variable rates
- Intertemporal smoothing BUT
- Choice requires more judgement
- More exposure to market swings
Implications for participants; originators and banks

- Greater risk diversification
- Normally more sources of liquidity BUT
- Less need for “due diligence”
- Difficulties in valuing complex products
- Failure to price liquidity adequately
The banking system remains resilient

Bank share prices

- United States
- Germany
- United Kingdom

1 Ratio to broad share price index, end-1998 = 100.

Expected default probability

2 The expected probability, in percentages, that a company will default within one year. Sources: Datastream; KMV; national data.
Implications for the financial system as a whole

- Risk transferred to those who can manage it OR
- To the most gullible and the most greedy?
- Everyone becomes suspect
- And the demand for liquidity soars
A sudden shift in the appetite for market risk ...

Volatilities\(^1\)

Risk appetite indicators\(^2\)

Global risk appetite\(^3\)

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1 Conditional volatilities of daily returns from an asymmetric GARCH(1, 1) model, estimated over the period Jan 1990-Nov 2004.

2 Derived from the differences between two distributions of returns, one implied by option prices with varying strike prices and one based on actual returns estimated from historical data.

3 Derived from principle components analysis of the three risk appetite indicators, estimated over the period Dec 1995-Nov 2004, first component plotted.

Sources: Bloomberg; Chicago Mercantile Exchange; Eurex; LIFFE; BIS calculations.
... but some still have large market exposure

Net repo financing of US primary dealers

Value-at-risk

1 In billions of US dollars.  
2 As a percentage of total assets of securities dealers.  
3 Market capitalisation-weighted averages of eight large institutions' total and interest rate VaR; 2001 Q4 = 100; quarterly data, in per cent.

Sources: Company reports; national data.
Implications for the broader economy

- Will current turmoil result in credit rationing?
- How vulnerable is the global economy?
- Is the global housing sector of particular concern?
- And what about the dollar?
Conclusion

- Current financial turbulence has deep roots
- The boy who cried wolf!
- How a “better” financial system can still be improved
- Implications for monetary and regulatory policy