## REINSURANCE PRICING IN LATIN AMERICA



Distinctive. Choice.

**Session CS-20 – Emerging Market Pricing** 



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# WHAT IS "LATIN AMERICA"?



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#### **Definition of "Latin America":**

- Mexico part of North America
- Central America 7 (6?) diverse countries with strong US influence and varying exposure to natural perils
- South America 12 (11?) diverse countries speaking some different languages, with divergent political environments and varying exposures to natural perils

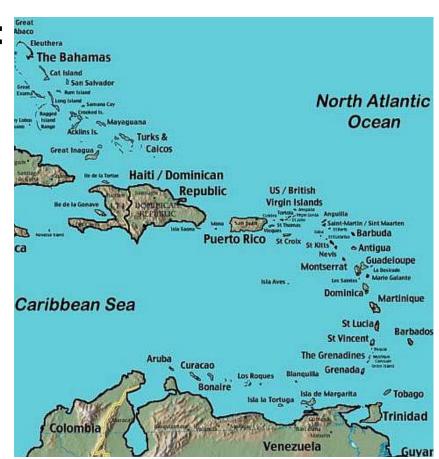




## WHAT IS LATIN AMERICA?

#### **Definition of "Latin America":**

- Includes Spanish-speaking Caribbean (Puerto Rico, Dominican Republic, Cuba)?
- Includes English-speaking Caribbean plus Frenchspeaking Haiti? Bermuda?
- Further diverse collection of over 20 countries





# LATIN AMERICA – MARKET DYNAMICS



## **LINGO CAN BE DIFFERENT!**

- Auto = Motor in many countries
- GL = GTPL (General Third Party Liability) or RC (Responsabilidad Civil)
- Property/Casualty = Non Life (No Vida)
- Workers Comp generally considered part of Life (instead of P&C)
- And yet some words in English are acceptable to use in Spanish (Property, IBNR, Benchmark, etc.)



#### MARKET DYNAMICS

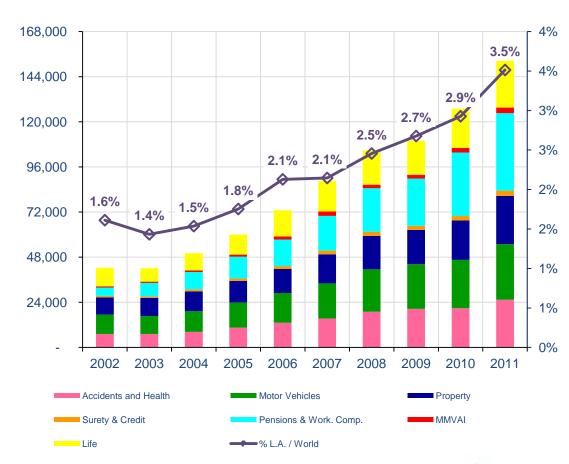
- Property market cycles driven by US/Europe rather than regional Cat events (outside of the country impacted)
- Rates on Line for Property markedly lower in Latin America vs. US/Caribbean
- Trend towards regionalization via M&A activity
- Threats of nationalization
- Truly an "emerging market" Latin America grew from 1.6% to 3.5% of World Written Premium between 2002 and 2011...



Millions of US\$

#### **Latin America: Evolution of Written Premiums**

Fairly balanced distribution across lines of business

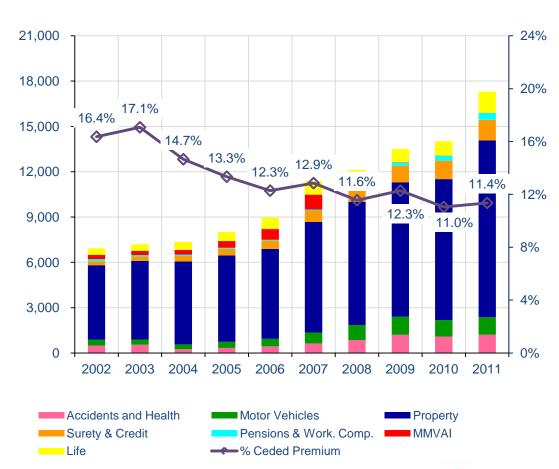




Millions of US

#### **Latin America: Ceded Premiums Evolution**

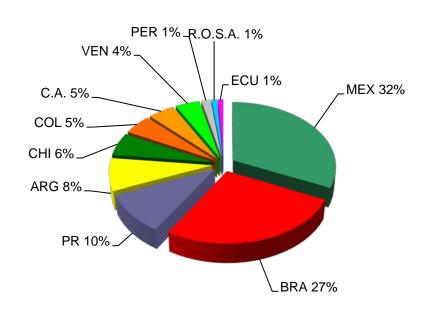
Heavily skewed ceded distribution centered around Property

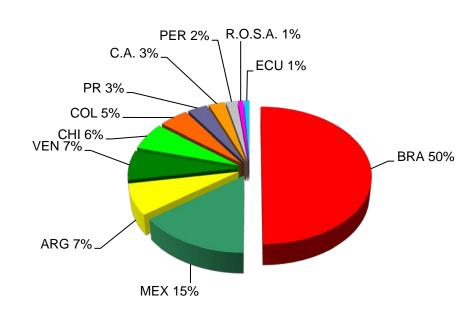




Written Premiums by Country 2002 42.418 MM US\$

Written Premiums by Country 2011 153.606 MM US\$



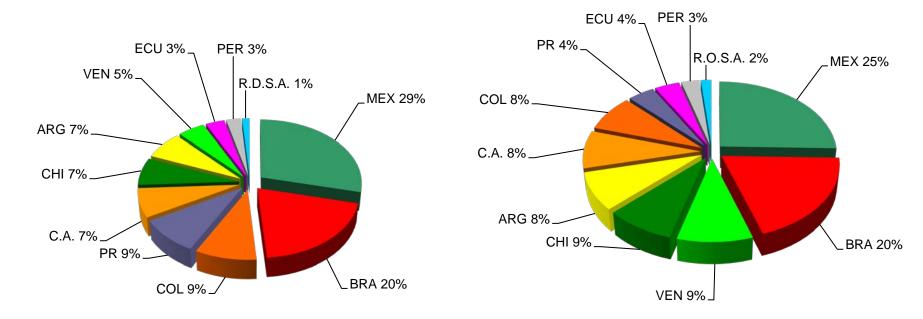


Large shift – due principally to Brazil



Ceded Premiums by Country 2002 8.093 MM US\$

Ceded Premiums by Country 2011 18.170 MM US\$



Different story! Lack of Nat Cat exposure has kept Brazil's ceded share stable



**REG: Insurance Density & Penetration** 





Despite steady growth in WP per capita, market penetration has not improved much



## PRICING CONSIDERATIONS



## DATA CONSIDERATIONS

- Lack of advisory organizations such as ISO/NCCI, so difficult to find data on insurance-specific market trends (e.g., loss trends, LDFs, etc.)
- Some industry data available from government entities, but on a CY basis (not at all like Sched P)
- Level of specificity and reliability of data varies greatly from country to country, and from company to company even within a country
- Less common to find actuaries at cedent companies, but also varies greatly across the region

#### For non-Cat exposures, some nuances:

- Significant differences in primary loss ratio levels between countries (especially Caribbean vs. Latin America)
- Data typically not provided in triangulated form
- LDFs often not applied due to perceived lack of tail, but sometimes there is a tail!
- Distinguishing rate changes for Cat vs. Non-Cat coverages

#### For non-Cat exposures, other nuances:

- Impact of "first loss" policies
- Proportional treaties can be on a "clean cut" basis, so chance for negative loss ratios!
- "Caribbean" profit commission feature
- Even lower layers on Property Per Risk programs can often be "not working" in nature



#### For non-Cat exposures, other nuances:

- Lack of industry exposure curves general reliance on traditional international curves
- Impact of co-insurance on larger policies
- Can have treaties in USD but data in local currency – exchange rate impacts?



#### For Cat exposures:

- Perception that vendor models are not tailored to the true exposure to natural perils in the region – "calibration"?
- Characteristics of insured vs. overall population
- This perception has only been reinforced in the eyes of some based on recent Cat events



#### For Cat exposures:

- Lack of detailed exposure data only exacerbates the problem in using the models
- Reliance on models for measuring PML vs. pricing is often treated quite differently
- Lack of Event Limit in some countries/treaties can place even greater reliance on models



#### For Cat exposures:

- Exposure to various natural perils varies significantly by country, and in some cases within specific countries
- In general the Cat exposure is uncorrelated across the region but there are exceptions
- Some perils are un-modeled but could be quite meaningful for lower layers



## **NON-PROPERTY PRICING**

Though reinsurance in the region is dominated by property exposures, there are other challenges when pricing other lines of business:

- Levels of litigiousness though generally much lower than the US, there are exceptions
- Exposure to US (courts, exports of products, etc.) is possible
- Inflation some countries have high levels of inflation but does this translate into similar impacts on insurance costs?



## **NON-PROPERTY PRICING**

Other challenges when pricing non-property lines of business:

- Medical inflation difficult to assess; generally perceived to be moderate and in some countries lower than overall inflation
- Exchange rates even bigger impact than
  Property due to existence of development
- Specialty LOBs particularly challenging as it's hard to get data split out from GL



## THE FUTURE



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Though current challenges are enough to keep one busy, the winds of change are blowing:

- Data enhancements greater awareness of value of data, especially for Cat models
- Micro-insurance will the characteristics of the insured population change if this takes hold?
- Solvency II general desire of regulators to be on the same level with more developed countries
- Globalization good and bad effects!





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