Financial Stability: Macroprudential Analysis

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CCMF/CARTAC/CARICOM

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A Caribbean Architecture

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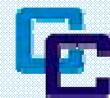

Simon Johnson's analysis of the Lehman Brothers' collapse as point of departure

- Lehman's collapse triggered call on AIG guarantees
- government rescue of AIG in form of senior loan depressed AIG's share by 40% o/n
- sent world financial markets into "cardiac arrest"
- genesis of world economic recession

Lesson: it is the interaction between the macro economy and financial performance which triggers crises and results in real economic costs

- a dramatic asset price fall can render insolvent the most risk-averse financial institution
- dependence on market prices can lead to deceptively positive financial soundness indicators during periods of asset price booms
- market prices can be extremely volatile where markets are thin (as is the case with most stock exchanges and most FC markets, including all the Caribbean)

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- markets are inherently unstable if everyone is on one side of the market (all buyers and no sellers, or vice versa, as with the international short term financial market)
- prudential guidelines may aggravate market instability: when asset prices fall, financial institutions need to raise capital to remain adequately capitalised, but issuing new equity in a market where no one is buying will serve to push down prices even further

- universal capital rules may aggravate market instability (Persaud): in times of asset boom, no one needs to issue new equity, so there is excess demand; when the boom goes bust, everyone has to raise new money, resulting in excess supply
- financial collapse leads to loss of funding for investment and economic contraction, aggravated by cross-border linkages
- financial collapse leads to capital flight in SOEs, causing deep devaluation and economic depression

Capital adequacy and asset prices

-e.g. UK banks, November 2009:

about ¼ of assets in form of "claims under sale and repurchase agreements", only about 50% of assets in form of loans.

An overnight fall in of 40%* in the value of these claims would have wiped out 10% of the value of UK bank assets.

*The % fall in the value of AIG shares on September 16, 2008

UK Banks – November 2009 £ 000m

Sight deposit	132 (20%)	Loans	335	55%
TDs	209 (34%)	CDs	22	
		T-bills	14	
Loans under sale and repo agreements	177 (29%)	Claims under sale & repo	165	27%
	518		72	
Discrepancy	90		608	
	608			

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The lessons:

(1) in the last resort governments will always come to the rescue of systemically important institutions, because they are subject to insolvency when asset booms bust, no matter how well capitalised;

(2) banks are better off sticking to loans; that does not insulate them from boom and bust, but the impact is indirect and therefore easier to manage.

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Capital is overstated during boom times

- because asset prices are high and measured risks are low
- this problem is intractable because we cannot know where we stand on the financial cycle: are we currently on the upswing from the nadir a year ago, or are we experiencing a temporary asset price recovery which will be followed by another fall?
- the only recommendation forthcoming so far is for counter-cyclical prudential requirements, but I am sceptical because it is hard to know when to apply the brakes, and when you do, people find creative ways around the regulations

Coping with thin markets

It is a fact of life that there is insufficient trading in Caribbean securities markets for any realistic price discovery:

- the average daily trading volume is typically less than 1 percent of market capitalisation and on many trading days there is little or no trading i.e. less than the sales of a single vendor in a large fish market, in relation to the size of the markets
- inevitably share prices stagnate for long periods and are subject to sudden sharp movements

– large market interventions are often met with charges of manipulation, but the previous ruling price is typically not the result of any significant market activity that would justify that price level

Banks in the Caribbean largely avoid this problem by holding few marketable securities other than T-bills

But volatility of securities markets is a major problem for insurance companies, pension funds and collective security schemes

Asset Pricing in one-sided markets

Markets fail when there is not activity on both sides of the market, buying and selling (the 2 blades of the scissors)

- In the Caribbean securities are typically bought at issue and held to maturity, so there is very little offered for sale on secondary markets
  - →Caribbean securities markets are in a semi-permanent state of failure
- the world financial crisis of 2006-2008 was a manifestation of similar market failure, when the demand for short term asset backed securities dried up
  - →World markets were suddenly confronted by what is the norm in Caribbean financial markets

Capital requirements and market instability

One reason that massive government intervention in financial markets was inevitable was that financial institutions could not attract capital from the markets to compensate for losses in asset values:

- attempts to issue equity in a market where no one was buying equity would simply have depressed asset prices further, deepening FIs' losses on their existing portfolio, like a dog chasing its own tail
- the prudential approach which aggregates all risks and uses the aggregate to determine capital requirements is dangerously flawed:

- FI capital should be adequate to cover the risks that are inherent in the provision of the services it is licensed to offer (e.g. credit, in the case of banks)
- capital is irrelevant to operational risks, which should be minimised through investment in appropriate technology and procedures
- we need to revisit the treatment of market risks, in my opinion; the individual FI does have discretion with respect to its market operations, and some capital coverage is appropriate;

- but it is impractical to require FIs to hold capital adequate to cover market failure, because FIs would be constrained to hold too much government paper (& in the case of some countries, US government paper)

Financial crisis & the real economy

Financial crises cause real economic loss when:

- funding for fixed capital formation dries up as a result;
- there is capital flight from the affected country, the exchange rate is deeply devalued and real domestic incomes are seriously eroded

Financial crises are relatively painless when:

- Government intervenes to prevent financial collapse, avoiding capital flight and ER devaluation, and finances the intervention with the issue of domestic currency securities at market value.