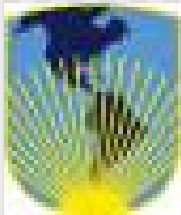


# Ensuring Insurance Market Development In Latin America and the Caribbean

(Asegurando el Desarrollo de Seguros en LAC)

*IIF Annual Meeting Symposium: "Missing  
Markets: Why Isn't the Whole World  
Insured?"*

INTERNATIONAL INSURANCE  
FOUNDATION  
Washington, DC  
November 10, 2005

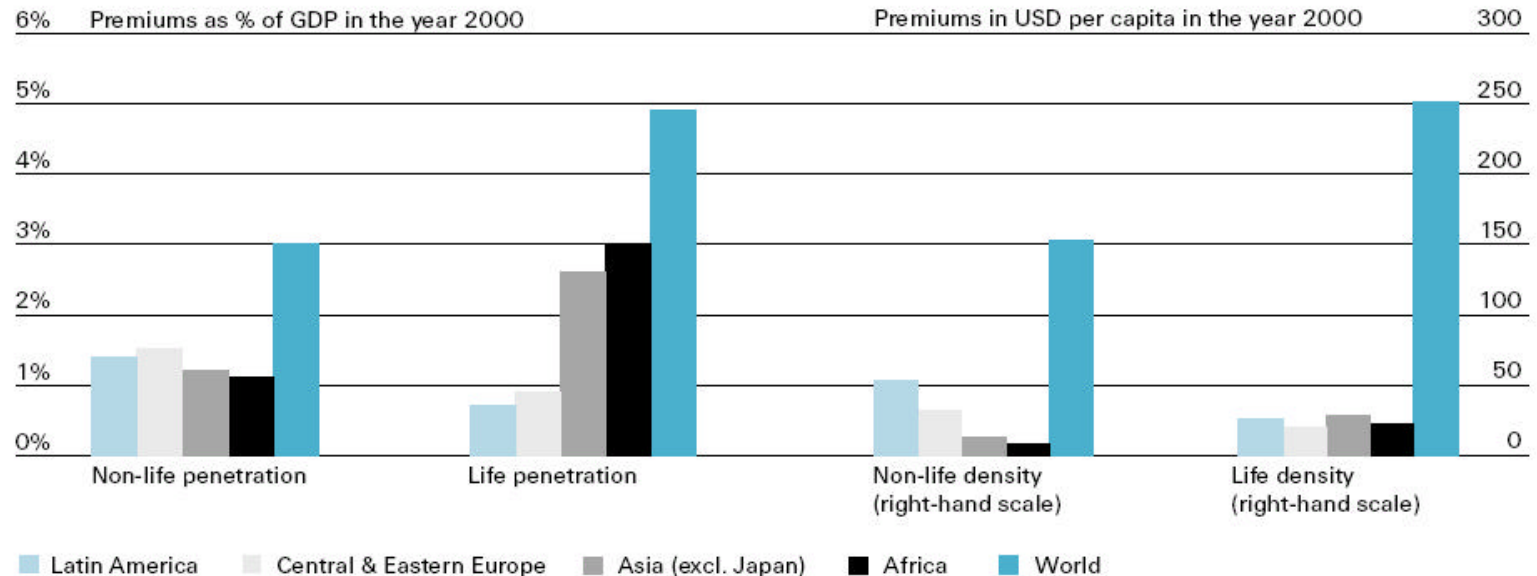


James Sylvester  
Luis Tejerina  
Pietro Masci



# Status: Low Market Penetration

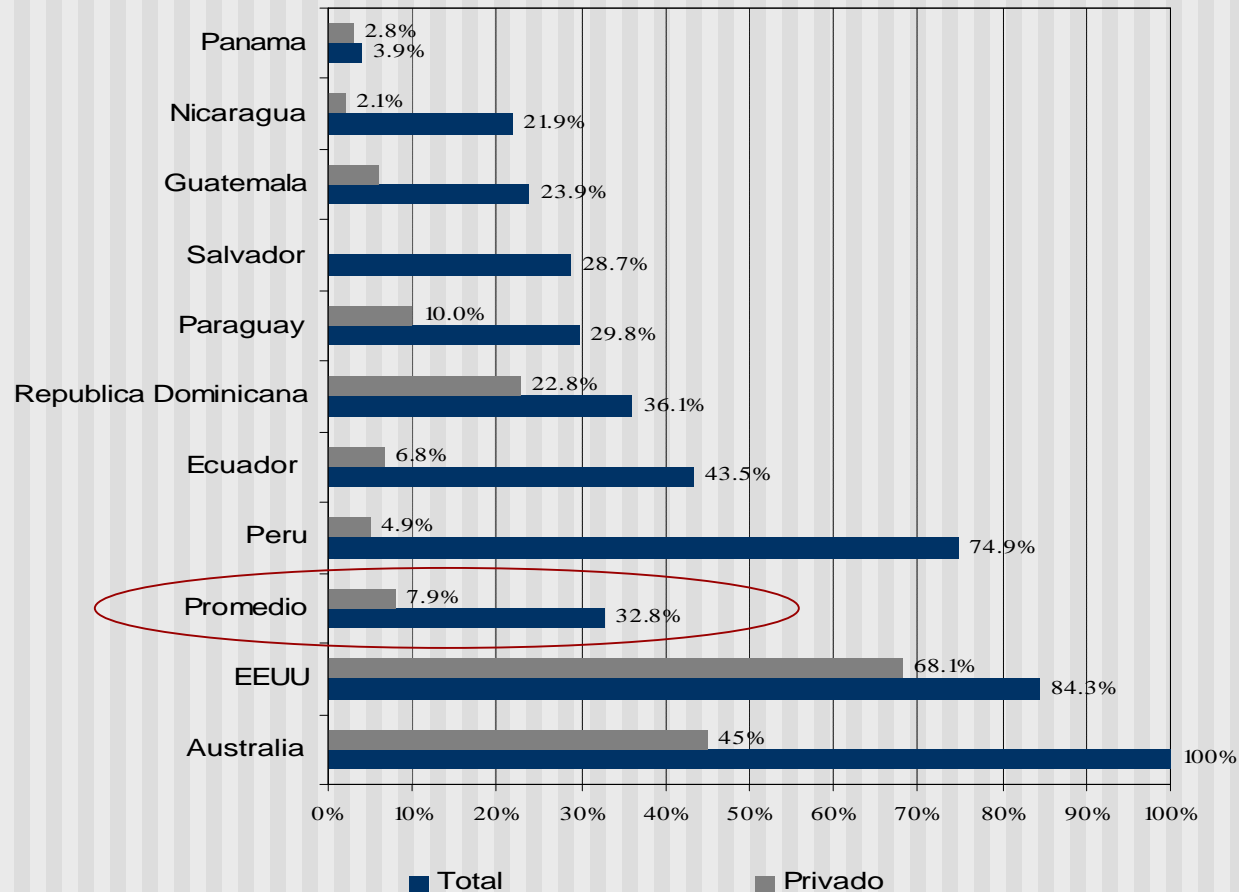
Latin America by comparison with other emerging markets and the world





# Status: Low Market Penetration

Porcentaje de Hogares Afiliados a Seguro de Salud

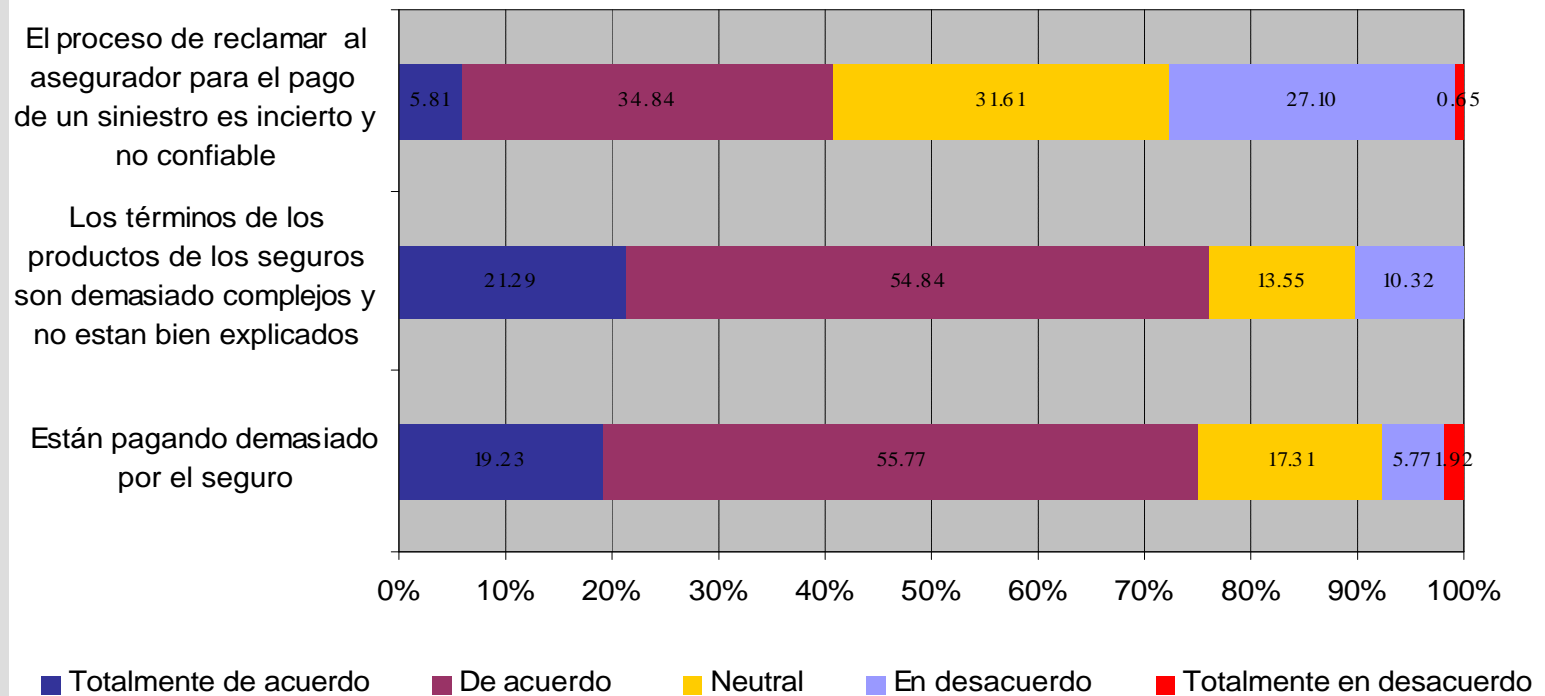




# Status:

## Effectiveness can be enhanced

**Distribucion de Respuestas a Preguntas de Efectividad del Mercado de Seguros  
(Porcentaje)**





# Past Approaches: Current research

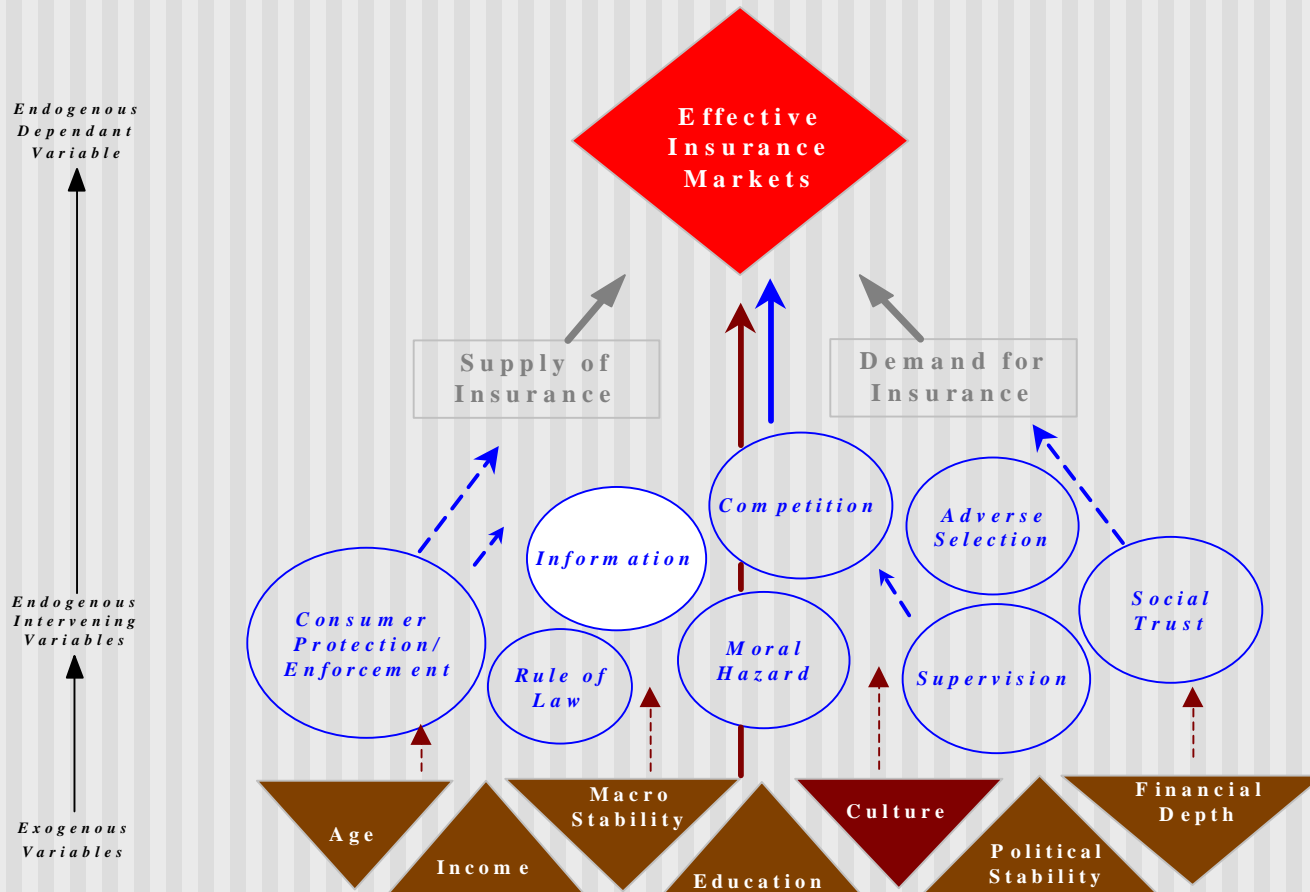
## Methodology of Firm-level Studies on Insurance

<i>Study</i>	<i>Sample</i>	<i>Model</i>	<i>Dependant Variable</i>	<i>Independent Variables (if significant, ordinality)</i>
Fecher et al (1993)	French insurers	n/a	Productive performance	scale ownership distribution reinsurance claims ratio
Borde, Chambliss and Madura (1994)	n/a	n/a	Insurance risk	financial characteristics... type of insurance company
Kramer (1996, 2000)	195 Dutch companies	Ordered Logit	Financial solidity	Solvency ratio Profitability ratio Investment portfolio Reinsurance Market penetration
Taylor (2001)	165 surveys from one large US insurer	OLS	Repurchase intention	Service Quality Customer Satisfaction Customer trust
Diacon and O'Sullivan (2002)	Time series for 53 UK life insurance companies	2-way Fixed Effects	Firm Performance : annual%change in firm's life fund annual%change in Mktvalue of Inv annual%change inTPW volume of new business slaes salary of highest paid Director	Board composition variable 1, CEO/Chair duality Board composition variable 2, % non-Exec Directors Size, Log of total assets Business composition, L-T preimums as % of TnetWP
Diacon, Starkey and O'Brien (2002)	454 European companies	Tobit	Firm Efficiency	Gearing ratio, borrowing from creditors as % of capital Liquidity, cash + deposits as a % of total assets Mutual, dummy for whether firm has zero share capital Profit, P&L as a % of TnetWP Reinsurance premiums Size, log of total assets Solvency, capital as a % of total assets
Leverly, Lin and Zhou (2004)	Chinese companies	1) Weighted Tobit (property/casualty insurer)	Firm Efficiency	Number of Firms (-) Size of firm, log of Total Premiums W ritten (+) Dummy for whether firm is foreign (+) Interaction between size and foreign firm dummy (-)
		2) Poisson (property/casualty insurer)	Firm Efficiency	Size of firm, log of Total Premiums W ritten (+) Dummy for whether firm is foreign (+) Interaction between size and foreign firm dummy (-)



# Our Focus: "Effectiveness" and its conceptual model

Figure 1 : Structural Model for LAC Insurance Markets

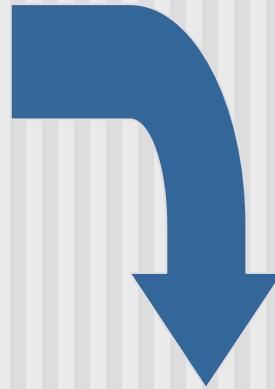
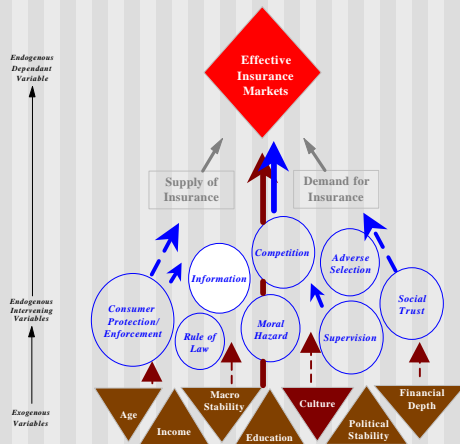




# Results:

## Specification

Figure 1 : Structural Model for LAC Insurance Markets



$$Eff_i = a + info_i b_1 + indep_i b_2 + enforc_i b_3 + superv_i b_4 + ext_i b_5 + int_i b_6 + e_i$$



# Results: Advantages and disadvantages of the tools used

- + It allows us to quantify the relationships among variables
- + It allows us to control the effects produced from other variables
- Limited number of observations
- There are non observed factors from the people who were interviewed





# Results:

## OLS

1. Relación positiva con el cumplimiento de la ley
2. Relación negativa con supervisión "permisiva"
3. Relación positiva con el grado de protección contra efectos externos

	Indice de efectividad	Cobertura es muy costosa	Productos muy complejos, no bien explicados	El proceso de Reclamo de pagos no es confiable
informacion	-0.10	-0.19 *	-0.09	-0.01
independencia	0.06	0.06	0.04	0.09
Cumplimiento de la ley supervisor	0.17 **	0.07	0.23 **	0.20 *
externo	-0.09 *	-0.05	-0.06	-0.18 **
interno	0.24 **	0.07	0.27 *	0.37 **
interno	-0.09	0.14	-0.27	-0.16
Observaciones		149	149	149
R-cuadrada	0.10	0.04	0.07	0.10

\* Significancia al 10%

\* Significancia al 5% level



# Results:

Una estimación de máxima verosimilitud muestra que los resultados son robustos

## Probit Ordenado

	Cobertura es muy costosa	Productos muy complejos, no bien explicados	El proceso de Reclamo de pagos no es confiable
informacion	-0.27*	-0.13	0.01
independencia	0.07	0.05	0.10
Cumplimiento de la ley supervisor	0.11	0.30**	0.23*
externo	-0.06	-0.08	-0.22**
interno	0.09	0.36*	0.45**
interno	0.21	-0.31	-0.18
Observaciones	149	149	149
R-cuadrada	0.02	0.03	0.04

\* Significancia al 10%

\* Significancia al 5% level



# Public Policy Implications

- 1. Rule of Law** → Minimum Requirements
- 2. Favorable External Conditions** → Minimum Requirements
- 3. "Rigorous" Supervision** → Adequate and applicable norms