



Update on Post-Level Term Experience

ACSW spring meeting – June 16, 2016

Parker Crosby, ASA, MAAA

parker_crosby@swissre.com



Table of Contents

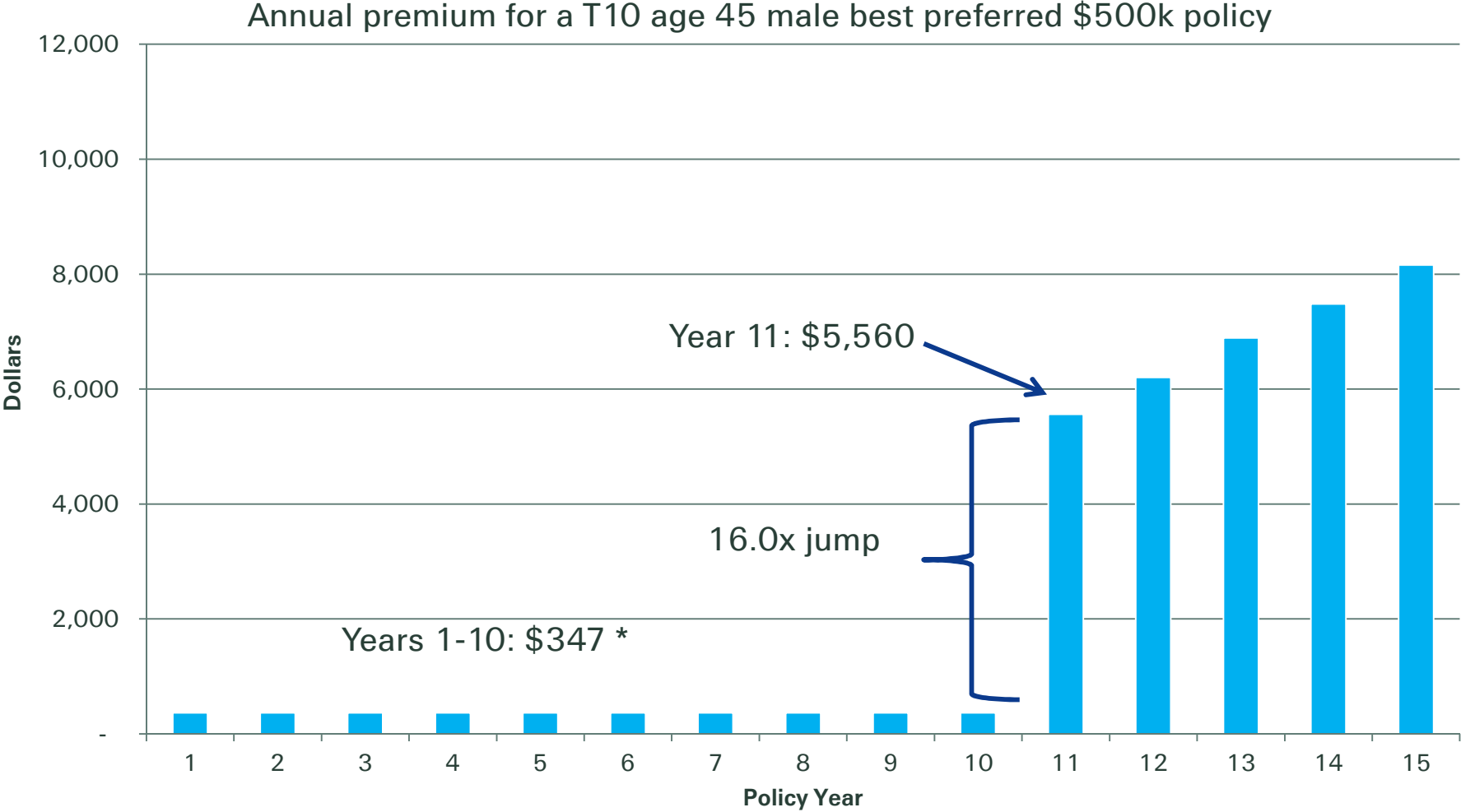
- Background
- What actions have been taken?
- Why bother with PLT?
- Next steps?

Background

- Term product illustration
- History

T10 example

Post level term premium jump



History of Post-level term management

1990s

- Level term products begin to be sold with high premium jumps due to pre-XXX reserving framework, non-forfeiture rules, lack of post-level experience available, and it is not the primary focus of product.

2000s

- Post-level experience begins to emerge with industry-wide experience above expected lapse & mortality.

2010s

- Post-level term premium management begins to take off.

Industry lapse assumptions

SOA survey shows only a few companies vary assumptions by the primary driver – premium jump ratio

Vary by these parameters	No Other Variance	Additional Variations		
		Premium Mode	Premium Jump Ratio	Risk Class & Premium Jump Ratio
No Variance	9			
Issue Age & Level Period	5	1	1	1
Level Period	5	1		
Issue Age & Risk Class	2		1	
Risk Class	1			
Premium Jump Ratio	1	1		

What actions have been taken?

Current market landscape

Significant movement over the past four years

- We are aware of at least 25 companies that have implemented a PLT management program on in force, new business, or both
 - Companies that have managed premiums for in force business wrote ~50% of the term business between 2002 & 2004.
- We have proposed PLT management or discussed the topic in detail with a number of additional companies that are currently evaluating their options
- Results from the 2013 SOA survey shows that companies were just starting to change new business design as well as manage in force premiums.

Post-Level Product Design (NB 2012)	
Product Structure	Responses
Premium jump to ART	40
Premium grade to ART	4
Jump to new level period	3
Face amount decrease	1
Product terminates	2
Flexible Premiums (Term UL)	1

Changes to Post-Level Premium Structure for Term In Force		
Description	Implemented in last 5 years	Considering
Lower post-level premiums	1	5
Grade into an ART scale	3	3
Other	0	2

Post Level Term – Actions

Our PLT management activity

- Accumulated a very large book of in force term reinsurance business
- Focused R&D resources to study the business and develop modeling and assumption setting approaches
- Believe the value of PLT business can be enhanced with informed, active management of PLT premiums
- Implemented premium changes on multiple blocks acquired by Swiss Re
- Working with our clients to help them manage PLT business
 - Agree to changes with clients
 - Adjust PLT premium rates to reduce lapses, preserve healthier live, and increase profitability

Comprehensive research, credible results

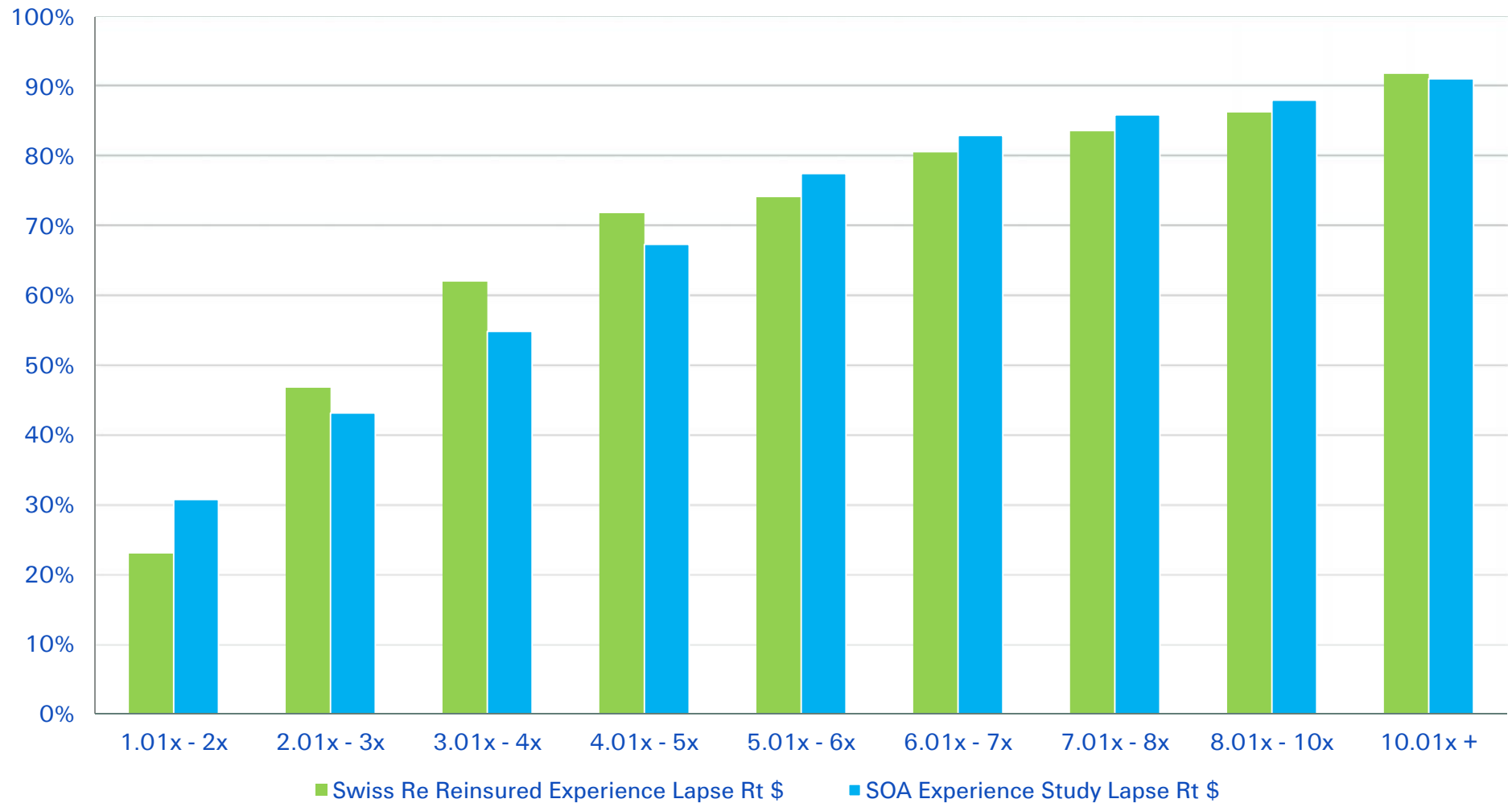
- Our analysis centers around 3 different studies
 - Swiss Re industry study (including Admin Re[®] data)
 - Swiss Re reinsurance study
 - SOA study
- Analysis focused on areas where we have premium information
- Summary PLT studies statistics (T10 only):

	<u>Swiss Re industry study</u>	<u>Swiss Re reinsured study</u>	<u>2014 SOA study</u>
Companies	8	33	27
Issue years	1990-2002	1990-2004	1989-2002
Exposure years	1995-2012	2007-9/2014	2000-2012
PLT claims	2,246	2,424	1,297
Dur 10+ lapses	360,357	548,597	336,866

Lapse experience

Lapse rates correlate with premium jumps

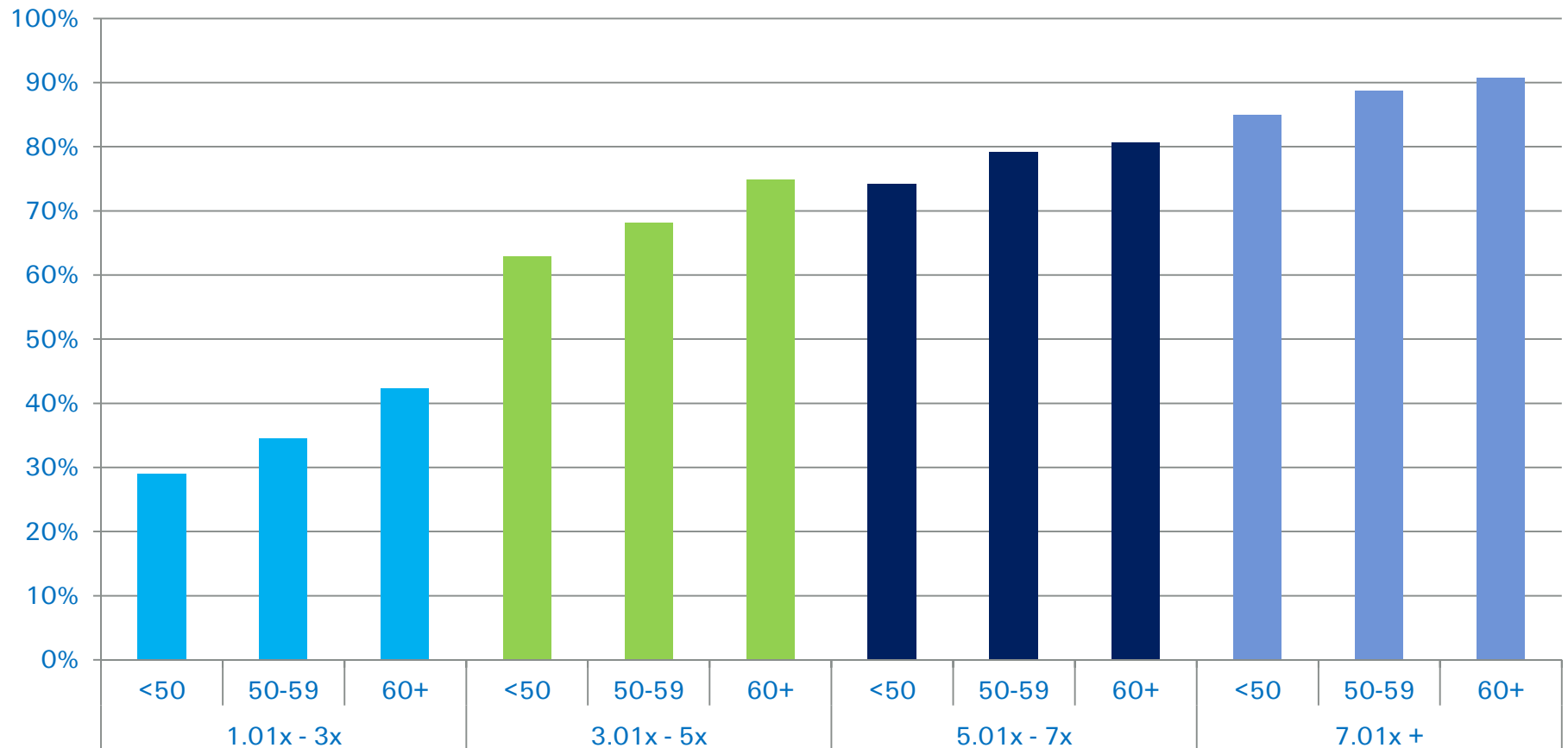
T10 shock lapse rate by premium jump ratio by amount



Lapse experience

Lapses vary by age for a given premium jump

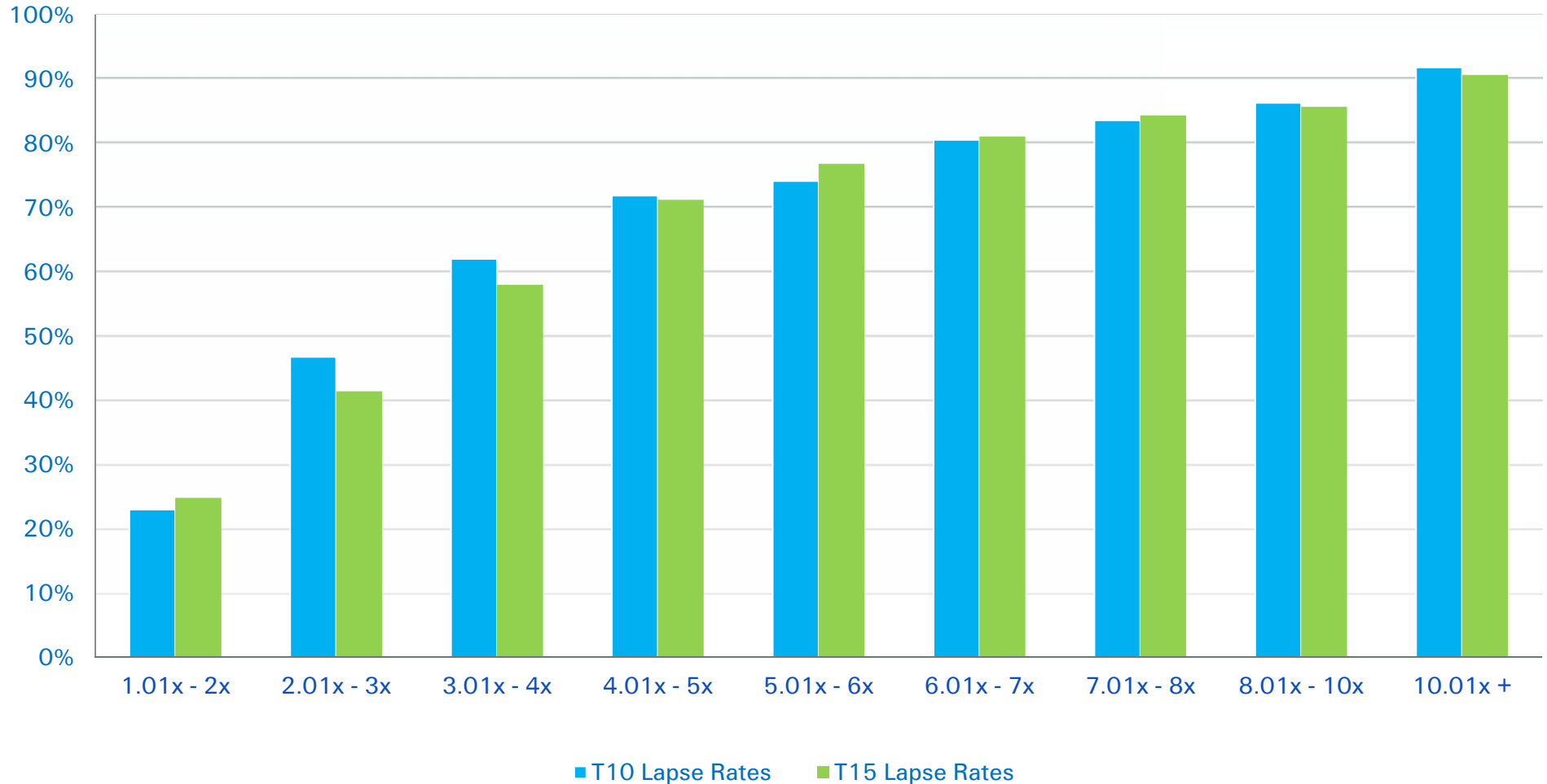
T10 shock lapse rate by premium jump and attained age by amount



Lapse experience

Results similar for 10- and 15-year level premium plans

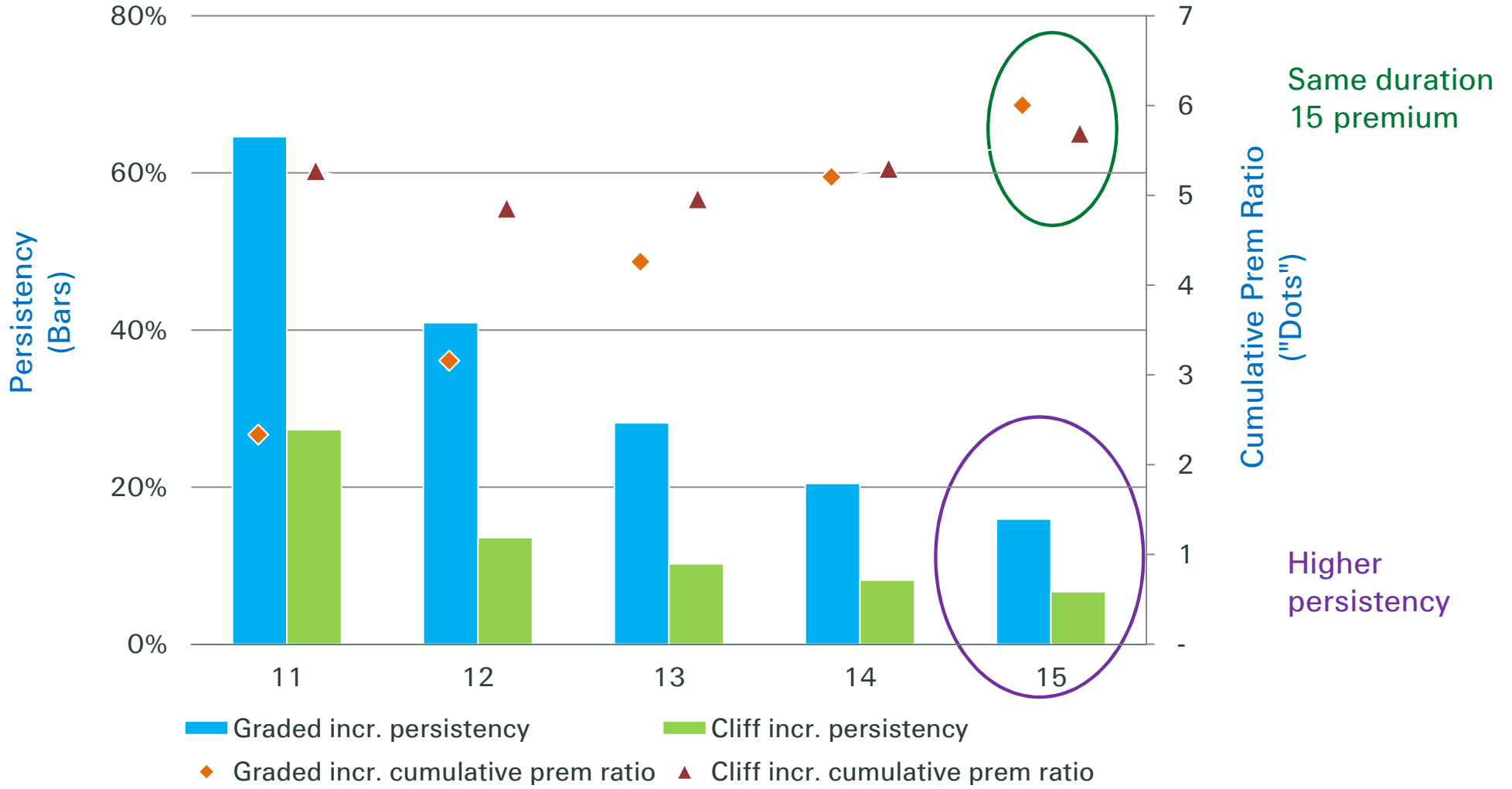
Comparison of shock lapse rates for T10 & T15 by premium jump



*Note: There is limited experience for T15

Post level term Persistence is path dependent

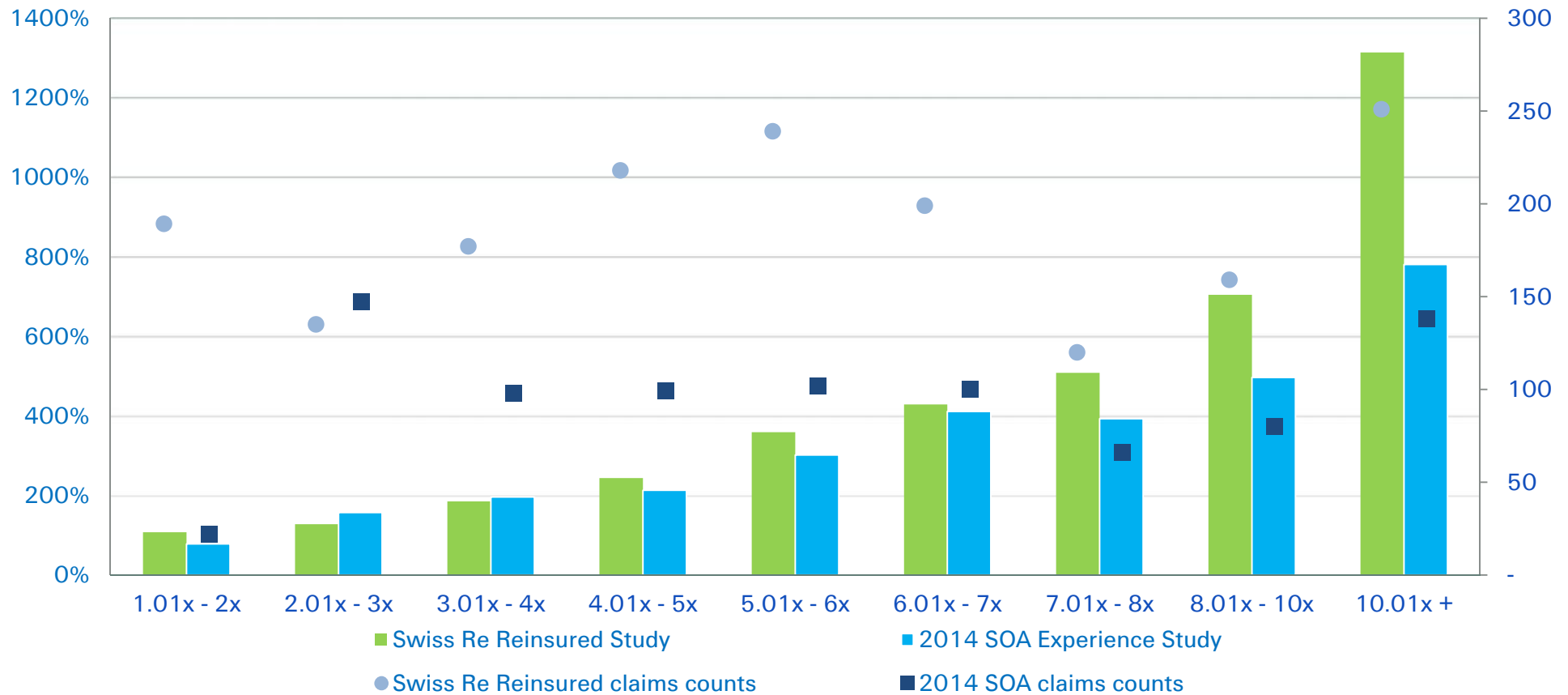
Post level term persistency by duration



Mortality experience

Mortality increases with larger premium jumps

Post Level Mortality (Dur 11-12) as % 2008 VBT Table (by number)

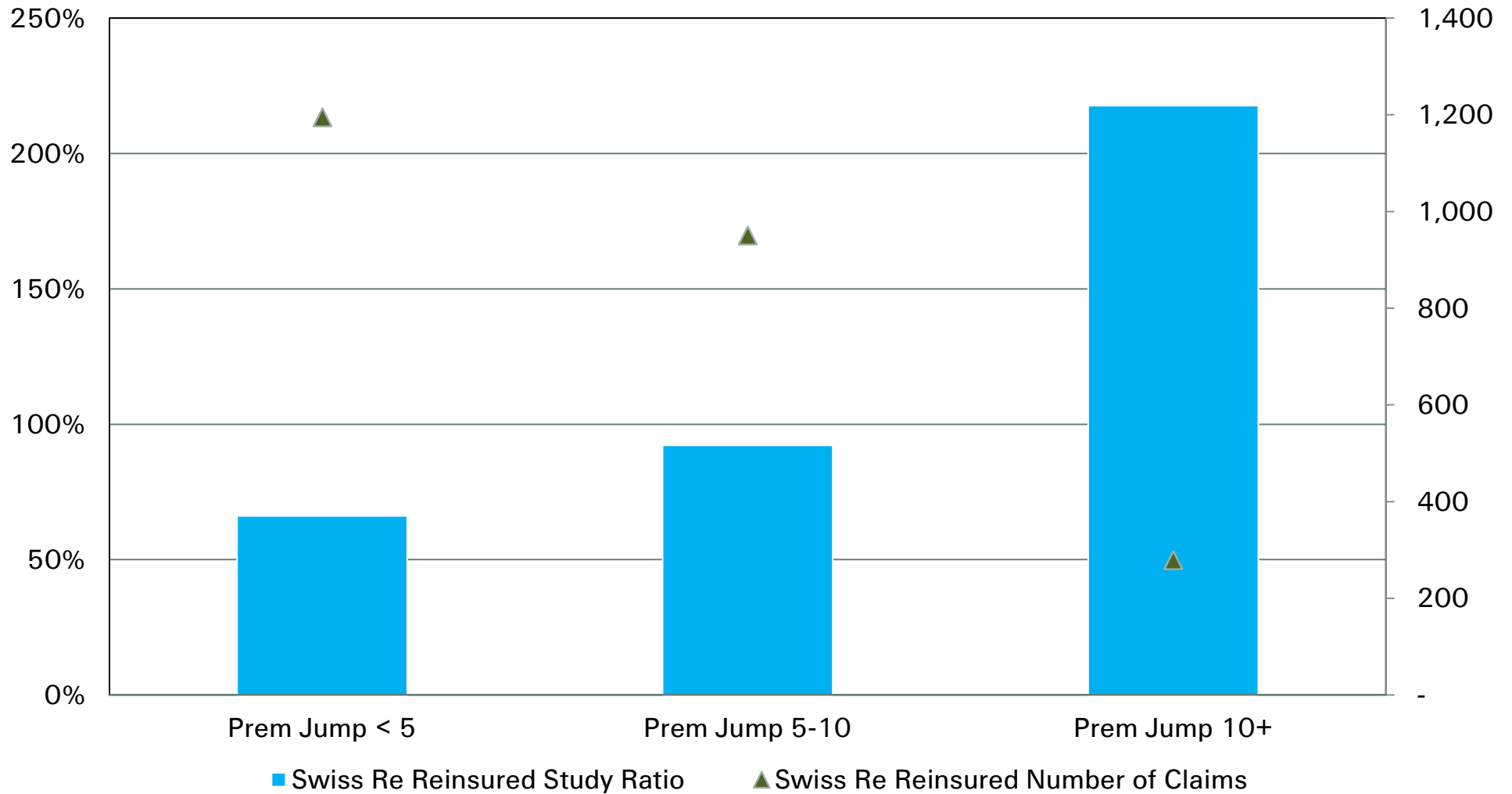


*A/E's are based on by number. A/E's by amount will be approximately 4 to 5% higher by amount

- Mortality patterns largely follow results seen in the lapse analysis (higher lapses = higher mortality)
- Given the limited number of claims there is significant volatility, however there is a clear trend

Post level term Loss ratio increases by premium jump

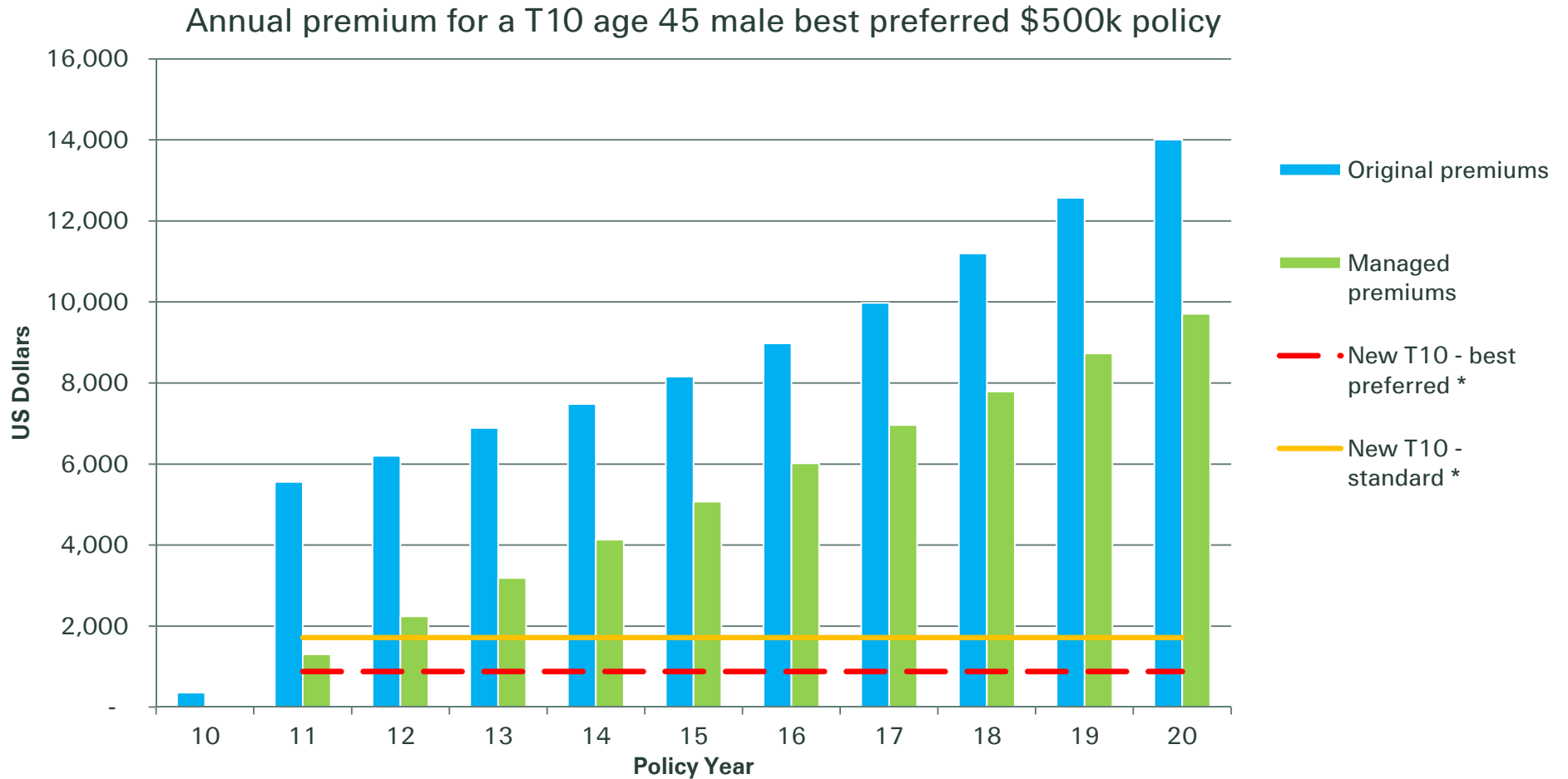
Ratio of Death Benefits to Direct Premiums



Why bother with PLT?

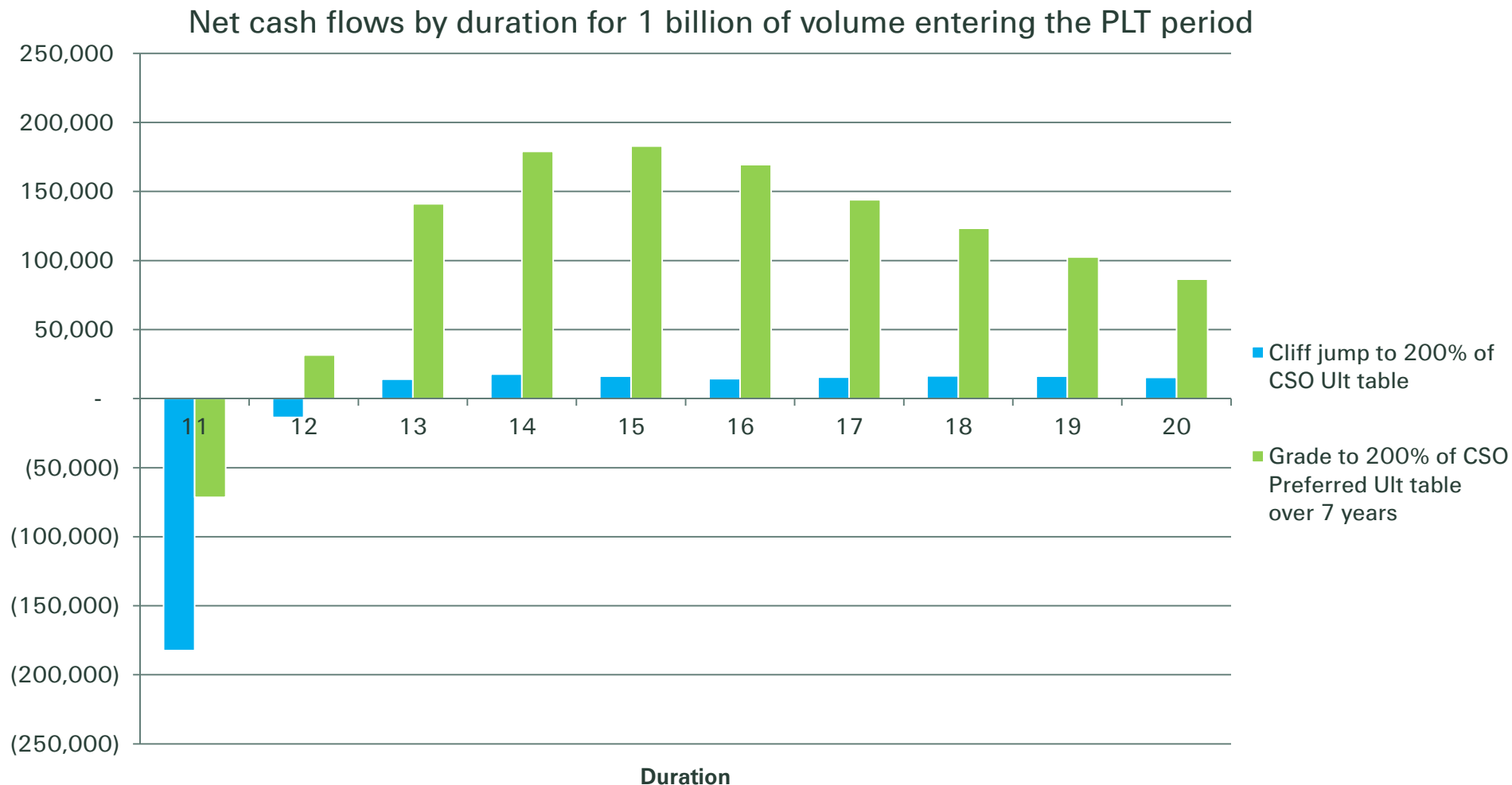
PLT management in action

Illustrative potential PLT premium change

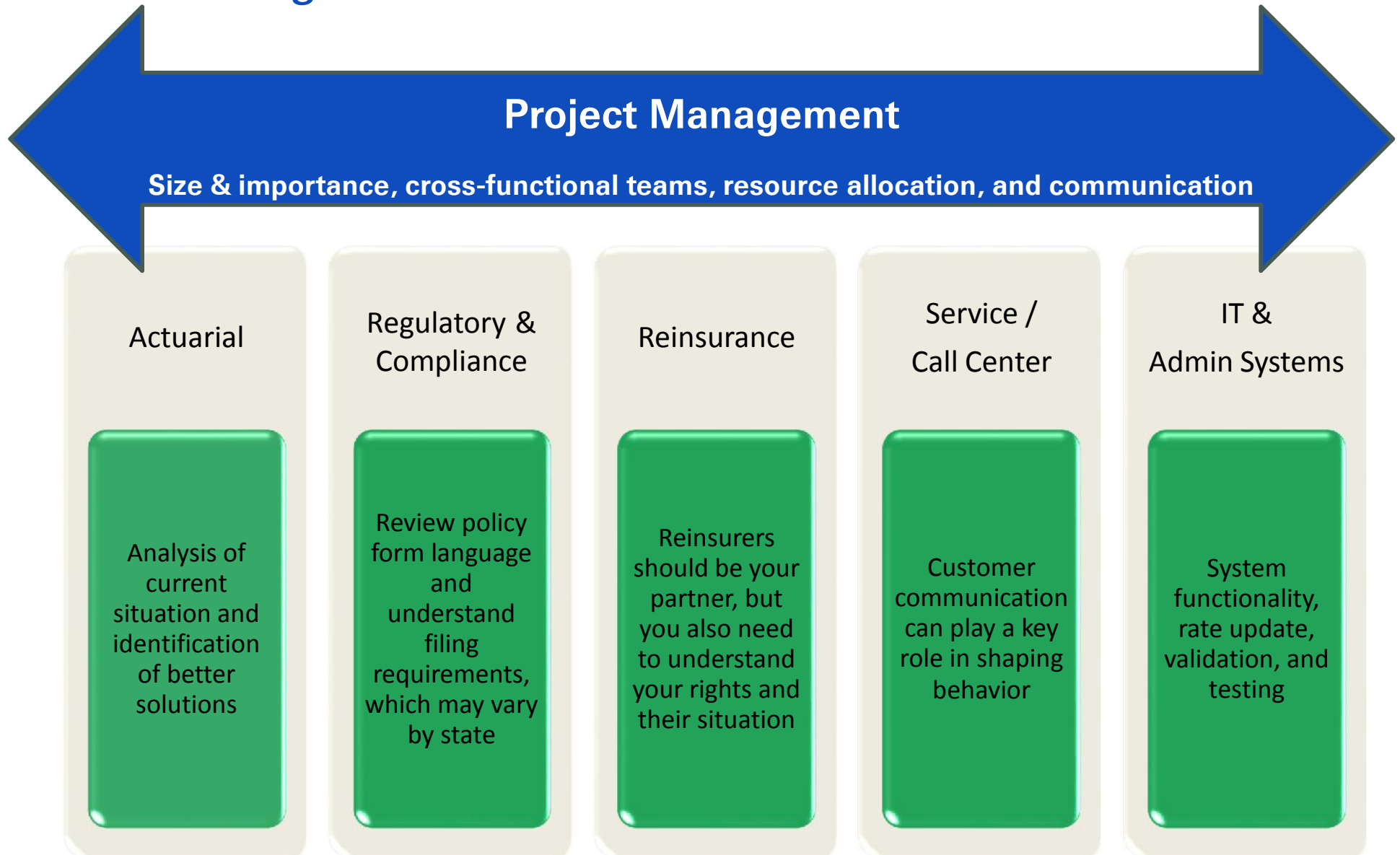


PLT management in action

Illustrative potential PLT net cash flows



Post Level Term –
Answering "Where should we start?"



Next steps?

Classical Economic Theory

- Assumes that:

- we are fully rational beings
- we seek to maximize utility

- To change behavior:

- Information to help us to better understand costs
- Financial incentives to change the relative prices of costs and benefits

- Theory vs. Practice:

Our choices should only be influenced by theoretically relevant factors (e.g. prices), but they aren't!

Source: Paul Dolan (LSE)

Behavioral Economics

- System 1 vs. System 2 thinking

- Automatic: fast, unconscious, associative and very low energy consumption
- Reflective: slow, conscious, analytic and consumes a lot of energy (from Thinking, Fast & Slow)



- We are mostly automatic beings (and evidence that this is mostly good)
→ Therefore, we are hugely affected by context as well as simply content

M **Messenger:** We are heavily influenced by who relays the information to us.

I **Incentive:** We often respond to incentive using mental shortcuts

N **Norms:** We tend to do what those around us do

D **Defaults:** We like to "go with the flow"

EQ



S **Saliency:** We respond to things that are new and relatable

P **Priming:** Our behavior can be influenced by unconscious cues

A **Affect:** Emotional associations can shape the way we behave

C **Commitment:** We look to be consistent with ourselves and our public promises

E **Ego:** We act in ways to make us feel better about ourselves

Dolan, P., Hallsworth, M., Halpern, D., King, D., & Vlaev (2010) [Mindspace: Influencing behaviour through public policy](http://www.instituteforgovernment.org.uk/our-work/better-policy-making/mindspace-behavioural-economics). Institute for Government. Available at <http://www.instituteforgovernment.org.uk/our-work/better-policy-making/mindspace-behavioural-economics>

You've got mail Renewal period

Version 1

<<OWNER FULL NAME>>
<<ADDRESS1>>
<<ADDRESS2>>
<<CITY>>, <<STATE>>, <<ZIP>>
Statement Date: 00/00/0000
Re: Policy Number <<CERTIFICATE NUMBER>>
Insured: <<INSURED NAME>>

Thank you for allowing us to continue to serve your insurance needs. To make it as easy as possible for you to stay informed about your life insurance policy, we are providing the following summary:

Premium Amounts

- Your current premium is guaranteed to remain the same for the first 10 years of your policy (through 00/00/0000).
- While you are not required to continue your policy after this 10 year period, if you choose to do so, your premium will increase.
- In year 11, we can not estimate of your monthly premium is \$0,000.00; however, this rate is not guaranteed.
- Your life insurance policy includes a Policy Schedule that contains more information about your premiums.

Policy Exchanges

- You can exchange your policy for one that provides permanent life insurance protection, including a Whole Life plan with level premium cost's or a Universal Life policy that can provide flexible premium payments.
- This option is available to you during the first X years of your policy, until 00/00/0000, regardless of your health.
- You are guaranteed coverage with no medical examination or other evidence of your insurability, as long as you act before your conversion option expiration date.
- There may be some age restrictions on this right, so please consult your sales for more details.

Please contact your agent or our office

P.S. As a reminder, even if you have no questions about your life insurance coverage, it is a good idea to take the time to review the beneficiary designation in your policy contract to be certain that it is up to date.

Increasing Premiums

Version 2

ABC Life Insurance Company
Customer Service
P.O. Box 12345
Any City USA

ABC
Life Insurance Company

June 1, 2015

JOHN DOE
Street
City, State, Zip code

Hi, Policy No. XXXXXX
Insured: John Doe

Dear John Doe,

Thank you for faithfully paying premiums on your ABC Life term life insurance policy since you purchased it in 2005. You've probably noticed many changes since then and through them all, your policy has provided critical protection for your family and yourself and for you. We appreciate the trust and confidence you've placed in us.

As shown in your policy, your premium will soon increase. With continued premium payment, your policy - not all of the protection it provides - can remain in place as the amount you have dependent on.

For policy year XX, beginning on 00/00/2000, your modal premium will increase to \$000.00.

Our records currently indicate that your premiums are billed twice. Unless you notify us to adjust the frequency of your billing, the new premium amount will be billed as scheduled for your continued convenience.

If you have any questions about your policy, please contact your agent or call us at 1-800-000-0000.

Sincerely,
Jane Smith
VP Insurance Administration

CC: Agent

Simplify

Version 3

ABC Life Insurance Company
Customer Service
143 Elm Street
Any City USA

ABC
Life Insurance Company

June 1, 2015

JOHN DOE
Street
City, State, Zip code

Hi, Policy No. XXXXXX
Insured: John Doe

Dear John Doe,

Thank you for faithfully paying premiums on your ABC Life term life insurance policy since you purchased it in 2005. You've probably experienced many changes since then and through them all, your policy has provided critical protection for your family and peace of mind for you. We appreciate the trust and confidence you've placed in us.

As shown in your policy and communicated each year, the level premium portion of your policy is about to end and your premium will soon increase. With continued premium payment your policy, and all of the protection it provides, can remain in place as the amount you have dependent on.

For policy year XX, beginning on 00/00/2000, your quarterly premium will increase to \$000.00.

Our records currently indicate that your premiums are billed twice. Unless you notify us to adjust the frequency of your billing, the new premium amount will be billed as scheduled for your continued convenience.

Also, our records currently indicate that you have the right to exchange this policy for a new Whole Life policy with level premiums on a new Universal Life policy with flexible premiums of \$000.00/000.00. The face amount of insurance of the new policy cannot exceed the face amount of insurance of this policy. This right is available without any medical examination or other evidence of insurability.

If you have any questions about your policy, please contact your agent or call us at 1-800-000-0000.

Sincerely,
Jane Smith
VP Insurance Administration

CC: Agent

Salience

Simplify

Questions?



Legal notice

©2016 Swiss Re. All rights reserved. You are not permitted to create any modifications or derivatives of this presentation or to use it for commercial or other public purposes without the prior written permission of Swiss Re.

Although all the information used was taken from reliable sources, Swiss Re does not accept any responsibility for the accuracy or comprehensiveness of the details given. All liability for the accuracy and completeness thereof or for any damage resulting from the use of the information contained in this presentation is expressly excluded. Under no circumstances shall Swiss Re or its Group companies be liable for any financial and/or consequential loss relating to this presentation.