

INSURANCE 101 – GENERAL INSURANCE

June 2009

AGENDA

Part 1 – Understanding insurance basics

Part 2 – Capital management and pricing

Part 3 – Industry thematics

Part 4 – Key drivers in an insurer's financials

PART 1

UNDERSTANDING INSURANCE BASICS



WHAT AN INSURER DOES

BASIC PRINCIPLES

- **The advantage of obtaining insurance is that it allows the pooling of risks and reduces the probability of one party bearing the entire cost of a loss**
- **Insurance policies originated in 17th century London coffee houses which became the place for sharing information on agreements of pooled risks between merchants, ultimately leading to the formation of Lloyds of London**
- **In the aftermath of The Great Fire of London, Nicholas Barbon an English physician opened “The Fire Office” to insure London’s brick homes, and established insurance policies as we know them today**
- **Today, an insurance contract is a contract in which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policy holder. (AASB 4)**

WHAT AN INSURER DOES

Differences to assurance and other financial products

- **Insurance pools the risk of uncertain future events. This is different to assurance models which pool the risk of events which will happen such as death, retirement or paying interest**
- **The actual cost of providing the general insurance product is *not known* at the time of selling the product**
- **The product being sold only has *intangible* attributes such as selling a promise to pay and the likelihood of a claim occurring**
- **The product is often a ‘grudge’ purchase and a ‘need’ rather than a ‘want’**

WHAT AN INSURER DOES

BASIC PRINCIPLES

SIMPLIFIED CONCEPT – RISK OF A LARGE AND INFREQUENT LOSS

Every year 1 in every 1,000 houses suffers a fire at a cost of \$100,000.



An individual risks having to finance \$100,000 if it is their turn for the 1:1000 loss.

A group of 1,000 householders pooling together pay only \$100 each to rebuild the house each year. Even after 10 years the individual has only paid \$1,000 to protect their risk of \$100,000.

WHAT AN INSURER DOES

BASIC PRINCIPLES

SIMPLIFIED CONCEPT – RISK OF SMALL FREQUENT LOSSES

*Every year 100 in every
1,000 houses suffers a
burglary at a cost of \$1,000.*



An individual risks having to finance \$1,000 if it is their turn for the 1:10 loss.

A group of 1,000 householders pooling together pay \$100 each to reimburse the cost of goods stolen. Over 10 years the individual has paid \$1,000.

WHAT AN INSURER DOES

PRODUCTS

SHORT TAIL

- **Claims usually known and settled within 12 months**
- **Less complexity in managing claims**
- **Less risk in predicting final settlement**
- **Generally based around property**

LONG TAIL

- **Claims may not even be reported within 12 months**
- **Settlement can take 3-4 years**
- **Greater complexity in managing claims**
- **Higher risk in predicting final settlement**
- **Generally based around medical and legal outcomes**

WHAT AN INSURER DOES

PRODUCTS

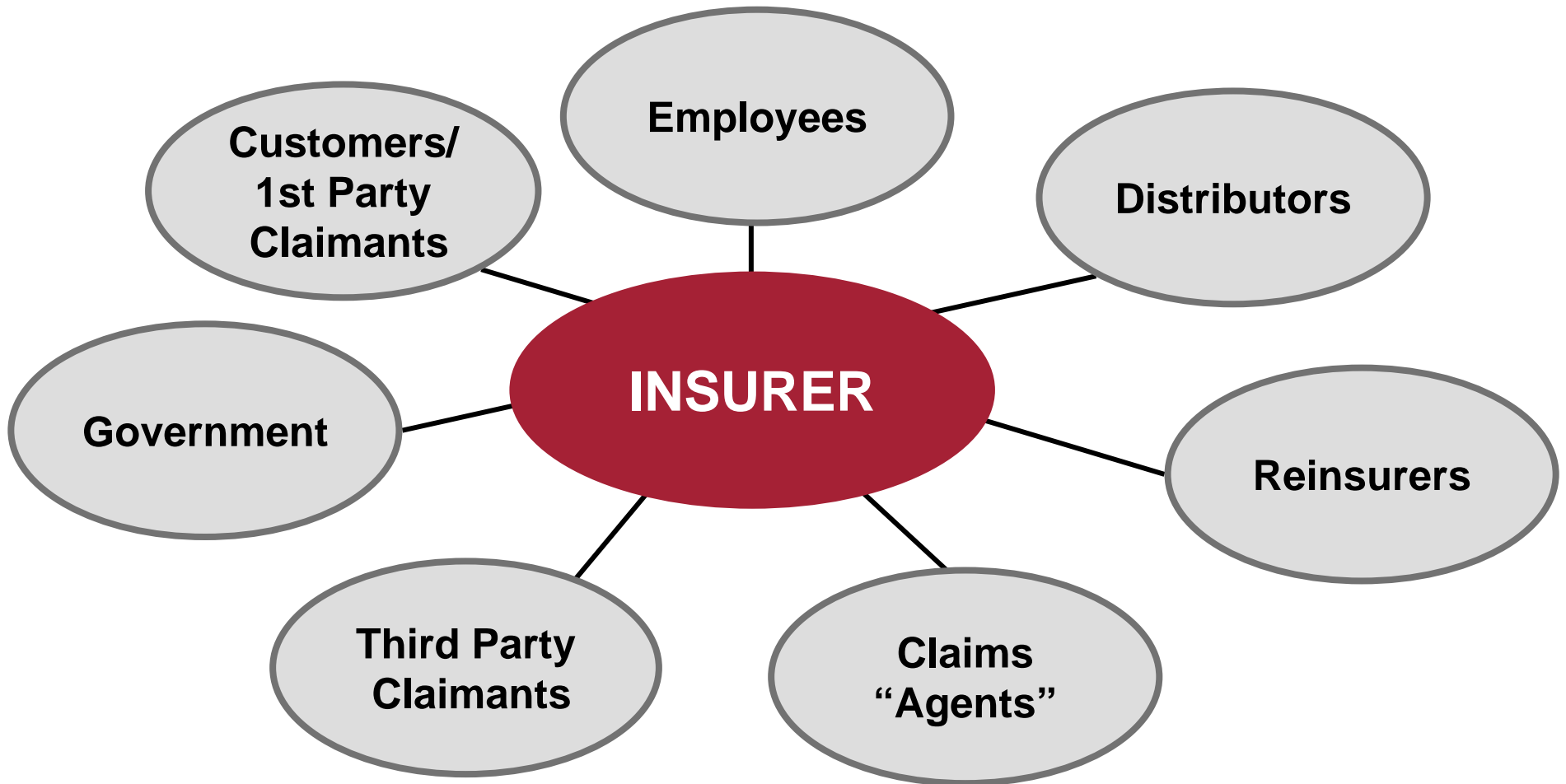
	PERSONAL LINES	COMMERCIAL
SHORT TAIL	<ul style="list-style-type: none"> • Private Motor • Home, Contents • Personal Effects • Boat • Caravan / Trailer • Health • Travel • Transport Accident • Consumer Credit 	<ul style="list-style-type: none"> • Fleet Motor • Fire, Explosion • Burglary, Theft • Goods in Transit • Construction • Personal Accident / Travel • Credit • Political Risks • Kidnap & Ransom
LONG TAIL	<ul style="list-style-type: none"> • Compulsory • Third Party (statutory) • Home Liability 	<ul style="list-style-type: none"> • Workers Compensation (statutory) • Public & Products Liability • Product Recall • Professional Liability • D & O Liability • Defamation • Environmental

WHAT AN INSURER DOES UNDERWRITING

An insurer manages the pooling of risks to optimise the result (underwriting profit) – not all risk attributes in the pool are the same:

SPECIFIC	SOCIO DEMOGRAPHIC	ECONOMIC	CATASTROPHIC
<p><u>Individual Risk</u></p> <ul style="list-style-type: none"> • Driver ability • Driver age • Gender • Ethical profile • Moral risk <p><u>Asset Risk</u></p> <ul style="list-style-type: none"> • Type of car • Type of finance 	<ul style="list-style-type: none"> • Area • Average income • Level of un-employment 	<ul style="list-style-type: none"> • Inflation • Exchange rates • Cost of parts • Fuel prices • Level of employment 	<ul style="list-style-type: none"> • Hail • Earthquake

KEY STAKEHOLDERS IN INSURANCE TRANSACTIONS



PART 2

CAPITAL MANAGEMENT

AND PRICING

INSURANCE BASICS

- **Outcomes of risks from individual policies are unknown when underwritten**
- **However, when many similar risks are underwritten, expected results of total portfolio become more predictable**
- **Claims processes are driven by:**
 - Frequency (or probability) of a claim event occurring; and
 - Severity (of size) of a claim if it occurs
- **Risks inherent in different classes of insurance vary:**
 - High frequency / low severity (eg motor and health) – outcomes easy to predict reliably
 - Low frequency / high severity (eg earthquake and hail) – outcomes hard to predict reliably

THE NEED FOR CAPITAL

Capital plays a central role in the provision of insurance:

- **Provides security to policyholders that claims will be paid**
- **Provides support in face of adverse unexpected outcomes from insurance activities, investment performance and operations**
- **Facilitates growth**
- **Can be defined as = Total Assets – Total Liabilities**

MINIMUM CAPITAL REQUIREMENTS

- **Capital available for regulatory purposes includes:**
 - Tier 1 (Share capital, retained earnings, eligible hybrid debt and excess technical provisions less intangible assets and goodwill) and
 - Tier 2 (Subordinated debt, non tier 1 eligible hybrid debt and other)
- **MCR is calculated as required by APRA as:**
 - Insurance risk charge, plus
 - Investment risk charge, plus
 - Maximum event retention
- **Capital strength is measured by:**
- **Capital multiple = capital available/ MCR**
- **Capital multiple must always > 1.0 to stay in business**

THE ROLE OF PRICING

- **Meet expected claims**
- **Meet operational expenses**
- **Provide a return on capital**
- **Be competitive in market for risk**

THE RIGHT WAY!

- **Analyse and understand the risk**
- **Premium comprised of**
 - Risk Premium
 - Claims administration expenses
 - Acquisition & maintenance expenses (incl. Commission)
 - Taxes, levies, duties
 - Reinsurance costs
 - Profit Margin
- **Risk Premium**
 - Expected No. of claims x Expected Average Claim Size
 - Inflated and discounted

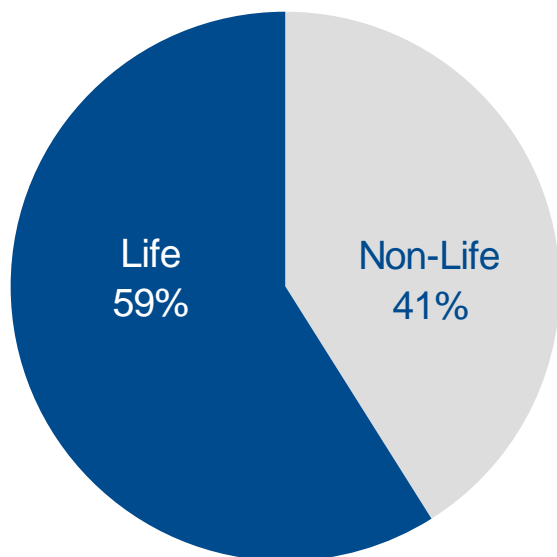
PART 3

INDUSTRY THEMATICS

INDUSTRY THEMATICS

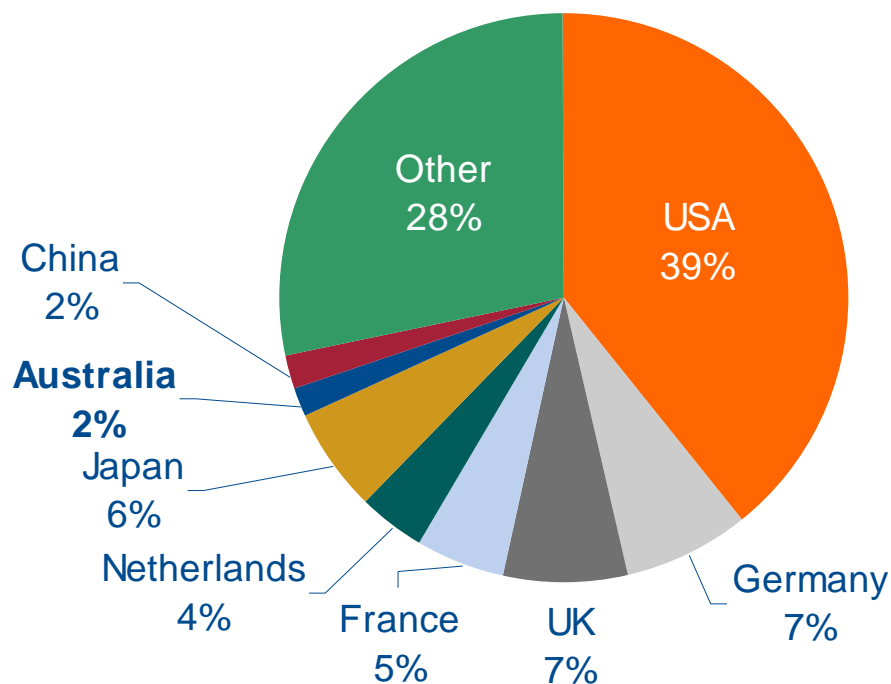
GLOBAL

Global Insurance market (US\$4,060bn)



Source: Sw iss Re Sigma No3/2008. Data as at December 2007.
Notes: Includes non-life health premiums

Global GI market (US\$1,667bn)

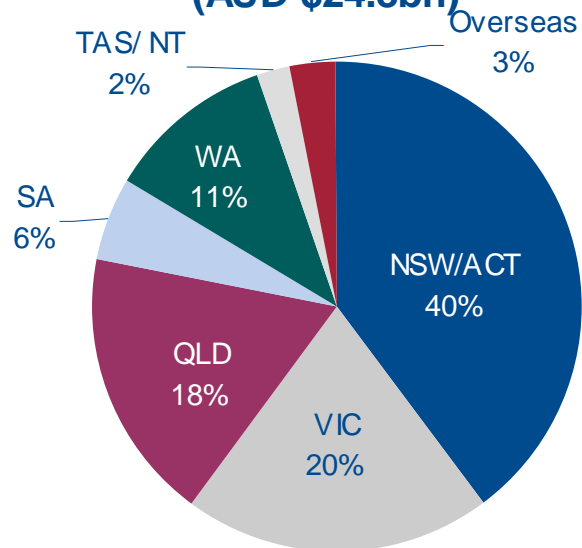


Source: Sw iss Re Sigma No3/2008. Data as at December 2007.

INDUSTRY THEMATICS

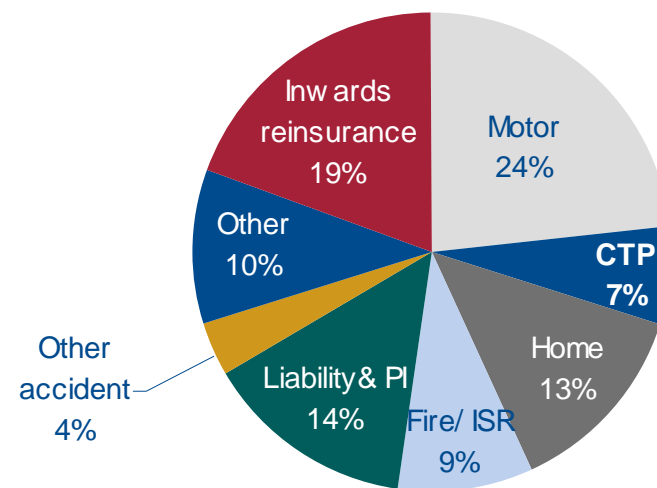
AUSTRALIA

**Australian Direct Insurance Premiums
(AUD \$24.8bn)**



Source: Apra Half Yearly Insurance Statistics, June 2008.

**Australian Premium by Class
(AUD\$30.8bn)**

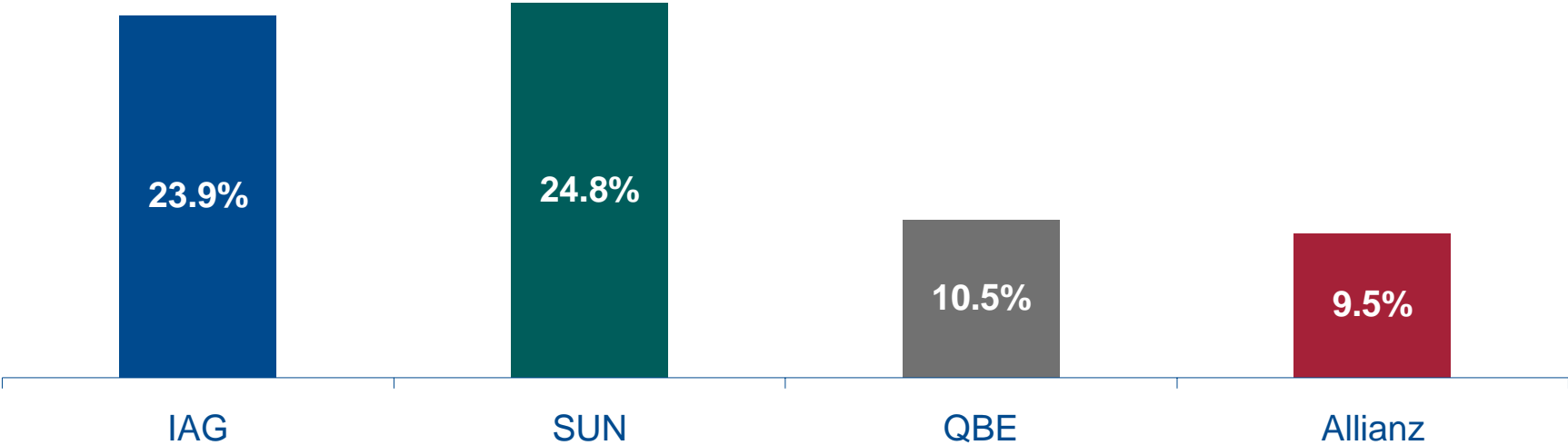


Source: Apra Half Yearly Insurance Statistics, June 2008.

INDUSTRY THEMATICS

AUSTRALIA

Major Australian Insurers Market Share

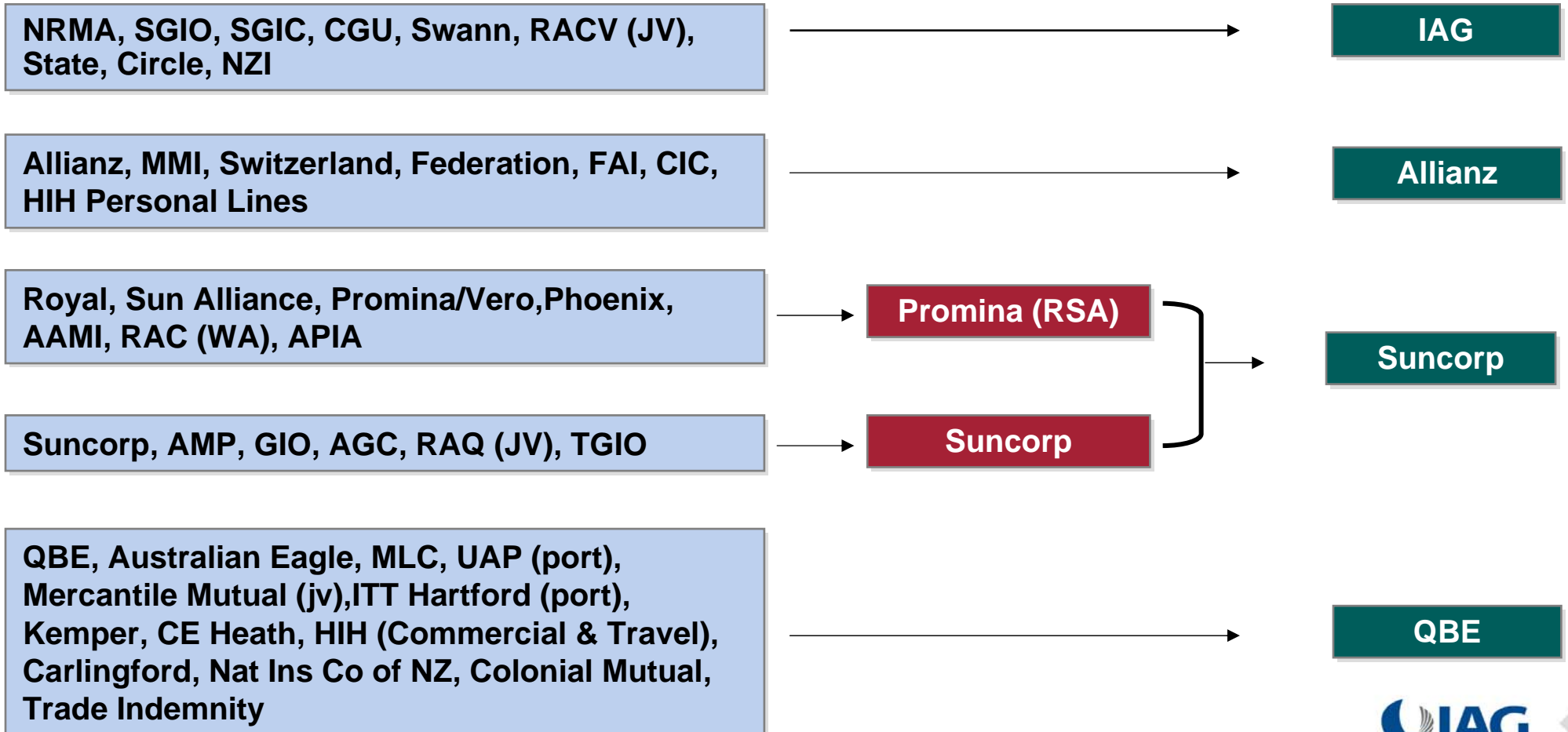


Source: APRA Net Earned Premium as at 30 June 2008

INDUSTRY THEMATICS

AUSTRALIA

Over the last decade there has been a trend of privatisation, demutualisation and consolidation.



INDUSTRY THEMATICS

TRENDS

Price Increases –
The Insurance Market Cycle

Underwriting Profits
Peak

Underwriting Profits Peak

Capacity Increases

Competition Increases /
Rates Deteriorate

Loss Ratio Begins to Rise /
Rates Continue to Fall

Major Underwriting Losses

Capacity Leaves

Rates Rise

Loss Ratio Improves

Source: Ord Minnett / Deloitte Touche

LARGEST GLOBAL INSURANCE LOSSES 1970 - 2008

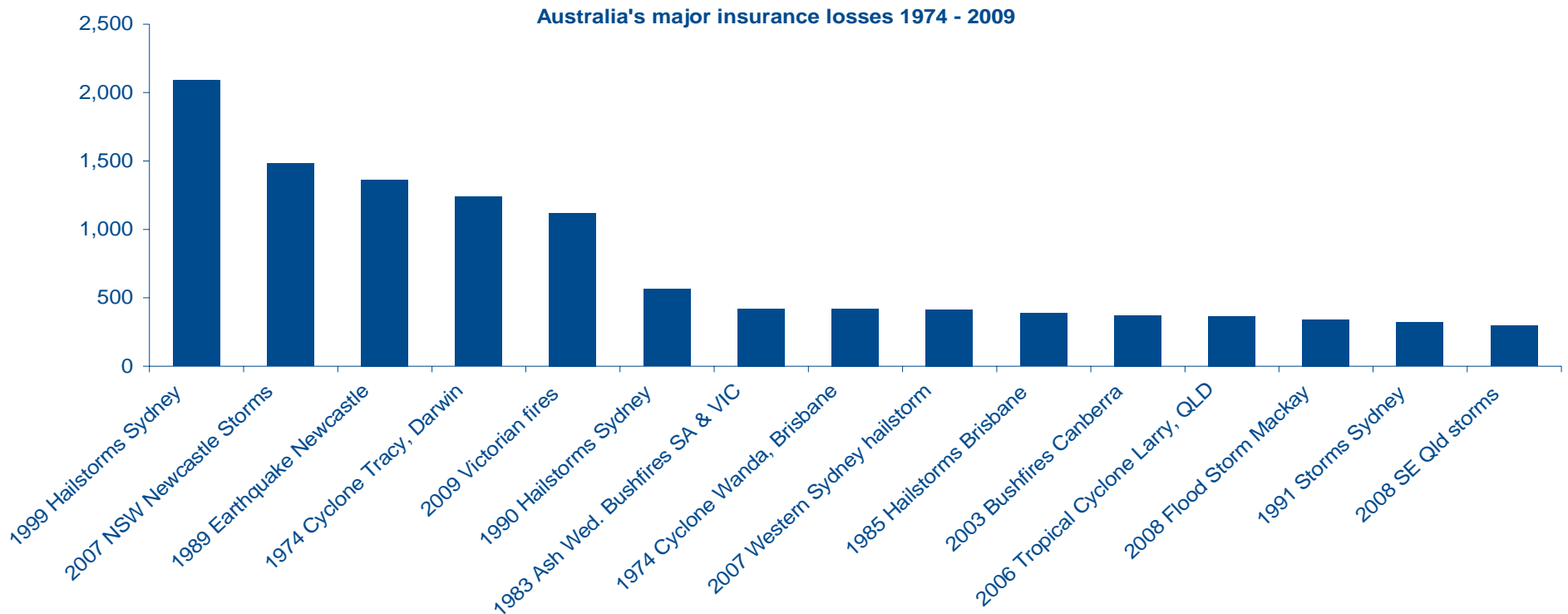
6 of the most costly losses have occurred in the last four years

Rank	Event	Insured Loss \$bn *	Year
1	Hurricane Katrina	71.3	2005
2	Hurricane Andrew	24.6	1992
3	WTC Terrorist Attack	22.8	2001
4	US, Northridge Earthquake	20.3	1994
5	Hurricane Ike	20	2008
6	Hurricane Ivan	14.6	2004
7	Hurricane Wilma	13.8	2005
8	Hurricane Rita	11.1	2005
9	Hurricane Charlie	9.2	2004
10	Japan, Typhoone Mireille	8.9	1991

* Indexed to 2008

Source: Swiss Re Sigma No 2/ 2009. All figures quoted in USD.

AUSTRALIA'S MAJOR INSURANCE LOSSES



Source: Insurance council of Australia and PWC facts and figures. Losses from the 2009 Victorian bushfires and South East Qld Storms are on-going.

PART 4

KEY DRIVERS IN AN INSURER'S FINANCIALS

HOW DOES AN INSURER MAKE MONEY ?

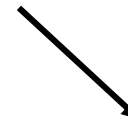
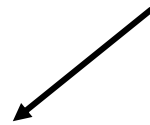
REVENUE



Premiums

+

Investment Income



LESS

EXPENSES



Claimants

+

Govt. Taxes & Levies

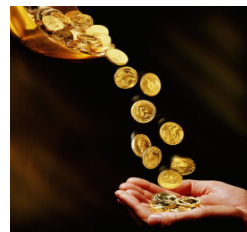
+

Reinsurers

+

Salaries & associated admin expenses

PROFIT



Distribution to Shareholders
(return on their investment)

KEY DRIVERS - HOW INSURANCE WORKS

TERMINOLOGY

Premiums

=

Gross Written Premium (GWP)

Is the total amount we received from customers for the payment of their insurance policies.

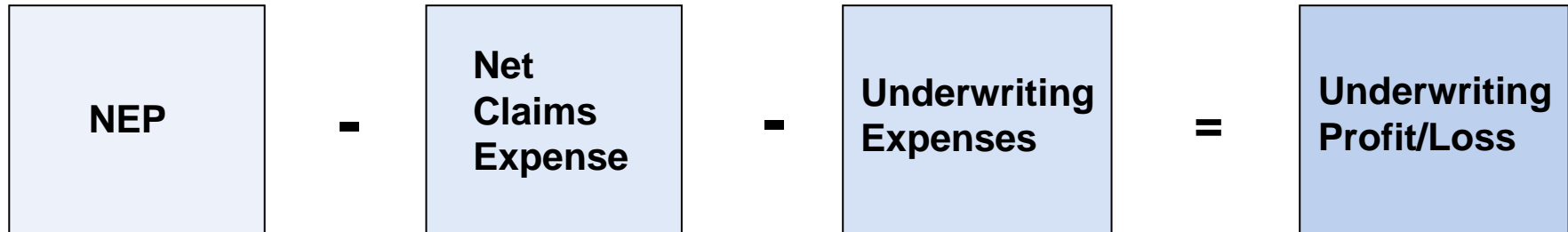
Gross Earned Premium (GEP)

When we calculate our results for the year (financial) we only include the portion of policies up to June 30.

Net Earned Premium (NEP)

Our net earned premium is our gross earned premium minus reinsurance costs.

KEY DRIVERS - HOW INSURANCE WORKS



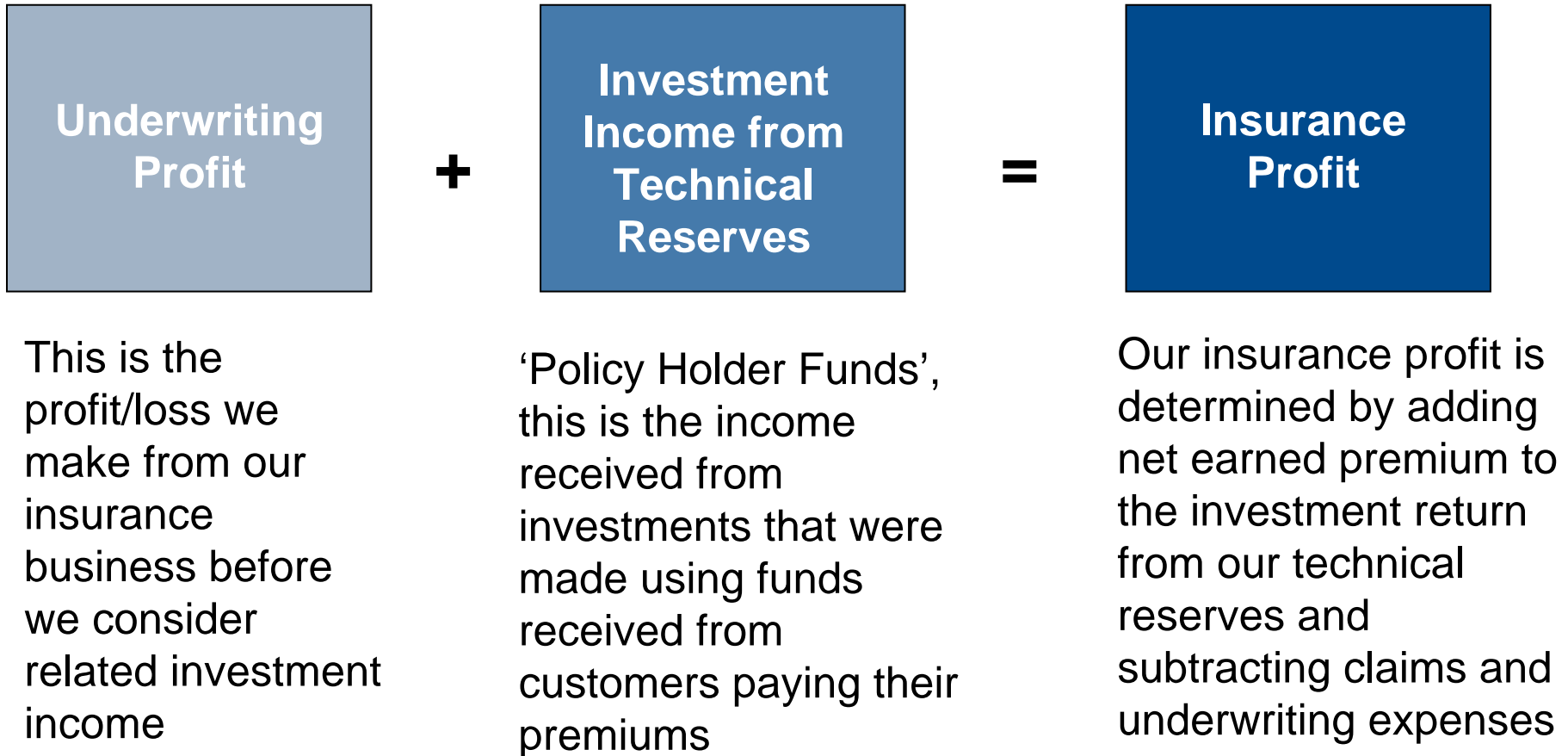
Is the total amount we received from customers after making adjustments for 'unearned premium' and 'reinsurance' costs

This is the gross amount paid out during the year, as well as an estimate of how much we need to pay on future claims which have been incurred (whether reported or not). It also includes the cost of processing claims. We deduct from this gross amount any recoveries (reinsurance, salvage, third parties, etc, which arise from the gross claim.

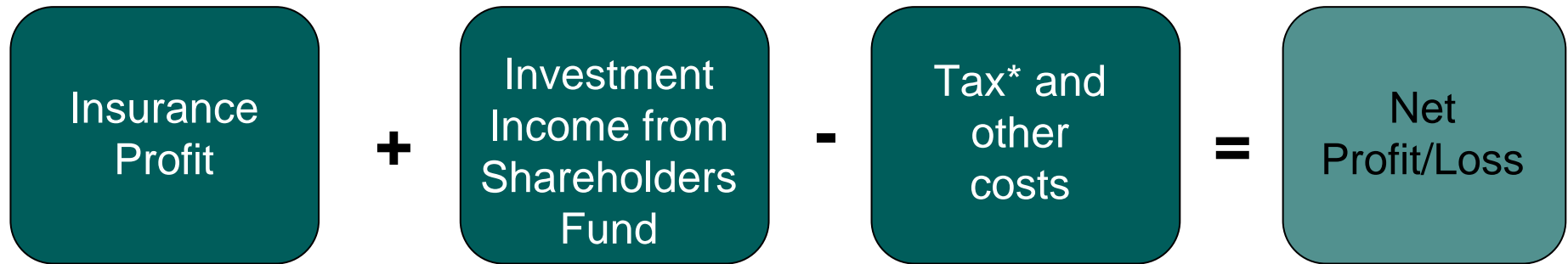
These are costs associated with researching risk and determining appropriate premiums, administering policy information, marketing, distribution, etc.

This is the profit/loss we make from our insurance business before we consider related investment income

KEY DRIVERS - HOW INSURANCE WORKS



KEY DRIVERS - HOW INSURANCE WORKS



Our insurance profit is determined by adding net earned premium to the investment return from our technical reserves and subtracting claims and underwriting expenses.

This is the income received from investments made using shareholders funds. These investments are usually more aggressive than those made using technical Reserves.

* Other costs include interest, amortisation, etc which is specific to a company.

This is the net result after allowing for income taxes and the share of profit owing to minority shareholders/ unit holders within the Group.

KEY DRIVERS - HOW INSURANCE WORKS

TERMINOLOGY

Loss Ratio

The ratio of net claims expense to Net Earned Premium (NEP)

+

Expense Ratio

The ratio of underwriting expenses to net earned premium

=

Combined Ratio

Our claims and underwriting expenses measured as a percentage of our net earned premium

+

Investment income
on technical reserve

=

Insurance Margin

The pre tax profit margin of the general insurance operations as a percentage of net earned premium

KEY DRIVERS

USE OF CAPITAL

Policyholders Funds
("Technical
Reserves")
Provisions made for
unearned premiums
& outstanding claims



More conservative
investment
approach 100%
Fixed Interest

Capital
("Shareholders
Funds")



More aggressive,
includes
investment in
equities

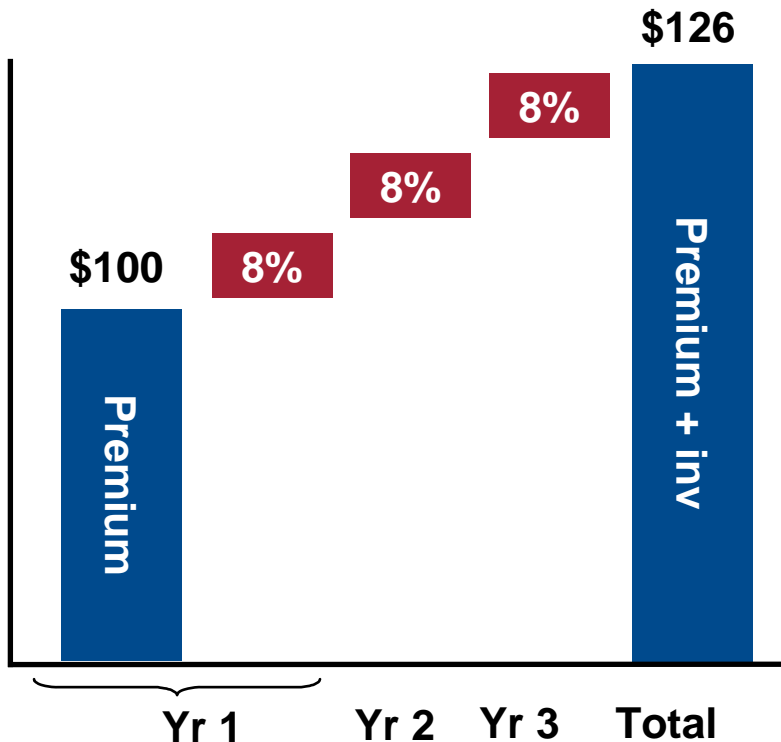
KEY DRIVERS

DIFFERING OPERATING RATIOS

Long tail has more volatility, longer duration and higher capital

Long tail

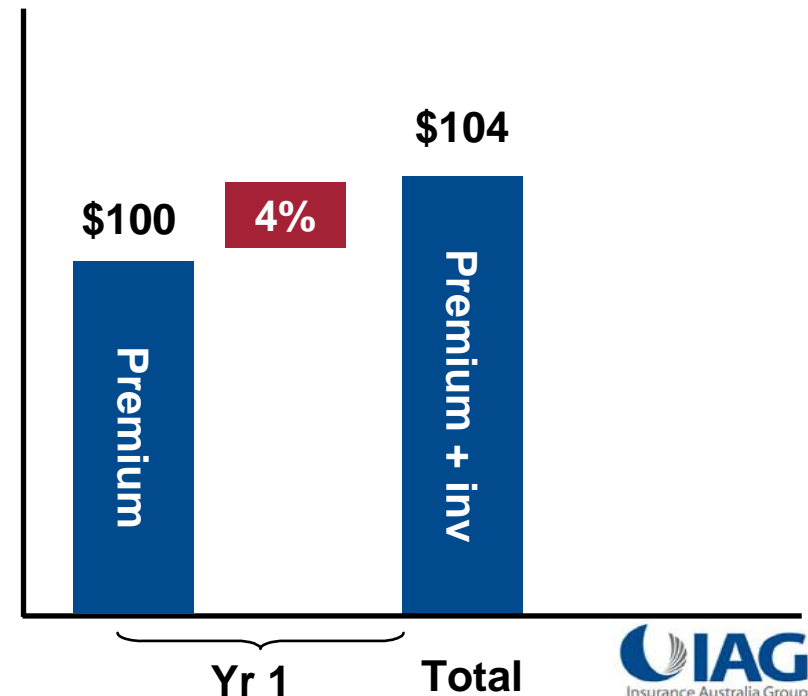
Long tail business has significantly longer claims payment cycle allowing investment returns to offset the higher loss ratio's:



vs.

Short tail

Short tail business has average claims payment cycle of less than 12 months, so investment return has less of an impact on the insurance margin earned:



KEY DRIVERS IN AN INSURER'S FINANCIALS

WHAT DRIVES SHARE PRICE?

- **Quality & Stability of Earnings**
 - Underwriting
 - Claims management
 - Liability & risk management
 - Asset management
 - Balance sheet management
 - Stability of earnings

- **Competitive Returns on Invested Capital**