

Panel Session V: Real Sector Leverage and Liquidity Risk Measurement Challenges

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Agenda

- Brazilian Derivative Markets - Overview
- Impacts of the last international turmoil in the Brazilian Banking System
- Recent Developments
- Challenges

Brazilian Derivative Markets - Overview

- Size of market - 5th largest of the world.
- Types of Derivatives traded
 - Mainly Futures operations of Interest Rate and Foreign Currencies.
 - CDS market is irrelevant
- Registration
 - Register all Financial Instruments - Bonds, Securities, Derivatives, including OTC- , in a clearing house is mandatory. Identification of the final holder for each financial instrument must be included in the registry.

Brazilian Derivative Markets - Overview

- Regulation and supervision
 - Only one supervisor and regulator (Securities and Exchange Commission of Brazil - CVM)
 - BCB could restrict the use by banks.
 - Operations abroad follow BCB rules (included derivative operations)
 - Only for hedge!

Impacts of the international Turmoil

- After Lehman, risk aversion and short-term funding needs caused the dollar shortage in global markets resulting in a large and unexpected depreciation of the Brazilian Currency (Real):
 - 36% in one month.



Impacts of the international turmoil

- Impact in the Banking System: insignificant!
 - Strict prudential regulation
 - limited FX Net Open Positions (NOP)
 - high capital requirement to NOP
 - Daily basis monitoring of liquidity
 - Metrics: impact of worst case market risk scenario on cash flow and liquidity assets
 - Prompt supervision action

Impacts of the international turmoil

- Impact In the Real Sector: Relevant!
 - Cause:
 - There were some non-financial companies holding exotic derivatives (in foreign Exchange Currency risk only). They did not appropriately assess the risks involved in such positions and suffered heavy losses
 - Most of them were traded in international markets.

List of Trading Losses

Table 2. Losses with derivatives incurred by companies as a result of the appreciation of the dollar

Company	Country	Sector	Losses (US\$ million)
Citic Pacific	Hong Kong	Infrastructure	-2,400
Controladora Comercial Mexicana	Mexico	Retail	-2,200
Aracruz	Brazil	Paper/Cellulose	-2,130
Votorantim Group	Brazil	Diversified	-1,040
Cemex	Mexico	Cement	-711
Gruma	Mexico	Foods made of corn	-684
China Cosco Holdings Co.	China	Shipbuilding	-577
Air China Ltd.	China	Airline	-450*
Sadia	Brazil	Processed food	-360
Alfa	Mexico	Diversified	-273
Vitro	Mexico	Glass	-227

Source: Prepared by the authors, based on Regalado and Lyons (Oct. 2008), Caminada and Price (Dec. 2008), Mavin (Dec. 2008), Randewich (Oct. 2008) and Diaz (Jan. 2009).

* Losses resulting from hedging contracts for fuel.

Note: not all losses are accounted for. Obviously, many companies are not listed and some derivatives positions are still open.

Recent Developments

- New regulations issued by the BCB:
 - Specific mandate: all currency trade operations must be under the BCB rules:

Mandatory register of derivatives traded on international market by Brazilian residents (all companies, financial or not, and individuals) in domestic clearing houses.
 - Limitation: subsidiaries of non-financial companies abroad.

Recent Developments

- Bureau of exposure in derivatives (CED) :
 - Private Sector initiative, supported by the BCB
 - Derivatives registered in domestic clearing houses are aggregated by risk factors
 - Metric: maxi exposition by risk factor in “bullish” and “bear” scenarios.
 - Information could be consulted by bank, under holders’ specific permission.
 - In process of implementation (full implemented at the end of 2010).

Recent Developments

- Coordination among local supervisors
 - Intensify the frequency of data exchange.
- Suitability – Brazilian Financial and Capital Markets Association Project
- Improvements in Derivatives Registry
 - Accurate information
 - Transparency
 - New products

Challenges

- Gathering information process (quality)
- Complexity of derivative operations
- Complexity of the monitoring process
 - Market innovations
 - Price
 - Exotic derivatives
 - Embedded derivatives
- Operations in foreign markets
- Subsidiaries of non-financial abroad

Challenges

- what should be monitored?
 - Numbers and metrics
 - Individual exposition
 - Global exposition
 - and the distribution of it on the market
- Liquidity Risk Measurements:
 - Bank level:
 - WGL work is going in good direction, ...
 - Systemic level:
 - Associated with market liquidity and the importance of each market to the allocative resources process.

Thanks!



Soccer World Cup



Olympic Games

Hope to see you in
Brazil!

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