



Competitive Pricing for Car Insurance

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Manager P&C Pricing Allianz Benelux

Responsible for the technical pricing of all P&C products for all distribution channels of AZ Benelux

Skills & Expertise

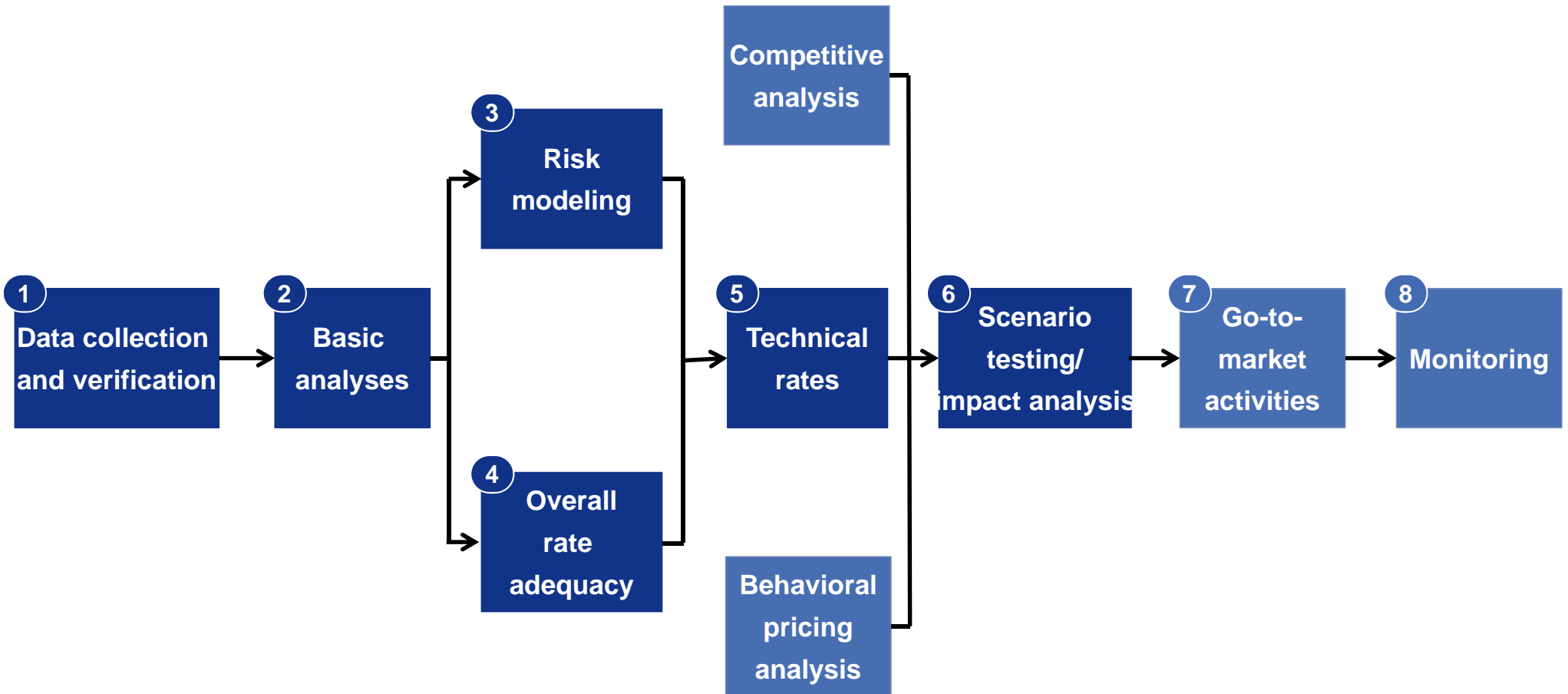
- Pricing
- Reserving
- Reinsurance
- Risk Management

Education

- Actuary AG
- Msc Actuarial Sciences
- Msc Mathematics

The pricing process

■ Focus on basics
technics



It starts and ends with culture!



Balancing both sides, easier said than done!

Technical folk

- Too “Technical”
- Too conservative
- Too theoretical
- Want to analyse everything
- Don't understand relationships or customer
- Live in a perfect world



Distribution folk

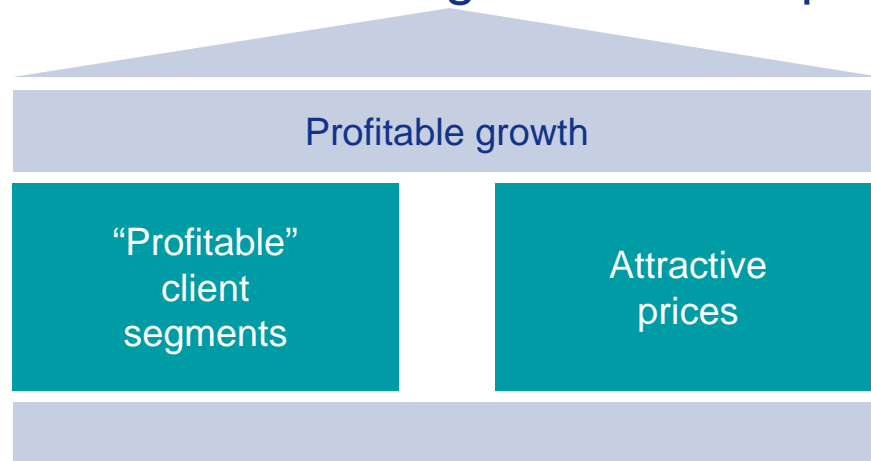
- Too optimistic
- Order takers
- Focussed on top line only
- Deal doers
- Kings of entertainment
- Don't understand technical pricing
- Can only sell using discounts






US vs. THEM
needs to give way to a highly effective team!

Achieving „profitable growth“ instead of „growth or profitability“:

Illustration of the general concept



Challenges

-  How to overcome the area of conflict of “growth vs. profitability”?
-  How to identify & address profitable and unprofitable segments?
-  How to adjust prices (and by how much) per segment (increase or decrease)?

Concept of profitable growth

-  Price increase for unprofitable segments with strong competitive position
- Price decrease for profitable segments with weaker competitive position

Ø margin	# of policies	Profit
50 €	1000	+ 50.000 €
		
40 €	1500	+ 60.000 €

Real life example: Price adjustment (private cars)

Analysis

Price adjustment

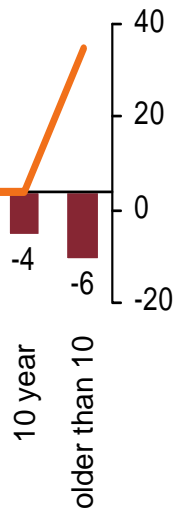
Result

Analysis of Profitable Segments

Margin in%

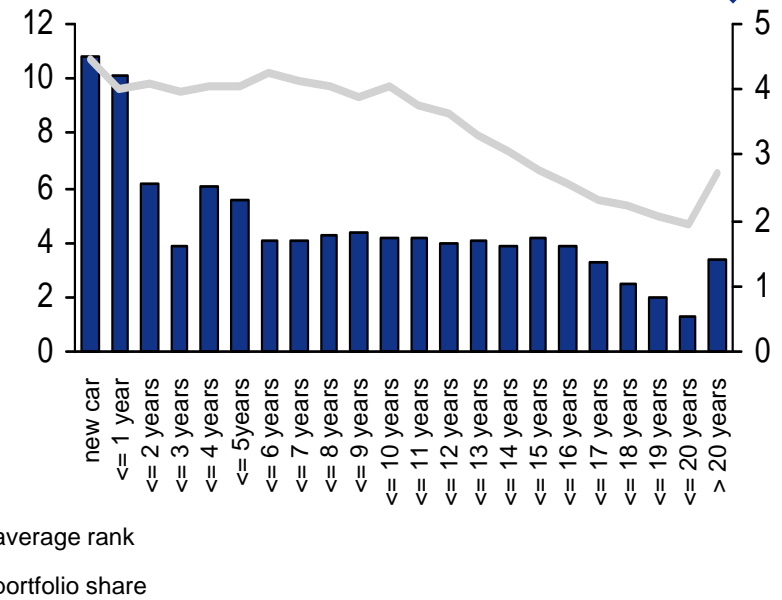


Portfolioshare

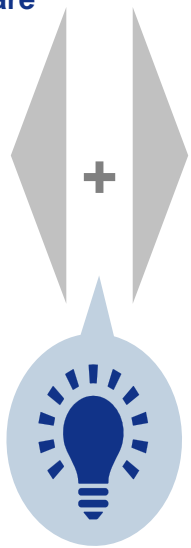


— Portfolioshare in % ■ Margin in %

Analysis of Market Position



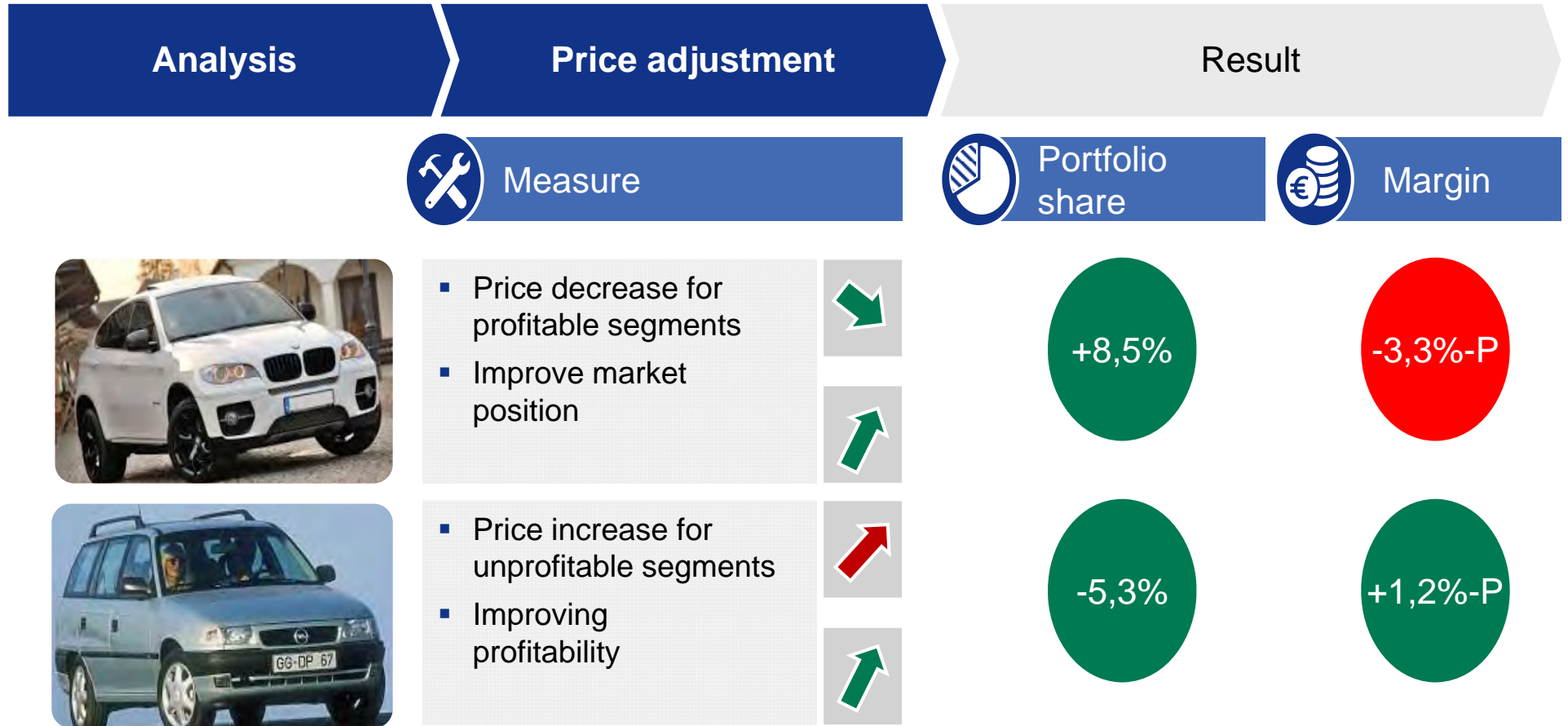
— average rank
■ portfolio share



RESULT: Improved competitive position of young cars while keeping an attractive margin

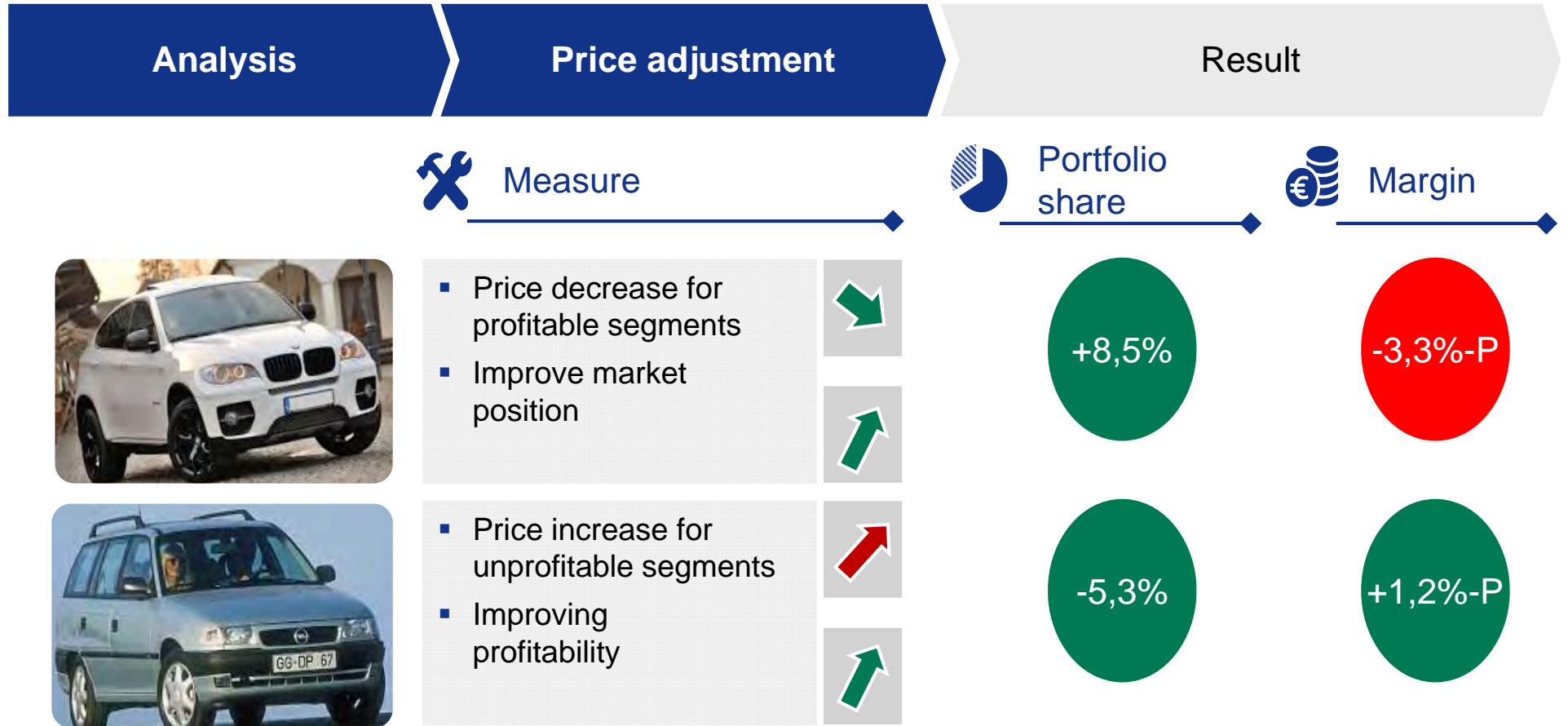
Margin = Breakeven-PLR – current PLR

Real life example: Price adjustment (private cars)



+++Higher margin +++ Higher conversion +++Profitable growth+++

Real life example: Price adjustment (private cars)

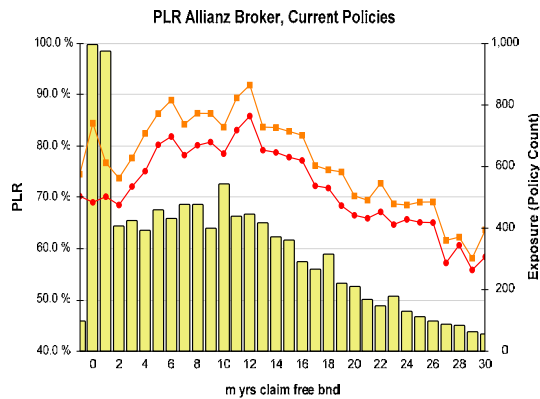


+++Higher margin +++ Higher conversion +++Profitable growth+++

Deep-dive Bonus Malus / Claim Free Years: status quo and proposal

Current status

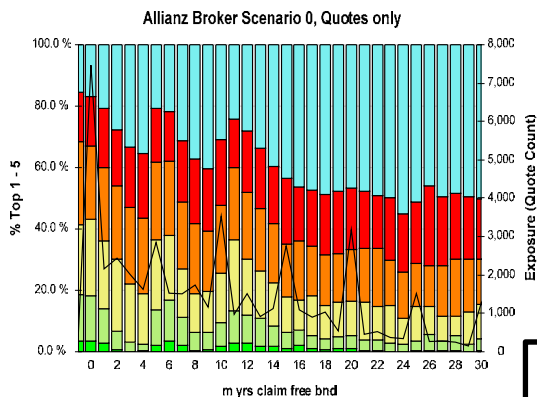
Profitability mismatch: PLR in portfolio



Orange line: PLR current (system) premium
 Red line: PLR latest tariff
 Green dotted line: average PLR
 Yellow bars: exposure (current policies)

- Large cross-subsidy for 5-15 CFYs
 → BM discount increases to quickly

Competitiveness: Top 3 positions quotes



- Higher competitiveness in the high PLR segment
- Potential attractive segment in the lower (0 – 5) claim free years: many quotes/policies, higher premiums

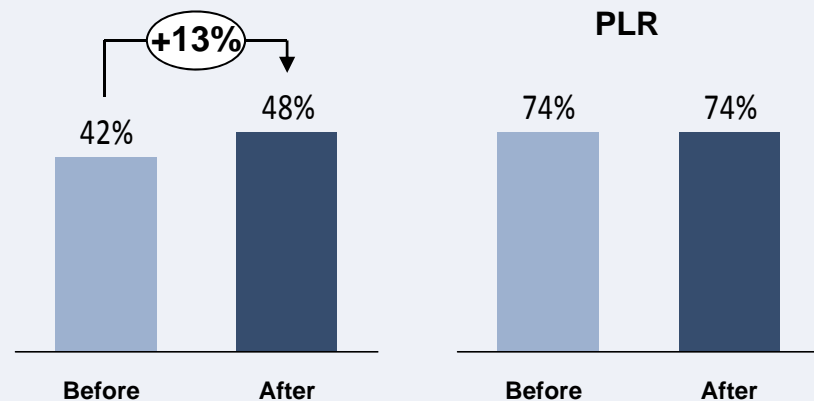
Black line: exposure
 Bright green: rank 1, green: rank 2, etc.
 Blue: not in top 5

Proposal

- Limited option: adjust the BM discount % in the current BM table
- Further options:
 - Increase length of the BM table

Top 3: amongst 10 broker peers
 PLR: excluding sub-cover effects

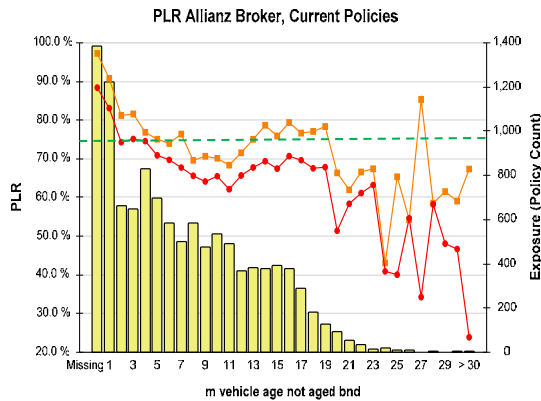
Top 3 positions



Deep-dive Vehicle age: status quo and proposal

Current status

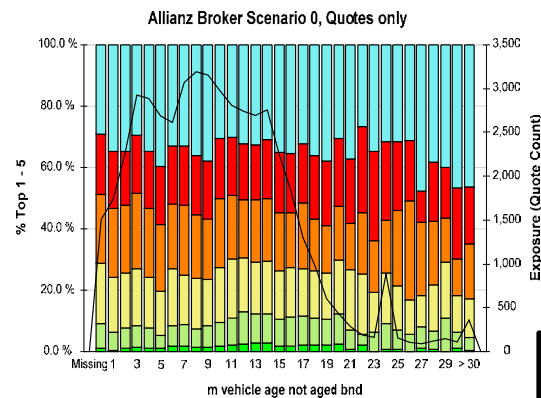
Profitability mismatch: PLR in portfolio



Orange line: PLR current (system) premium
 Red line: PLR latest tariff
 Green dotted line: average PLR
 Yellow bars: exposure (current policies)

- Newer cars have a significantly higher PLR
- Quite some exposure for younger vehicles: limited increase has big effect

Competitiveness: Top 3 positions quotes



- Relatively flat competitive position: possibility to improve

Black line: exposure
 Bright green: rank 1, green: rank 2, etc.
 Blue: not in top 5

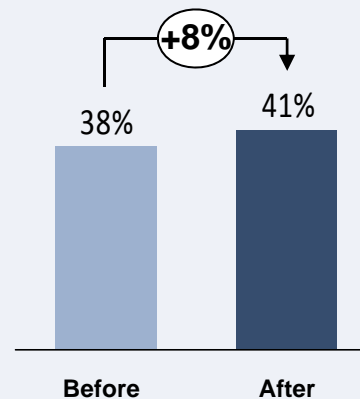
Proposal

- Increase premium for new cars: 0 or 1 year old
- Re-distribute earnings to other ages, especially 2-4 year old

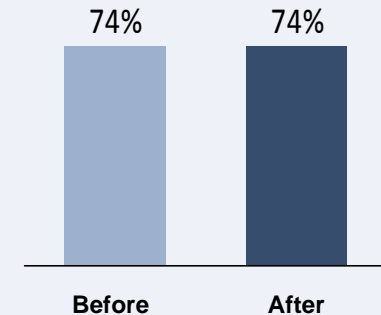
Younger vehicles are typically MOD risks: the above has a large impact on MOD and the second bullet increases the MOD top 3 positions significantly, offsetting the cover adjustment

Top 3: amongst 10 broker peers
 PLR: excluding sub-cover effects

Top 3 positions



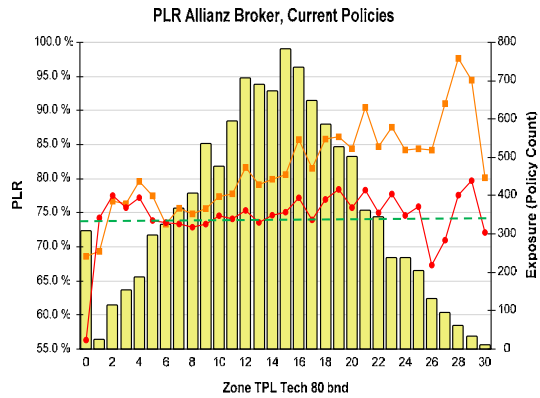
PLR



Deep-dive TPL Zoning: status quo and proposal

Current status

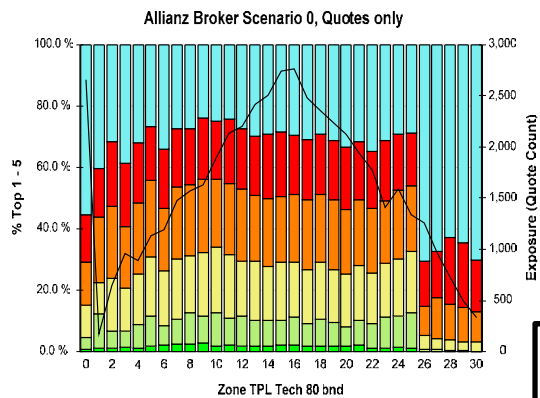
Profitability mismatch: PLR in portfolio



Orange line: PLR current (system) premium
 Red line: PLR latest tariff
 Green dotted line: average PLR
 Yellow bars: exposure (current policies)

- Small cross-subsidy in the lower and higher end zones (already lower than before for latest tariff)

Competitiveness: Top 3 positions quotes



- Relatively flat competitive position: possibility to improve (except for highest zones)

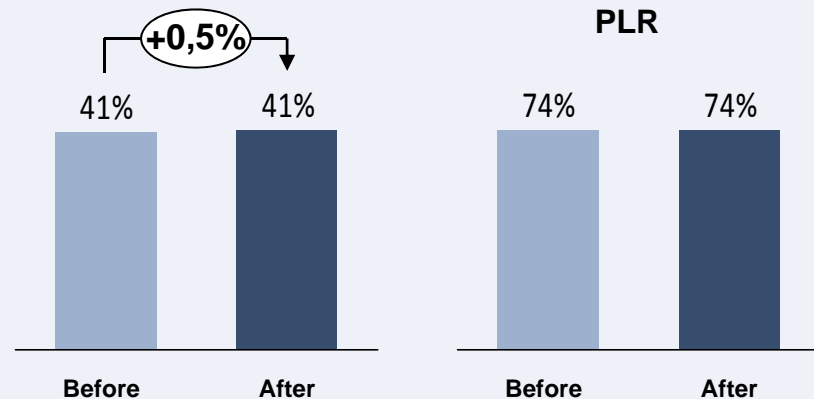
Black line: exposure
 Bright green: rank 1, green: rank 2, etc.
 Blue: not in top 5

Proposal

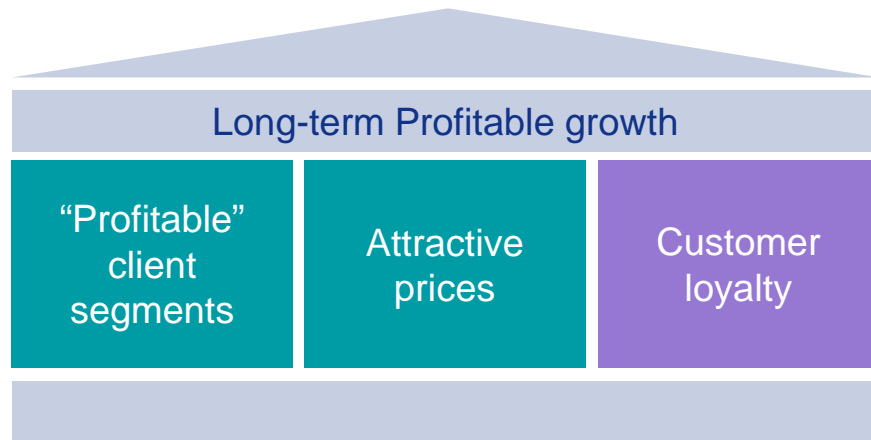
- Small adjustments to zoning relativities
 - Will make tariff more robust when portfolio distribution changes
 - Prevents cross-subsidies
 - Small effect on top 3 positions

Top 3: amongst 10 broker peers
 PLR: excluding sub-cover effects




Top 3 positions



Next Step: Achieving *long-term* profitable growth



Challenges

- 
 How to predict the customer lifetime/loyalty?
- 
 How to optimize the price regarding profitability and customer loyalty?
- 
 Applies to new business
Different approach to renewals

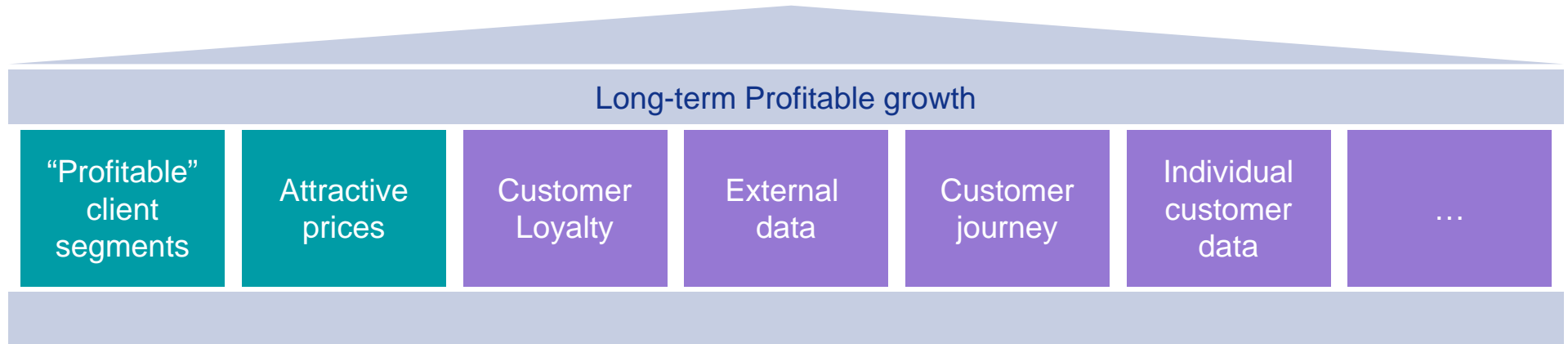
Concept of profitable growth



- Price increase for disloyal customer segments (high lapse rate, low customer lifetime value)
- Price decrease for loyal customer segments (low lapse rate, high customer lifetime value)

Ø margin	# of policies	Customer lifetime	Long-term Profit
40 €	1500	3 years	+ 180.000 €
↓	↓	↓	↓
35 €	1500	4 years	+ 210.000 €

Perspective: *Additional components to reach the optimal price*



Benefits of



External data (e.g. social-demographic data):

Spending power, unemployment rate etc. of customer's region → indication of lower/higher price sensitivity



Customer journey data (e.g. cookies):

Did the customer already look at aggregators → higher price sensitivity

Did the customer look at other (high priced) insurers? → higher premium brand awareness/possibly lower price sensitivity



Individual customer data:

How often did the customer change his insurance company in the past → customer loyalty

What is the customer's current life situation (e.g. just bought proprietary) → cross-selling potential achievable



What is an optimal price?

Technical Premium

- Internal „cost of production“
- Min. profitable price
- Derived via risk model



Customer's Willingness to pay

- Maximum viable price
- Depending on competitive position, socio-dem. factors, indiv. relationship to insurer



Customer loyalty

- Long time loyalty seekers“ vs. „yearly price hoppers“
- Important KPI for up-pricing potential



Core elements for deriving and optimal price

On individual policy level

- Optimal use of internal + external data (e.g. credit score)
- Sophisticated modelling
- Use of best practice approaches
- Back-testing / actual vs expected
- Geographical modelling
- Excellent resources (tools/software and individual skills)

Technical Premium

- Best prediction of ultimate losses
- Frequency /severity analysis per type of claim

Customer's Willingness to pay

- Elasticity / conversion models
- Knowledge of competitiveness / market position
- Previous insurers history / previous insurance companies
- Re-engineering
- Detailed quotes data

Customer loyalty

- Expected customer lifetime models
- Adequate cancellation models
- Renewal pricing strategy

Prerequisites for successful portfolio monitoring and dynamic pricing

1

Up-to-date and sophisticated risk model to determine a valid AP/TP

2

Database and processes that enable a realtime monitoring of AP/TP, conversion and competitiveness for new business

3

Decoupled tariff machine from the backend system, so that dynamic pricing is possible. Furthermore, a fast integration into the sales systems must be possible

4

Adequate tools and models for swift and thorough analyses and smart pricing measures of individual new business segments



Questions?

