Discussion of

Taxing Internal Capital Markets and the Repatriation of Risk

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Summary of Points

1. Importance of tax costs in catastrophe markets
2. Welfare implications of “profit shifting”
   - arguably a **good** thing
   - critical for efficient risk transfer

3. Repatriation of risk – where is the risk going?
   - impact on ceding company balance sheets?
     - measurement issues
     - repatriation of capital
     - ratings levels
   - **impact on primary markets**
     - BEAT Act
     - Recent harmonization (1/1/25)

Capital costs are important in catastrophe insurance

- Capital supporting the exposures is significant
  - Multiples of the ultimate premium charged

- Compensation to capital is a significant portion of the premium
  - North Carolina Homeowners filing (2024)
    - Underwriting profit provision **9%**, net cost of reinsurance provision **23%**
  - Florida Citizens (2025) – private reinsurance provision **42.8%** of wind premium
  - Catastrophe bonds – compensation to capital can be **80% or more** of the premium

➔Capital cost management matters

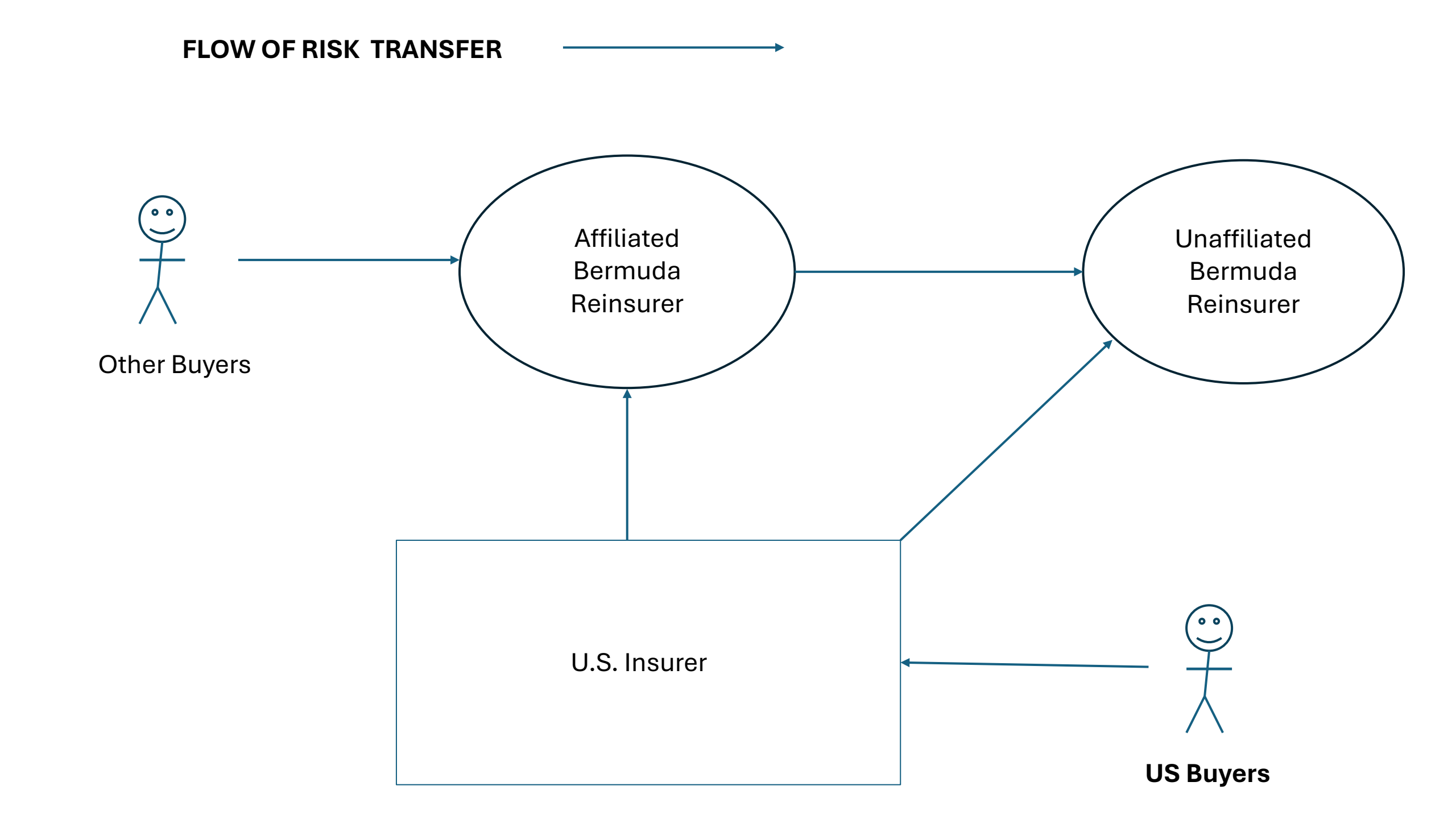
➔Taxes make a big difference and **must be managed** for these markets to be viable

Taxes and welfare

Ramsey (1927) – optimal taxation problem (how to tax if you must)
➔ lump sum taxation

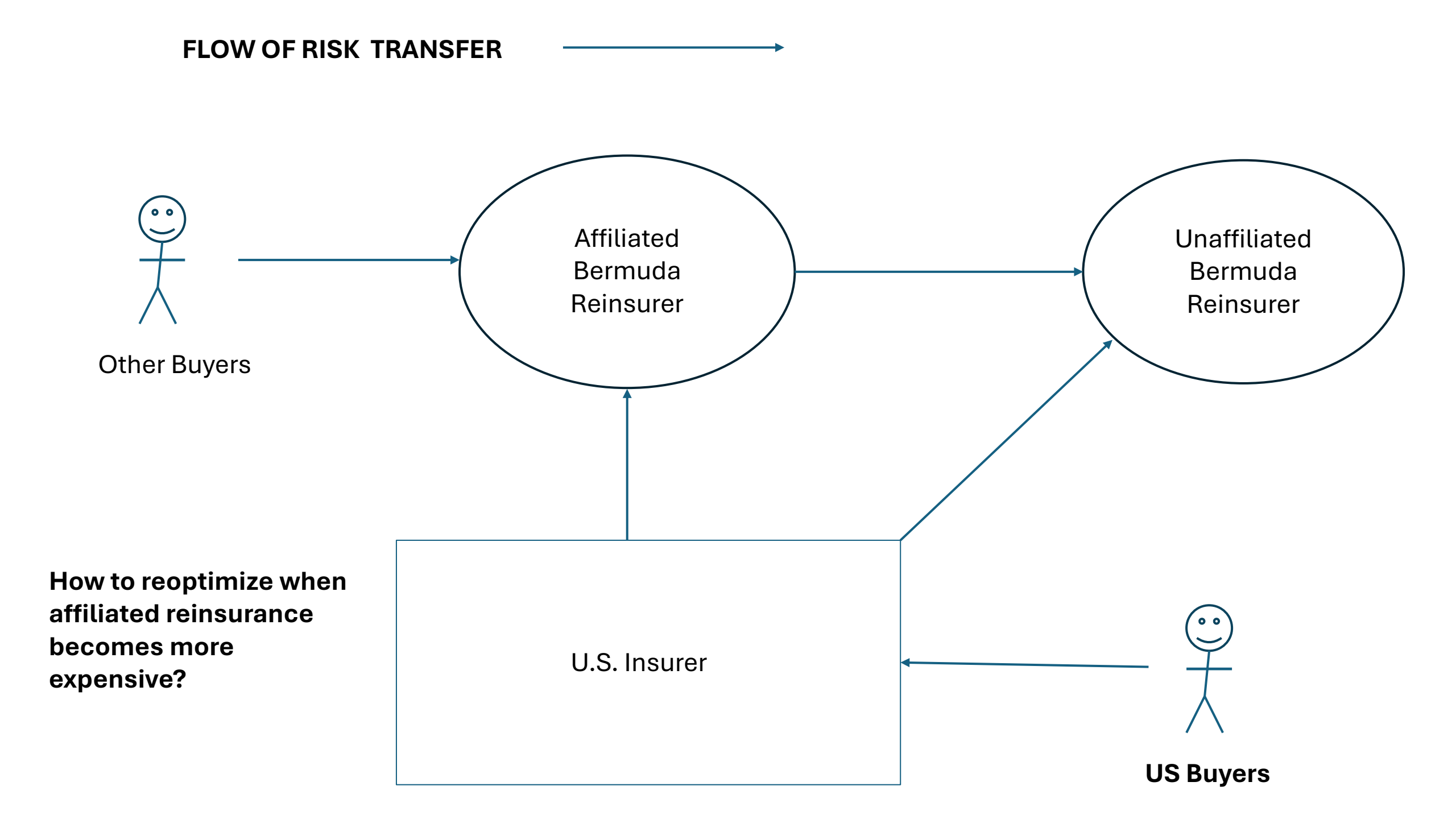
Diamond/Mirrlees (1971) – second-best world with proportional taxation
➔ don’t tax intermediaries

We’re in a third-best world
➔ Tax-related distortions are enormous in catastrophe markets
➔Need to be careful with efficiency assessments


FLOW OF RISK TRANSFER
Other Buyers
Affiliated Bermuda Reinsurer
Unaffiliated Bermuda Reinsurer
U.S. Insurer
US Buyers

	Number	2017 One Year Return Average	Median	2017 Two Year Return Average	Median
S&P 500	500	21.2		14.6	
Treatment Group	17	8.2	4.8	5.4	3.9
Treatment Group (Bermuda HQ)	4	-7.2	-4.5	-5.2	-3.5
Control Group	12	11.0	9.0	2.9	0.4

Brokers			
AON	27.8	39.7	
Brown	15.4	24.2	
Gallagher	22.2	45.8	
Marsh	20.7	20.7	
Willis	21.1	26.4	


FLOW OF RISK TRANSFER
Other Buyers
Affiliated Bermuda Reinsurer
Unaffiliated Bermuda Reinsurer
How to reoptimize when affiliated reinsurance becomes more expensive?
U.S. Insurer
US Buyers

Options for the US Business

1. **Repatriate/raise capital**
   - TCJA lowered the corporate tax rate from 35% to 21% at the same time as the BEAT Act. ➔ reduces tax advantage of offshore risk capital
2. **Buy more external reinsurance**
3. **Retain more risk**
4. **Reduce exposure to US buyers**
   - cut direct and assumed business in the US
   - tighten terms and conditions (E&S)

Section 7 argument stresses #3

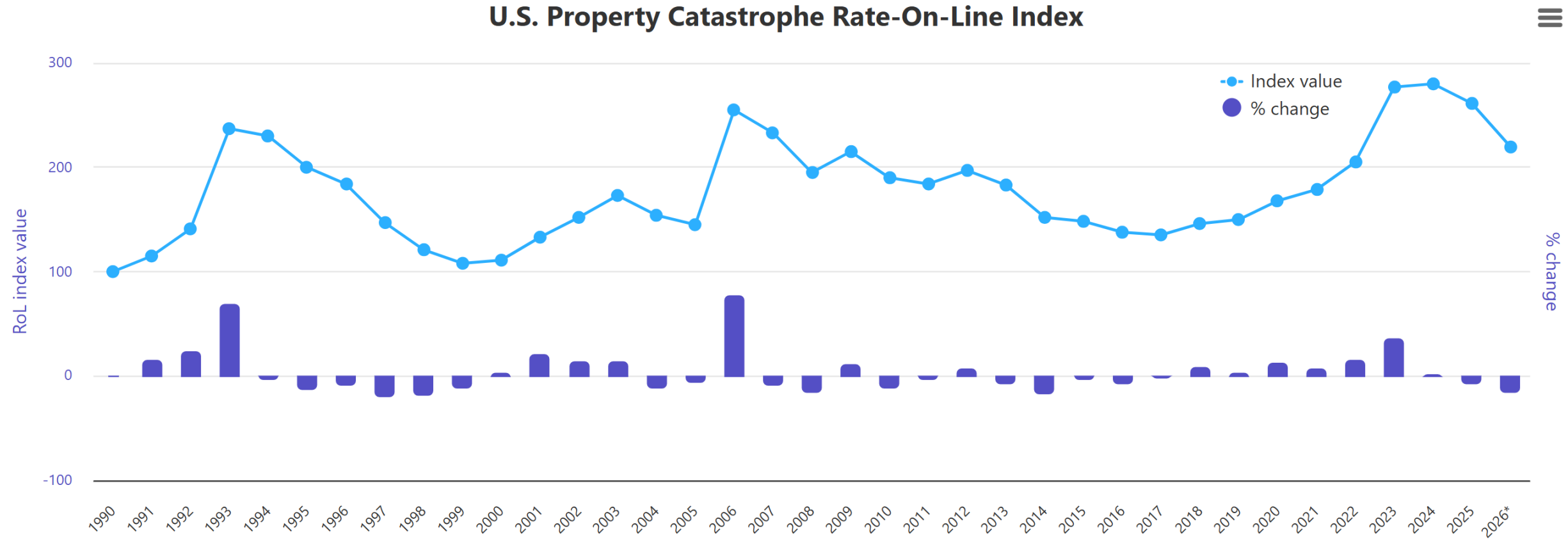
➔Risk has been "repatriated"

- **BEAT led to more of the gross premiums being retained**
- **BEAT led to less ceded loss/more net reserves in relation to assets**

➔Risk has been "pushed back onto U.S. balance sheets"

Are Industry Balance Sheets Riskier?
Measuring Risk Using Statutory Data is Hard

- What are they writing?
- What kind of reinsurance is being bought (or sold)?
- Where is pricing?
  (next slide)
- Retention ratios: what's happening to the gross?
- Has capitalization changed?
  - Aggregate surplus adjustments paid-in for treatment group
    - $1 bn annual avg for 2013-2017
    - $5 bn annual avg for 2018-2022
- …



Source: Data from Guy Carpenter, presented by Artemis.bm

- 2012 – 2017: **-31%**
- 2017 – 2022: **+52%**

- Treatment group has higher property exposure
- Reserving tends to follow pricing

Are Balance Sheets Riskier?
Attempt at External Validation using AM Best Ratings

- Premium weighted averages of rated companies within the group

	Improved	Same	Worse	Much improved (0.5 notch or more)	Much worse (0.5 notch or more)
Treated	7	9	4	2	2
Control	6	8	2	2	1

- Not much evidence of risk increase
- Caveats: 1) “Hybrid” sample 2) AI produced the weighted averages
- Sort into High, Medium, and Low BEP?

Primary Market Participation

	2017	2022
Treatment Group Market Share		
California Property	39%	37%
Florida Property	18%	18%
Nonproportional Assumed Property	30%	26%
Control Group Market Share		
California Property	16%	15%
Florida Property	15%	11%
Nonproportional Assumed Property	54%	56%
Nonproportional Assumed Property (ex Berkshire)	1.8%	2.4%

Notes: Property = Fire, Allied, HO/FO MP, Earthquake, CMP Non-Liab, Inland Marine, Private Crop, Private Flood (DPW)
Nonproportional Assumed Property based on Schedule P NPE

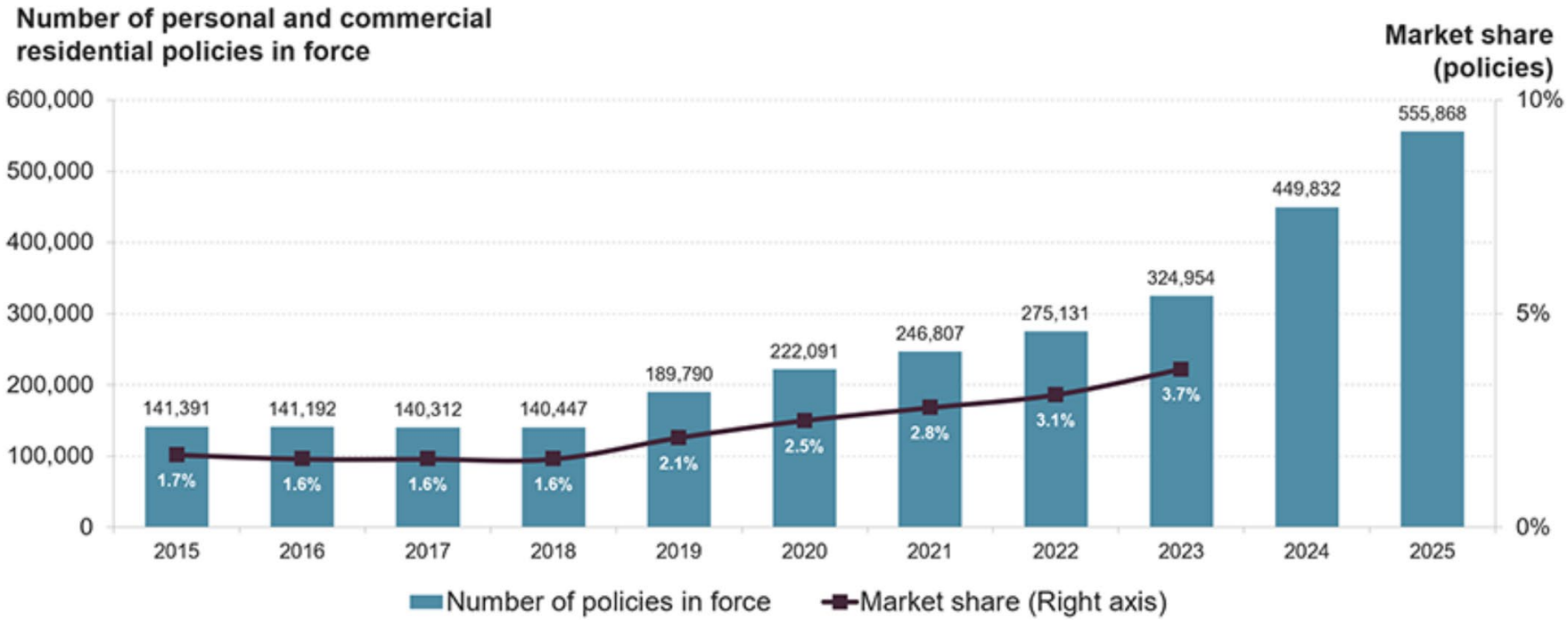
Primary Market Trends

- Residual market growth
  - California FAIR Plan share doubles 2017-2022
  - Florida CPIC share doubles 2017-2022

- Excess and surplus market growth

- “Judgment proofing” in the industry

Figure 3: California's Fair Access to Insurance Requirements (FAIR) Plan Is Experiencing Historic Growth and Financial Stress



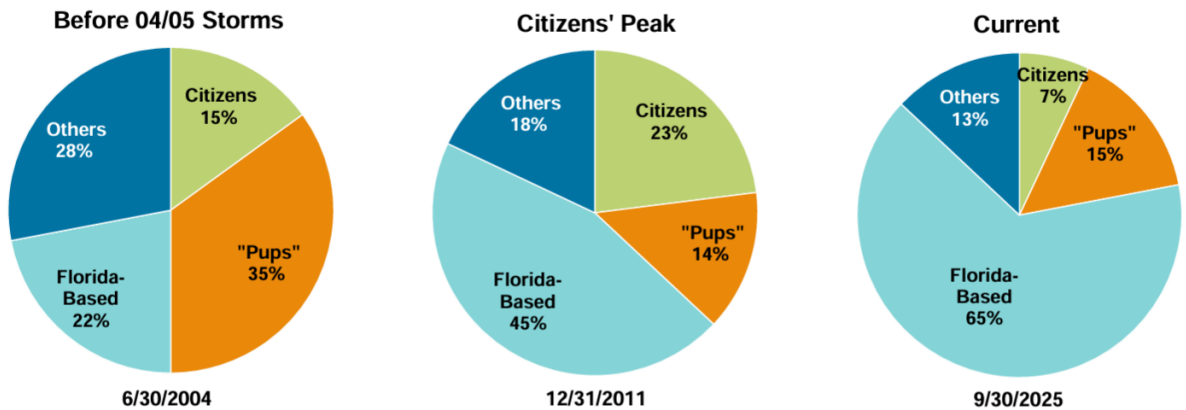
Sources: California FAIR Plan; 2024 data represent total from September 2024 while 2025 data represent total from March 2025.
Note: Market share information not yet available for 2024 and 2025.

"California's Homeowners Insurance Market Is a National Bellwether", Steve Koller, Housing Perspectives, May 27, 2025

Figure 5
California Homeowners Market Share – Including FAIR Plan[62]

Market Segment	2021	2022	2023	2024
Admitted Market	94.1%	92.5%	90.9%	86.7%
E&S Market	2.2%	2.8%	3.6%	5.7%
CA FAIR Plan	3.7%	4.7%	5.5%	7.6%

Market Share Based on Total Insured Value
For Policies that Include Wind Coverage
Florida Residential Property Insurance Market
Includes Trade Secret Insurers
QUASR Data as of September 30, 2025



Insurer Category	Total Insured Value
Citizens	$270,591,681,264
"Pups"	$565,970,817,910
Florida-Based	$2,482,924,700,239
Others	$485,155,645,674
Total	**$3,804,642,845,088**

The Florida Residential Property Insurance Admitted Market is divided into 4 major parts: (i) Citizens; (ii) Florida only subsidiaries "pups" of major national writers; (iii) Florida-based domestic companies; and (iv) non-domestic nationwide property writers, such as USAA, etc.

Notes:

1) Includes admitted insurers only
2) Surplus lines companies are not included in the market share calculation
3) Based on total insured value for policies with wind coverage
4) Percentages may be adjusted so the values add up to 100%. For example, Citizens' market share was 23.5% in 2011.

Conclusion

- Why is this happening? Catastrophe risk transfer is expensive
  - BEAT Act makes it more expensive
  - More “harmonization” in progress: we may be running out of workarounds
    - **Bermuda enacts corporate income tax effective 1/1/25**

- Where is the risk going? Carriers shedding risk affects primary market

- Ultimate burden on consumers and taxpayers
  - availability/affordability problems
  - forced into residual markets, and E&S
  - various schemes that push costs onto consumers and taxpayers

- Paper offers an important contribution in a neglected area