

International Capital Rules: Harmonization, Conflict or Competition

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Outline

- Introduction & Background
- RBC v. Solvency II
- US Firms do have Significant Capital Regulation
- Conflict, Harmonization, or Competition
- Conclusions

Introduction & Background

- Focus on Two Systems
 - RBC ~ Early 1990s + SMI
 - Solvency II ~ 2000s
- RBC is “old” and has a suspect past.
- Solvency II is new, modern, and technical.
- Conflict was arising due to very different standards
- But we forget that the goal of solvency regulation is not to minimize insolvency, but to minimize the cost of it.

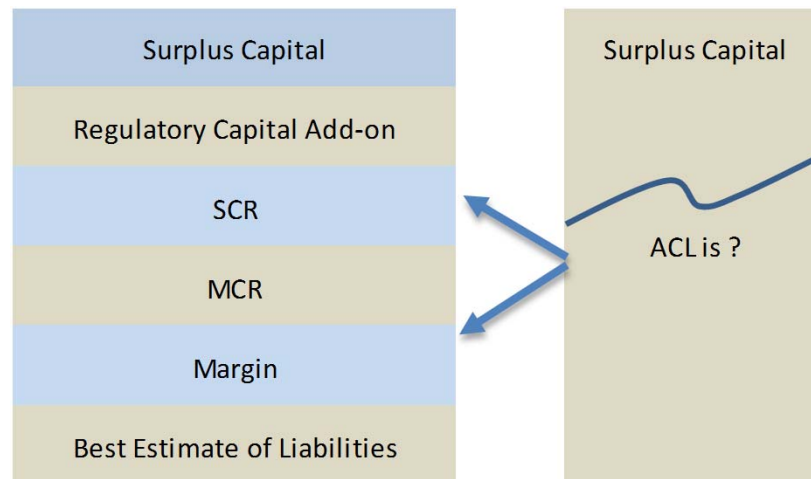
Quick Comparison

Solvency II

- BEoL – Actuarial est. of liabs
- Margin – Covers run off costs
- MCR – Min Capital Req'mnt 85%
- SCR- Solvency Cap Req'mnt 99.5%
- Add-on +
- Surplus +
- Dynamic, “all” risks

RBC

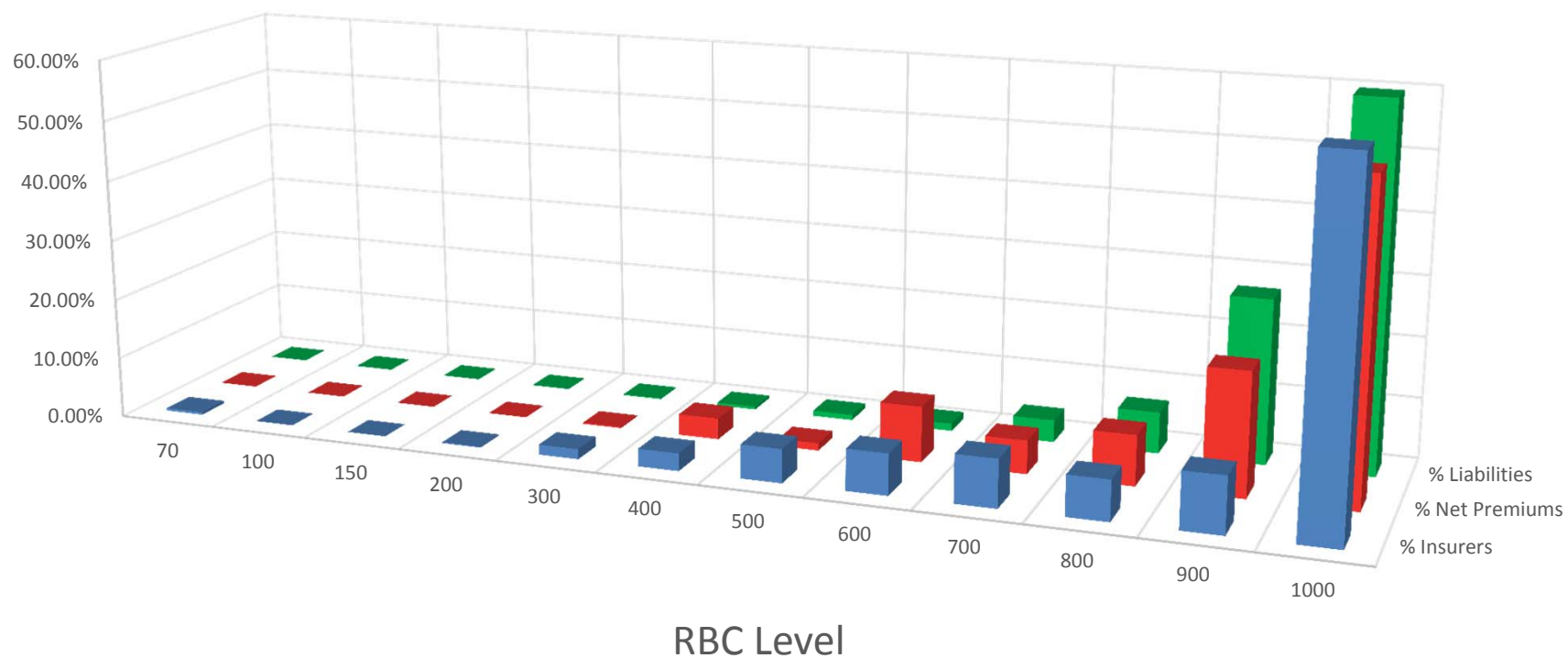
- $RBC = f(\text{Risk})$ such as
 - Underwriting, credit, investment loss reserve growth, interest rate business risks risk
- = Authorized Control Level (ACL)
- Static, Auditing based, missing risks



Big Question: How Does RBC Compare?

- RBC is not just a **solvency protection** device as much as a **regulator of discretion** device.
 - RBC mandates behavior for management & regulators
 - Solvency for US, is FAST, IRIS, RBC + Inspection, and Review
- Most firms have RBC significantly greater than Authorized Control Level
- Most firms have AM Best Ratings greater than “Vulnerable” (B and Below)

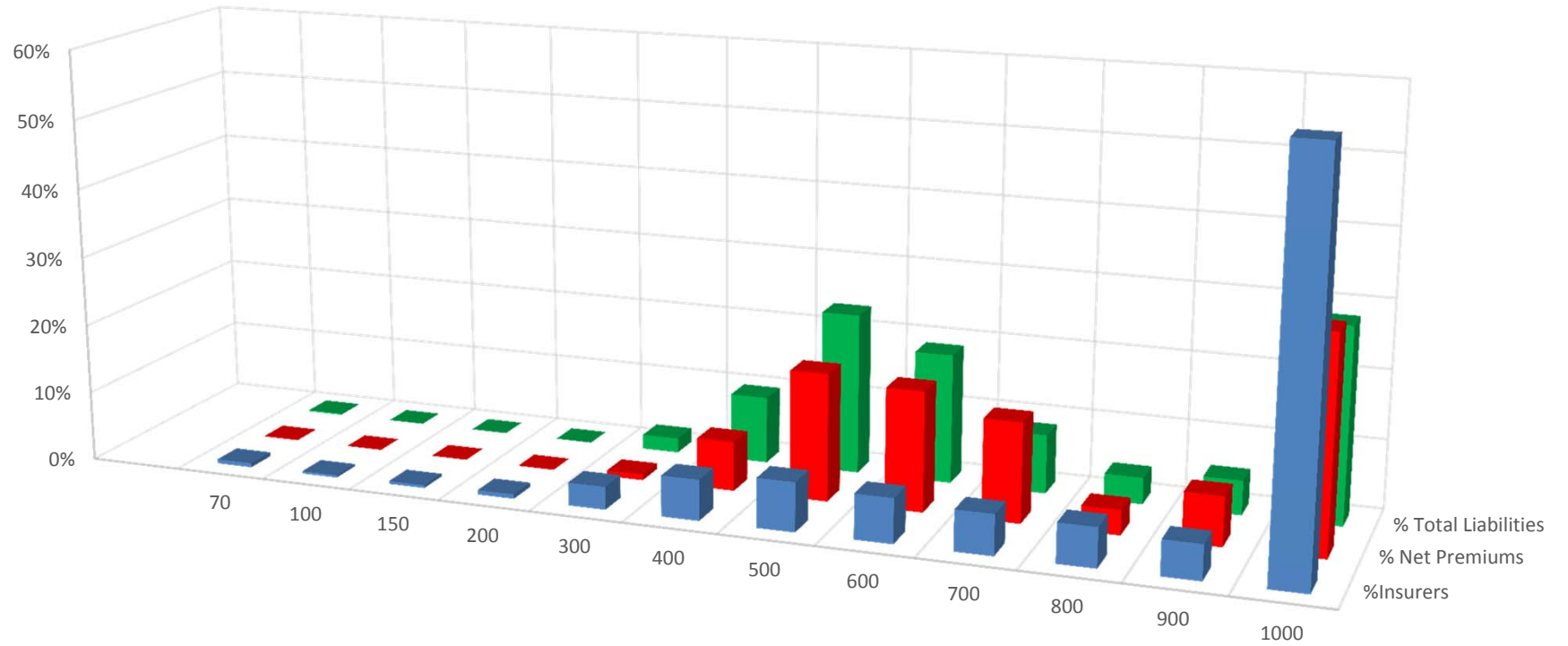
Percentage of Firm's, Net Premiums, and Liabilities by RBC Level 2012 for Life Companies



	70	100	150	200	300	400	500	600	700	800	900	1000
■ % Insurers	0.42%	0.00%	0.00%	0.14%	1.67%	2.92%	5.56%	6.82%	7.93%	6.68%	9.32%	58.55%
■ % Net Premiums	0.00%	0.00%	0.00%	0.00%	0.17%	3.51%	1.21%	9.16%	5.51%	8.31%	20.29%	51.85%
■ % Liabilities	0.01%	0.00%	0.00%	0.00%	0.15%	0.46%	0.88%	1.21%	3.66%	6.82%	27.05%	59.81%

■ % Insurers
 ■ % Net Premiums
 ■ % Liabilities

Percentage of Firm's, Gross Premiums, and Liabilities by RBC Level 2012 for Non Life Companies



	70	100	150	200	300	400	500	600	700	800	900	1000
■ % Insurers	0.61%	0.34%	0.42%	0.65%	3.31%	5.90%	7.12%	6.48%	5.87%	5.71%	5.07%	58.51%
■ % Net Premiums	0.08%	0.03%	0.02%	0.03%	0.84%	7.15%	18.44%	17.35%	14.39%	3.61%	7.15%	30.96%
■ % Total Liabilities	0.16%	0.03%	0.03%	0.04%	2.11%	9.71%	23.27%	18.75%	8.51%	3.84%	4.99%	28.17%

■ % Insurers
 ■ % Net Premiums
 ■ % Total Liabilities

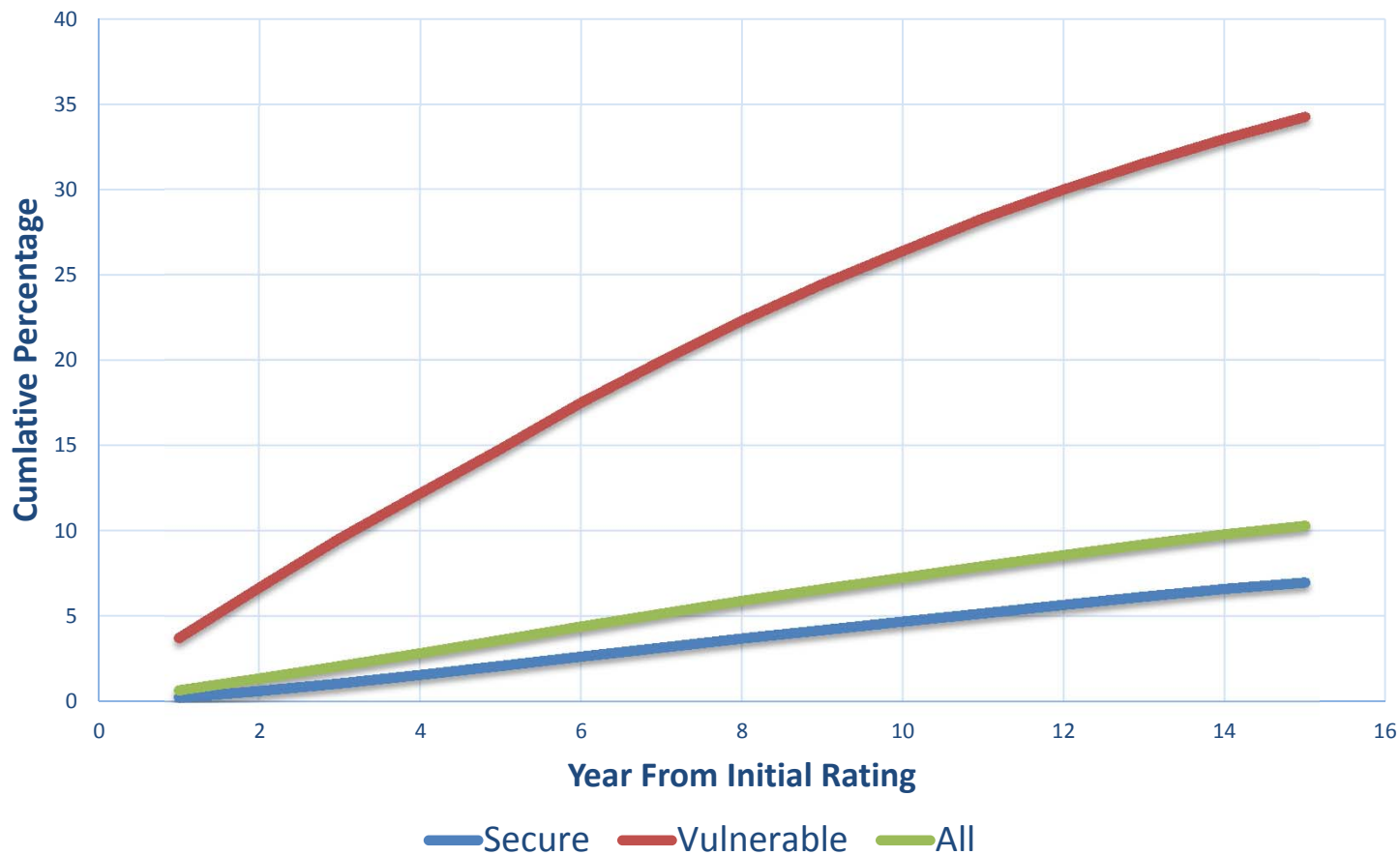
Rating also Influences Capital Held

AM Best Rating	Mean RBC Ratio	
	Non-life	Life
A	9,709	1,833
B	3,192	1,744
C	434	286
DEF	413	355

Source: SNL & author's calculations

Poor Ratings come with a Cost

Vulnerable v. Secure Eventual Impairment

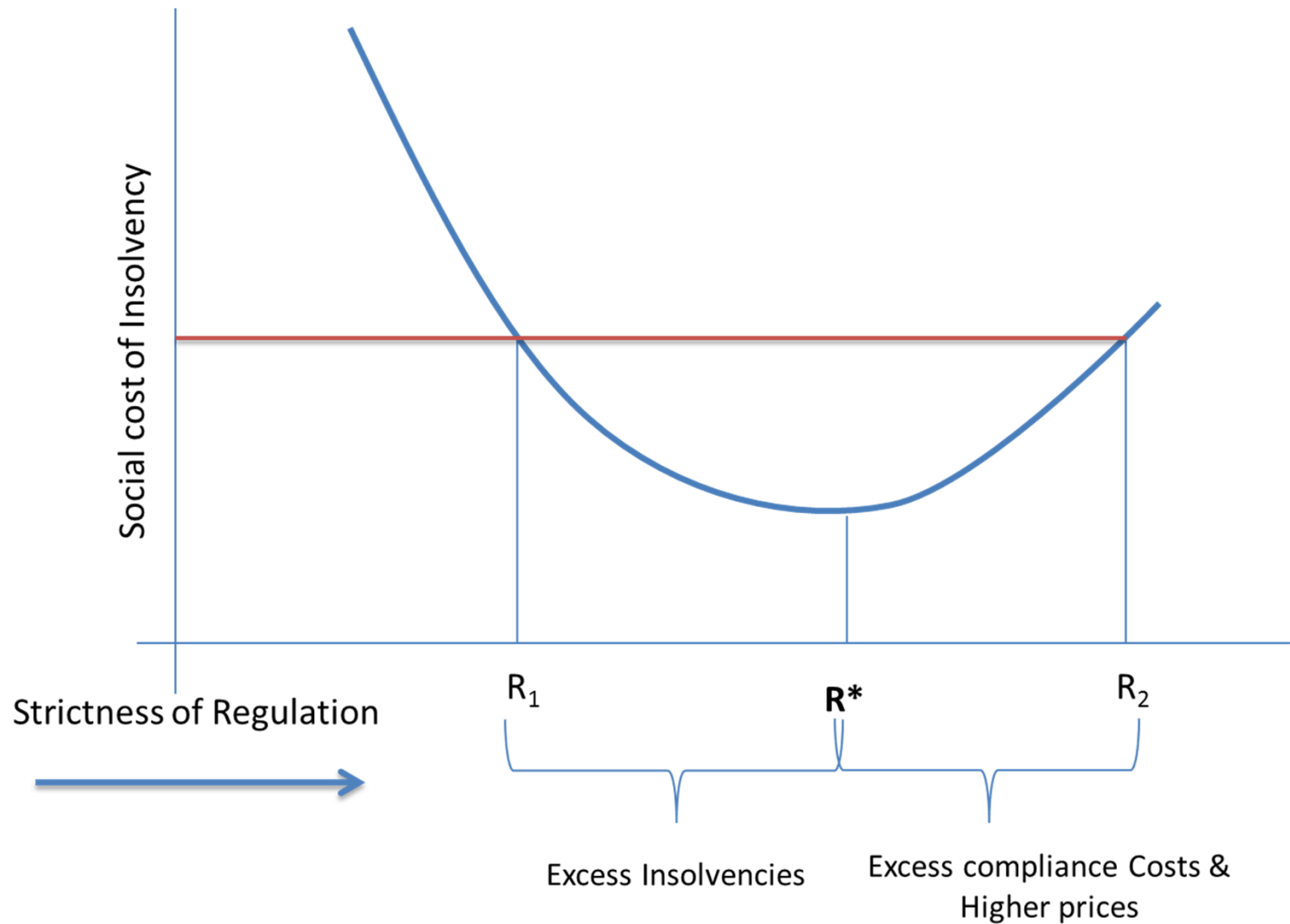


Source: AM Best, 2011 Impairments, Secure means B+ or Better

Goal of Capital Regulation

- “To protect the consumer”
 - Both USA and EU agree to this
 - Vacuous Goal – who is the consumer?
- Consumer protection is not measurable or assessable.
- True goal should be to minimize the social costs of insurance insolvency.

Goal of Solvency Regulation



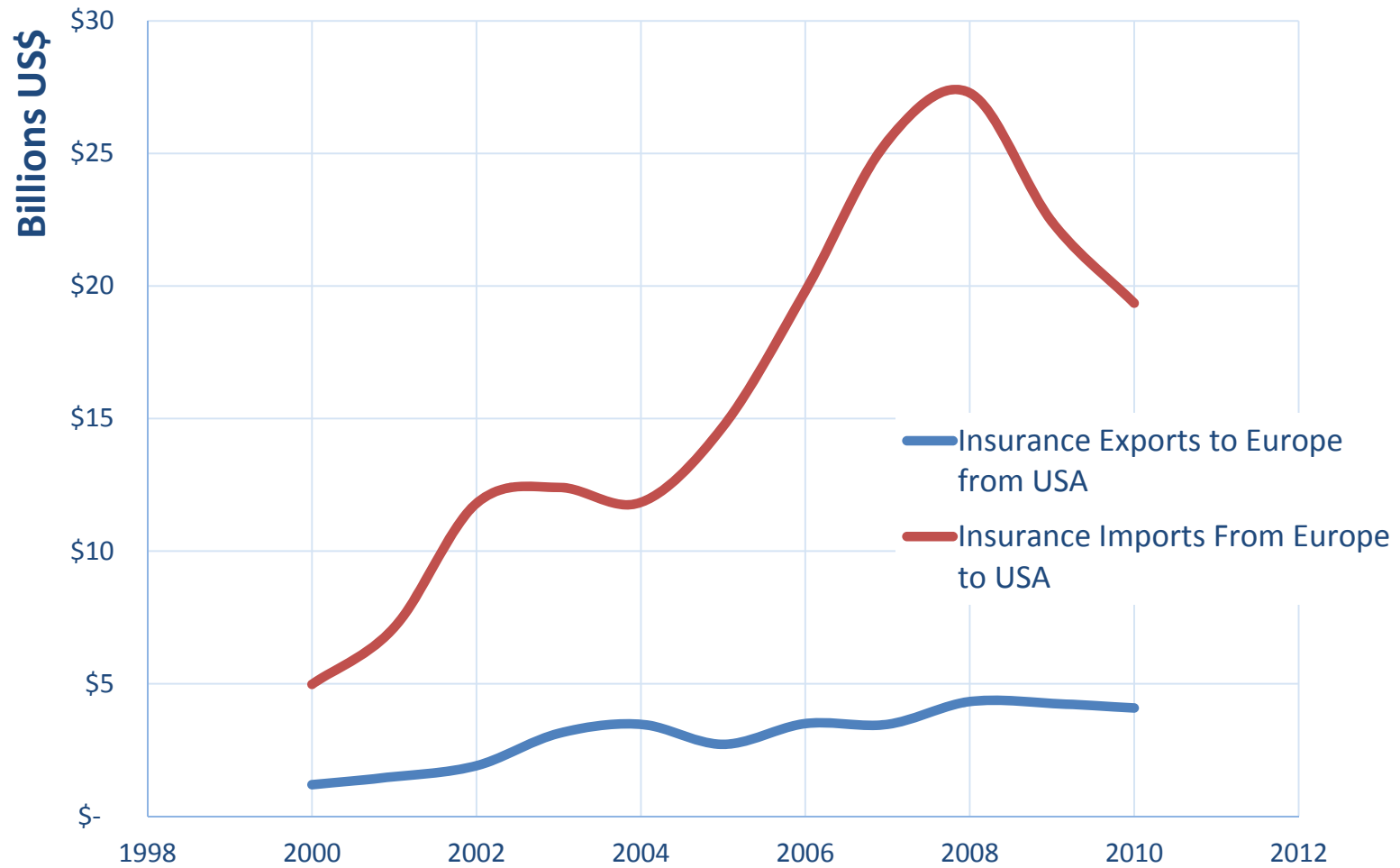
US Insures Do Hold Capital

- Both (RBC and AM Best Ratings) imply higher levels of capital are held by US insurers than the ACL minimum requires.
 - If firm is near ACL
 - Higher regulatory scrutiny
 - Harder to attract capital/customers
 - Likely to be small company
- US firms examined by multiple regulators (FAST+ IRIS)
 - Rating Agencies
 - Reinsurers
 - Competitors who monitor for issues relating to Solvency Guarantees
- All of this scrutiny raises required levels of capital for firms who want to be in business for the long run.

Conflict

- Probability is reduced due to recent US/EU agreement.
- Different capital standards could have caused a trade dispute.
 - Failure to recognize US RBC as an effective solvency monitoring mechanism might lead to US firms not being able to sell in the EU.
 - US might then restrict EU firms from US.
- This is a real short run problem for the EU, but could be a long run problem for US because of the comparative advantage EU firms have in certain sectors (such as reinsurance).

Trade in Insurance Services between US and Europe



Source: United Nations, 2010, UNServiceTrade,
<http://unstats.un.org/unsd/servicetrade/dqBasicQueryResults.aspx?px=EB&cc=253&r=841>

What conflict is there to be resolved in the “Way Forward”?

RBC

- Appears to be lower than Solvency II
- Accounting based
- Missing Risks (CAT/Cycle/Non-core)
- Can be engineered
- “Politically determined” cut-offs?

Solvency II/VaR

- Definitional
- Assumptions
- Market Value Based
- Can be engineered
- No one knows what stress really means
- No one knows about the model risk

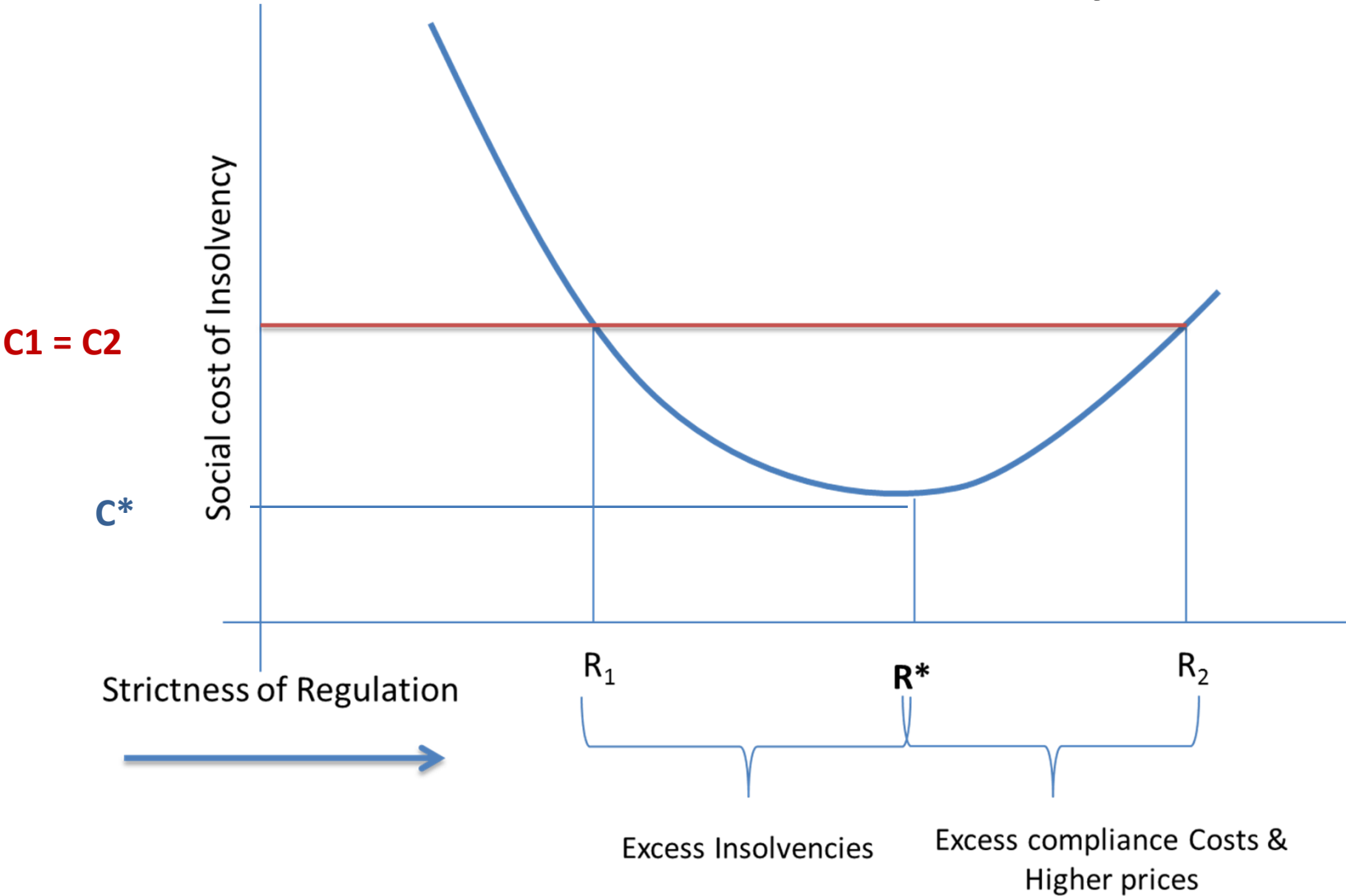
Harmonization

- Harmony can mean a number of things.
 - Conformity (not likely in the short run)
 - Similar outcomes (more likely)
- Question will now be how similar do the outcomes need to be?
 - Many EU countries have a transition “prohibiting” financial bankruptcy.
 - US industry has failures.

Harmonization

- RBC and Solvency II could have different distributional effects
 - EU higher prices – few insolvencies
 - US lower prices – more insolvencies
 - Social costs could be the same, but the costs would be paid by different parties.
 - Customers
 - Tax payers
 - Future/other policy holders

Goal of Solvency Regulation: Minimize Social Costs of Insolvency



Distribution of Solvency Costs

- For harmonization, the idea is to have $C1^* = C2^* = C^*$

	Solvency II	US
Oppty Cost of capital held in reserve	+	
Cost of risk taking greater than a risk neutral firm would undertake (moral hazard cost)	?/+	?/0
Other Allocative Costs	?	?
Cost of winding up or Resolution	-/0	
Cost of (Liabilities > Assets) at end of day	?	?/-
Exposure to other firms of insurers risk taking behavior	?	?
Total Costs	C1	C2

Competition

- Can be thought about from a number of perspectives:
 - Between firms
 - Between similar types of regulators
 - Between different types of regulators
- Regulatory competition is often thought of as a race to the bottom. However, with state insurance regulation we do not necessarily see this in terms of solvency regulation in the US.

Competition

- Can also be thought of as with different jurisdictions:
 - Solvency regulator differs from market conduct regulator. We have this now with the FDIC/FED and the FTC and Consumer Financial Product Safety Bureau.
 - Solvency regulator can check excess of other regulators and vice versa.
 - This type of regulatory competition can reduce industry capture and regulatory over reach if structured properly.
 - Can also impose tremendous costs on industry if structured improperly.

Conclusions

- **Competitive**
 - Multiple regulators are present in US and EU
 - US companies do not necessarily hold lower capital than their EU counterparts.
 - It is probably true that the minimum capital requirements are for RBC are lower than Solvency II requirements,
 - Most firms do not operate at those minimum levels.
- **Harmonization/Conflict:** EU and US rules have different distributional effects which make it difficult to say which one is actually more efficient. We just do not have evidence yet.