

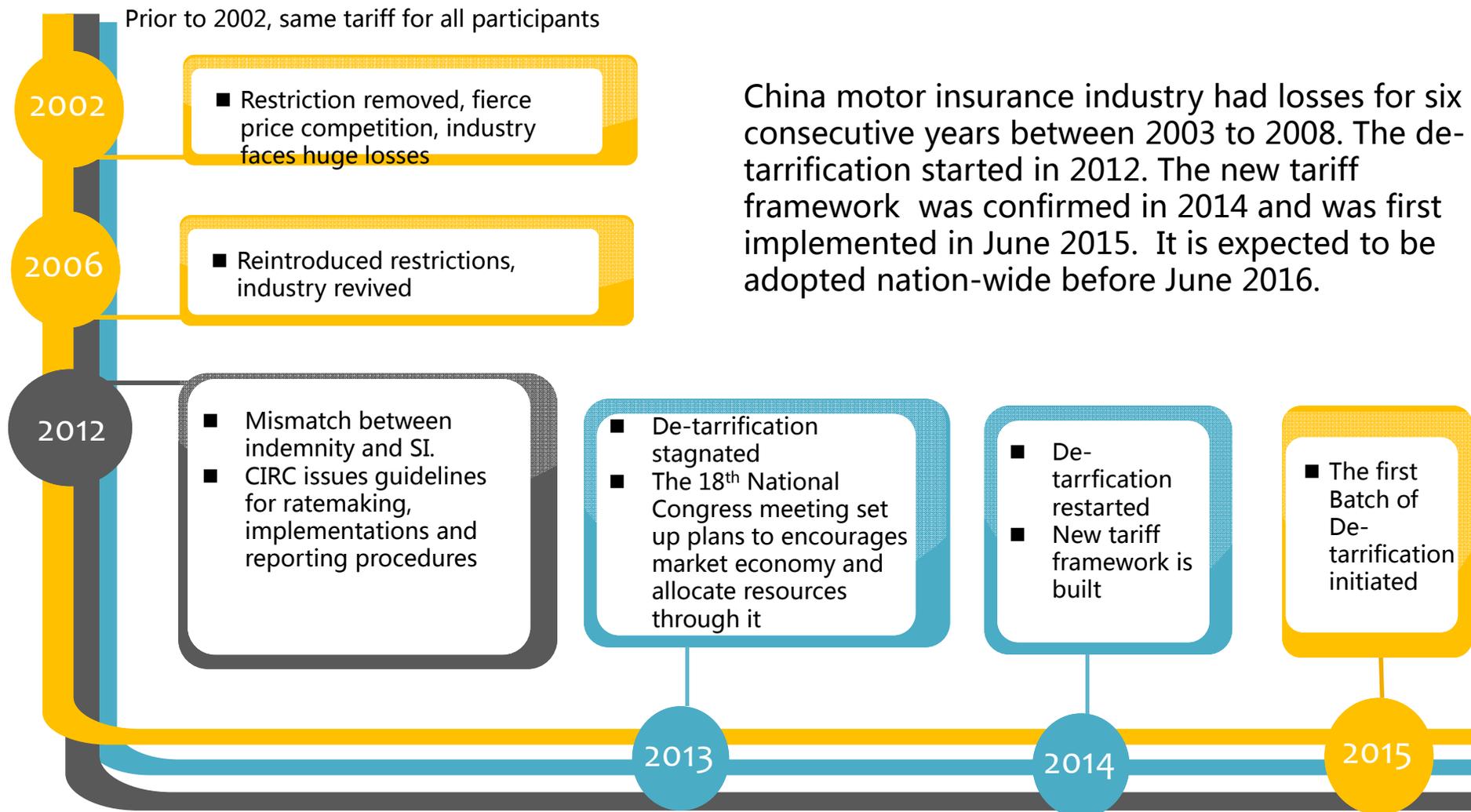
An Introduction of China Motor Insurance De-Tarrification

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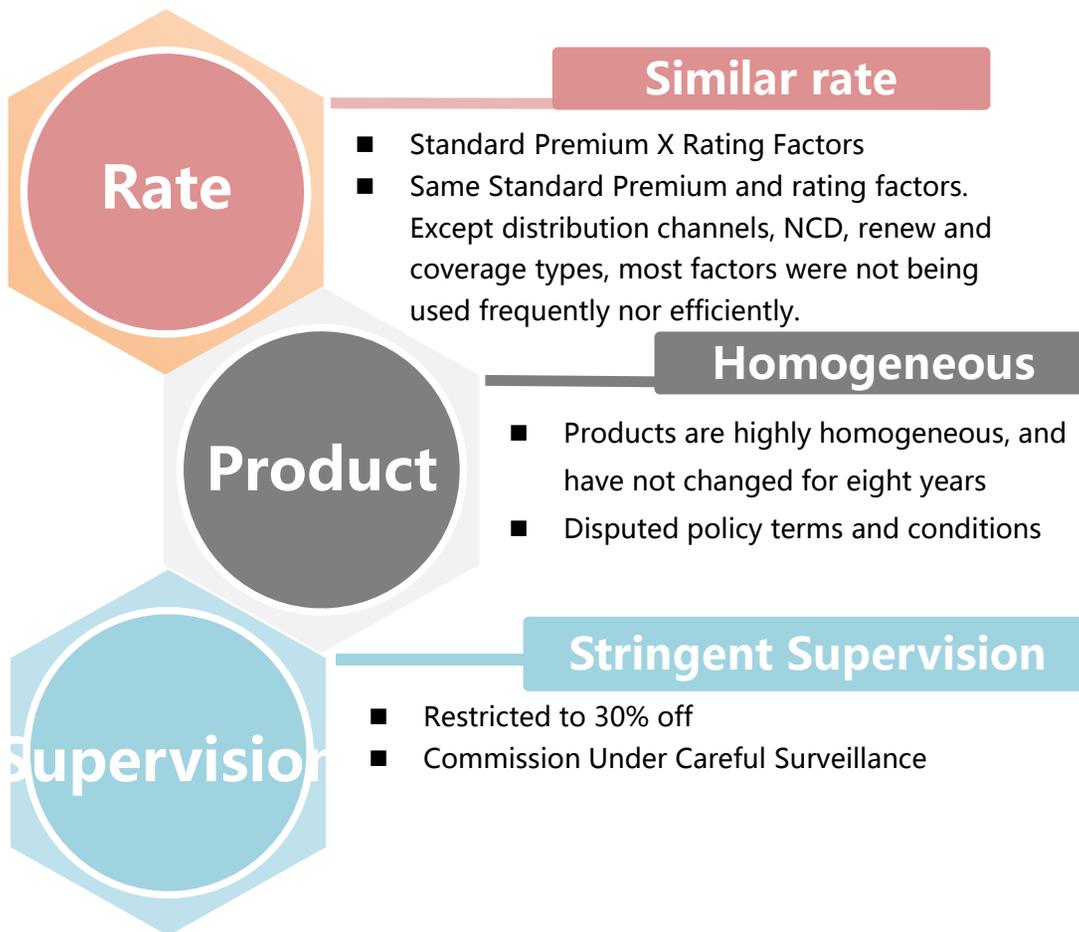
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History of China Motor Insurance Rate Reform



Driving Factors and Current Market Landscapes

Market current situations



Driving Factors

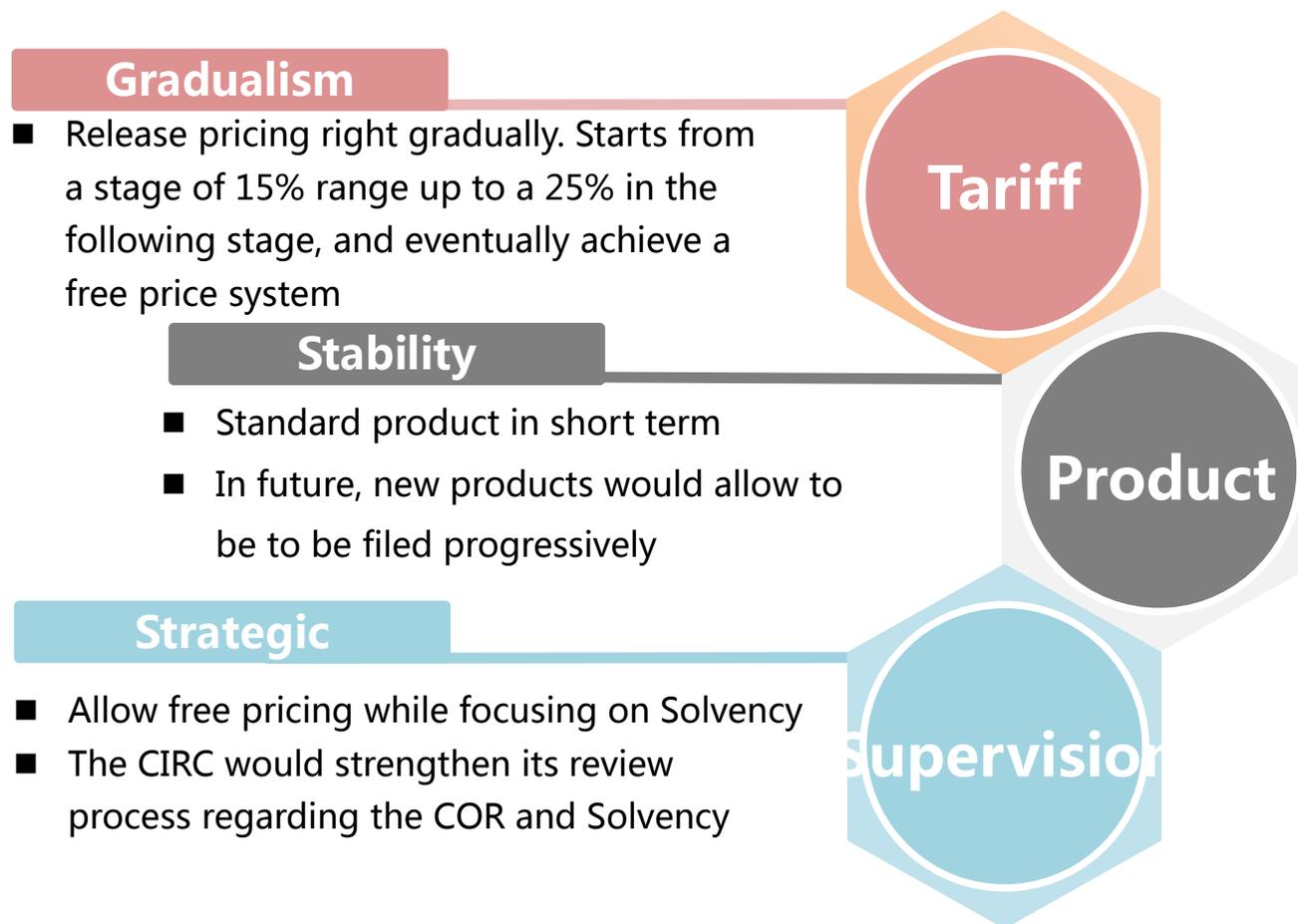
A Within Industry

- Differences between SI and indemnity as well as no-liability-no-payment under disputes
- Absence of rate adjustment mechanism
- Repair cost is independent of premium charged, car dealers/manufactures have overwhelming influences over the industry
- Mismatch between NCD and risks lead to severe losses for multiple-claims business
- High expense and low efficiency
- Non-standard market behavior

B From Government

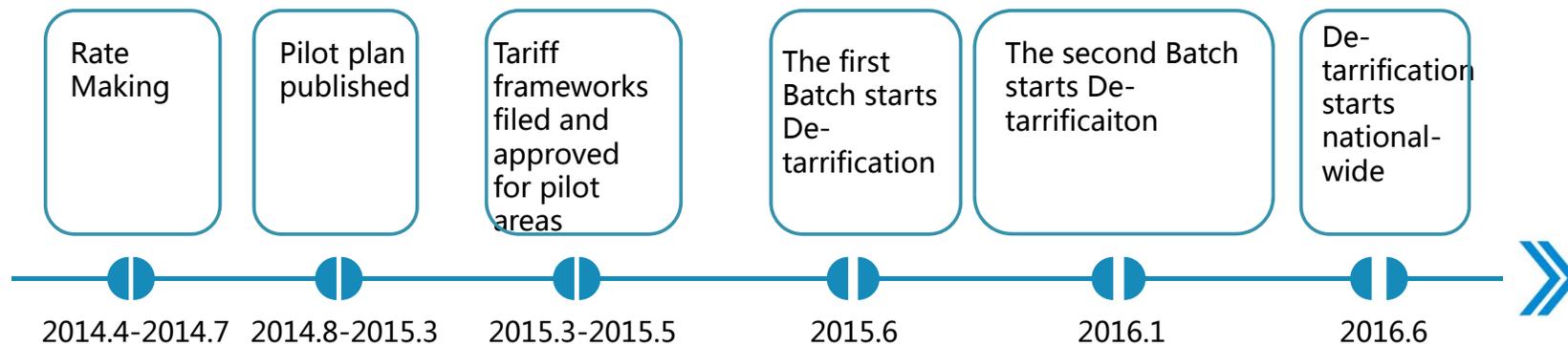
- A top-down Ideology of marketization
- State Council encourages modernization of insurance industry

Objectives and Guidelines



Timeline for Latest De-tarrification

- Under the guidance of CIRC , the Insurance Association of China organized the CIITC, CAA, 16 major direct insurers, China Re, Haosheng, SAS, Towers Watson、 JY and other companies to participate in the project of commercial motor de-tarrification



- CIRC issues supporting supervision procedures
 - A Working Guidance for De-tarrification supervision system
 - A Prescribed Scoring system for on-site inspection

New Tariff System



- Require a complete and detailed actuarial report for the Tariff
- Require an intensive and meticulous implementation plan
- Establish a supervision procedure for tariff review and adjustment

New Tariff Structure

$$\text{Premium Charged} = \frac{\text{Pure Risk Premium}}{1 - \text{Expense Rate}} \times \text{NCD} \times \text{Channel Ratio} \times \text{Underwriting Ratio}$$

- Pure Risk Premium**
- For stability considerations, it is established by CIITC in the first phase
 - Vehicle rating groups are introduced

- Expense rate**
- Dependent upon insurer's own expense ratio, approx. 35% in the first phase

- NCD**
- Range Extended : from 0.7-1.3 to 0.6-2.0 for a better match between price and risk

- Channel Ratio**
- Have a range of [0.85 , 1.15] , determined by properties of sales channels of insurers

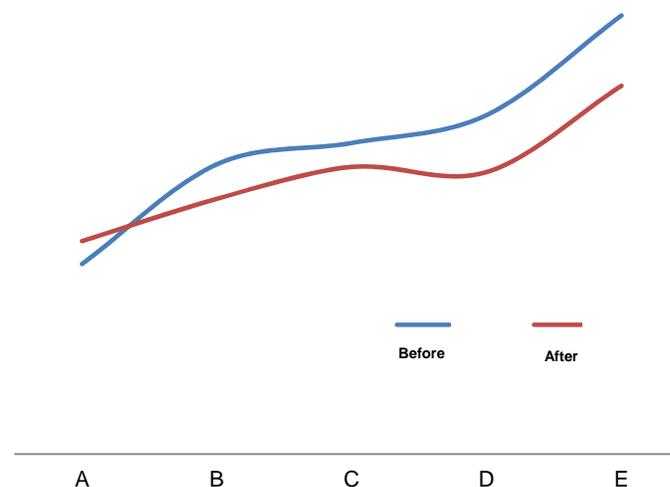
- Underwriting Ratio**
- Have a range of [0.85 , 1.15] during the first stage, would be extended in the later stages, determined by risk
 - Different business and risks can be assigned with different values

Introduce Vehicle Rating Groups

- Methodology : separated into five groups by costs of parts & labor and past claim experience

Vehicle Group	Group Ratio	No. of Series
A	0.8	6,125
B	0.9	4,285
C	1.0	88,539
D	1.1	4,861
E	1.2	5,091

- Graph : Change in loss ratios after the introduction of vehicle rating groups

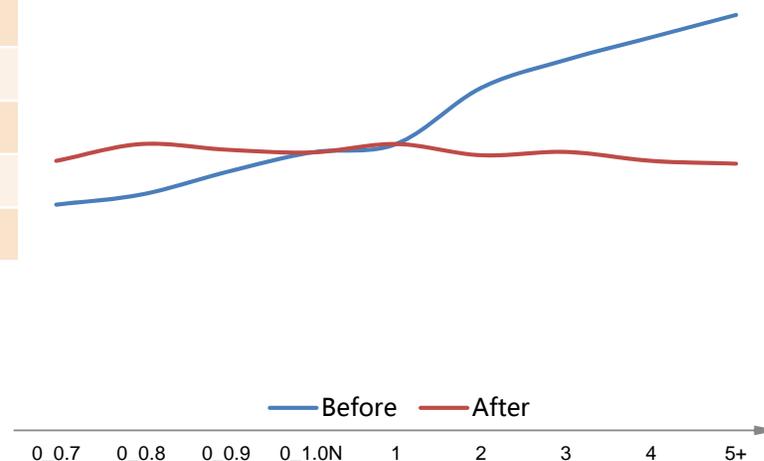


Further Optimization on NCD for Better Risk Matching

- Methodology : use univariate analysis and GLM based on past experience

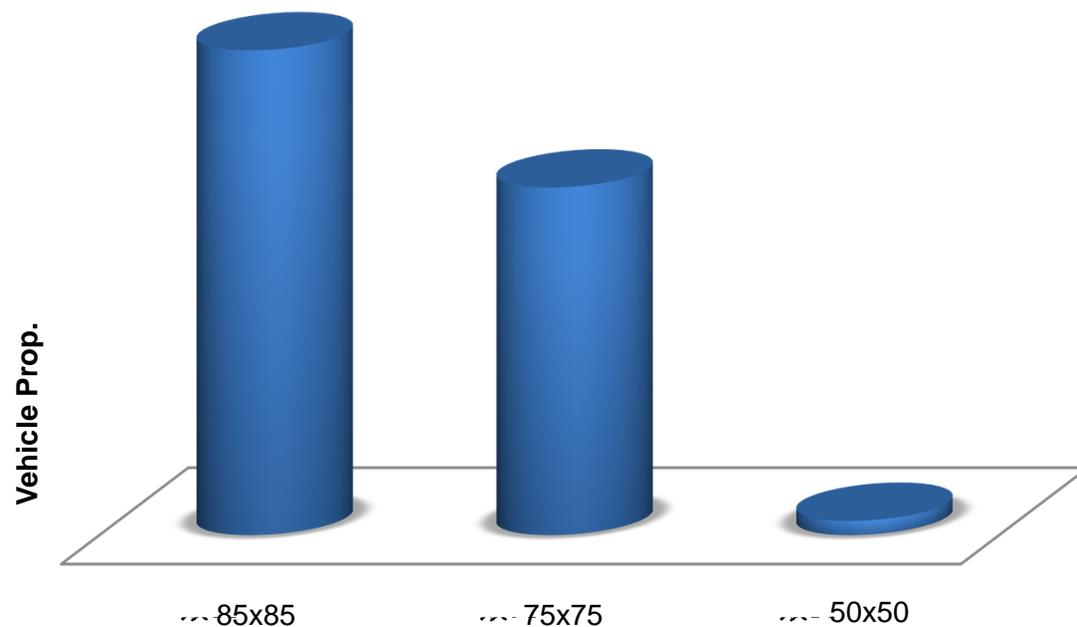
NCD CLASS	现行系数	改革后方案
No claim made in recent 3 years	0.70	0.60
No claim made in recent 2 years	0.80	0.70
No claim made in last year	0.90	0.85
New policy	1.00	1.00
One claim made in last year	1.00	1.00
Two claims made in last year	1.00	1.25
Three claims made in last year	1.10	1.50
Four claims made in last year	1.20	1.75
More than five claims made	1.30	2.00

- Graph : Optimized NCD achieve a better balance between price and risk, enables a more fair price



The new Tariff removes the 30% rate deviation limitation, and achieve competitive pricing mechanism over time to better reflect insurer risk and price management ability

- Channel ratio and underwriting ratio
- Currently limited flexibility for independent pricing , risk for most of the business is actually below the restricted lower bound



De-Tarrification

The Implementation Process

- An implementation plan signed by executive director who is responsible for the business is required
- Main filing aspects include:

Aspects	Main Contents
Major objectives of Tariff	<ul style="list-style-type: none">❑ Planned premium growth rate❑ Expected insurance profit
Main contents of Tariff implementation	<ul style="list-style-type: none">❑ Underwriting rules❑ Expense plan
Management and control procedure for the Tariff	<ul style="list-style-type: none">❑ Key index monitoring❑ Sales channel management and control procedures❑ Dedicated underwriting management and risk control procedures❑ High risk business management and risk control procedures

Review and Adjustment

CIRC requires all Insurers:

01

To establish a dynamic monitoring system

02

To submit price analysis report every quarter :

- Analyze any differences between actuarial assumptions and actual outcomes
- Explain differences between filed and actual tariff rate

03

Establish tariff adjustment procedures so that tariff can be amended in time should the following conditions happened :

- Key monitoring index differs significantly from assumptions in the actuarial report
- A significant increase in combined ratio

Influences of De-tarrification to China Motor Market



After de-tarrification , the premium growth rate was **13%**, similar as before. It indicates a smooth transition.



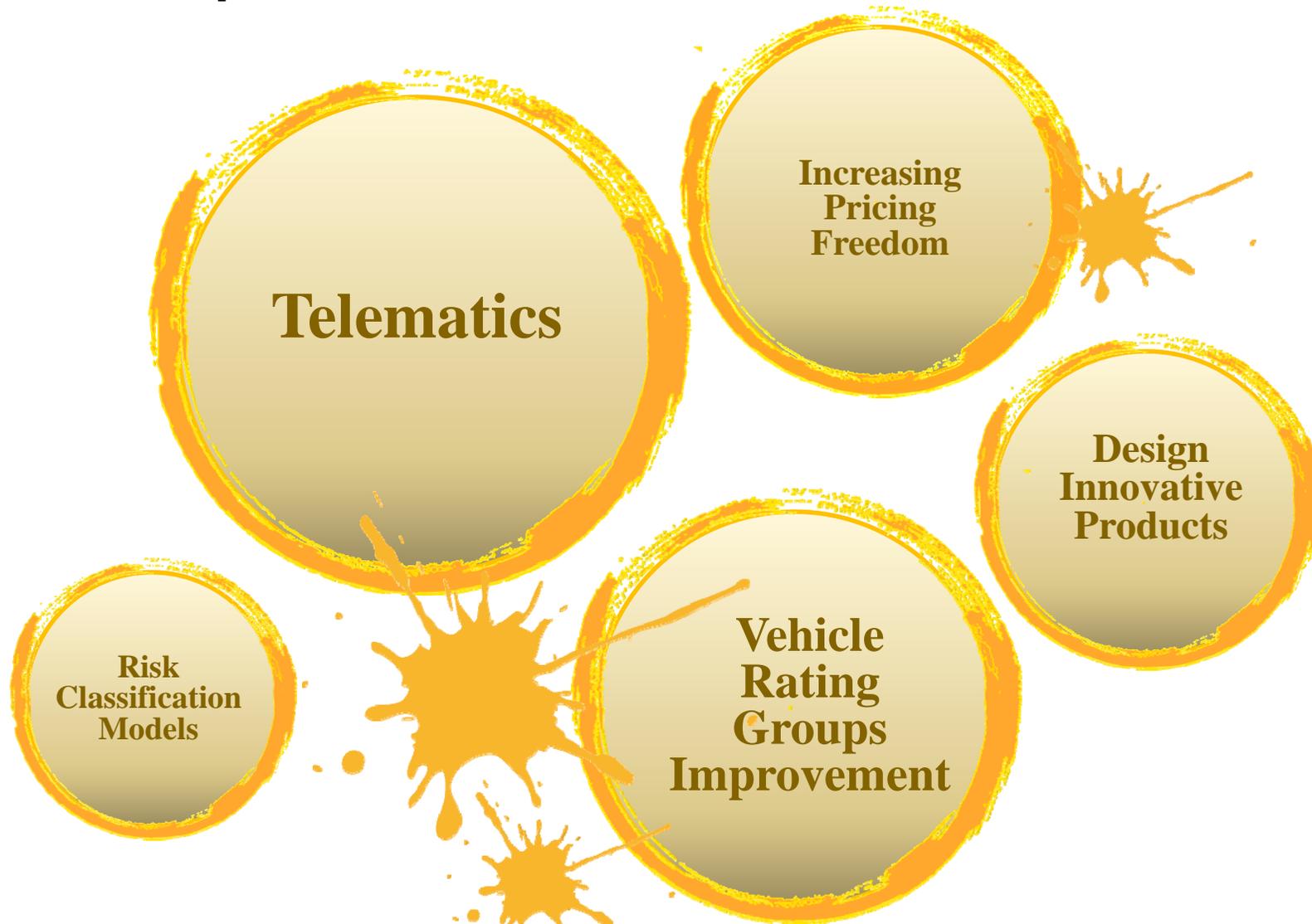
Policyholders are benefited from the De-tarrification:

- 1) **75%** of insured have their premium reduced
- 2) Premium reduced by **10%**
- 3) Penetration level increased by **4%**, more people are covered



As a result of optimized NCD, claims frequency for small claims reduced significantly, overall, the claim frequency dropped by **30%** and loss ratio reduced by **2%**, achieving a safer driving environment

Future Prospects of China Motor De-tarrification



Telematics in China

Problems and Challenges

- Scheme
 - "Manufacture Installation" ?
 - "After Market Installation" ?
 - "Mobile App" ?
- Incentives to Attract Customers
 - Premium Discount ?
 - Services ?
- Huge Initial Investment
 - System
 - Equipment
 - Foster Customer Behavior

Insurance Companies

The "Big Three" has initiated their own pilot tests, followed by others

Manufacture

Manufactures such as Nissan, General Motor and other major China Car Makers have started planning and designing their own devices

After Market Third Party

Many China OBD manufactures are making such devices

Mobile Apps

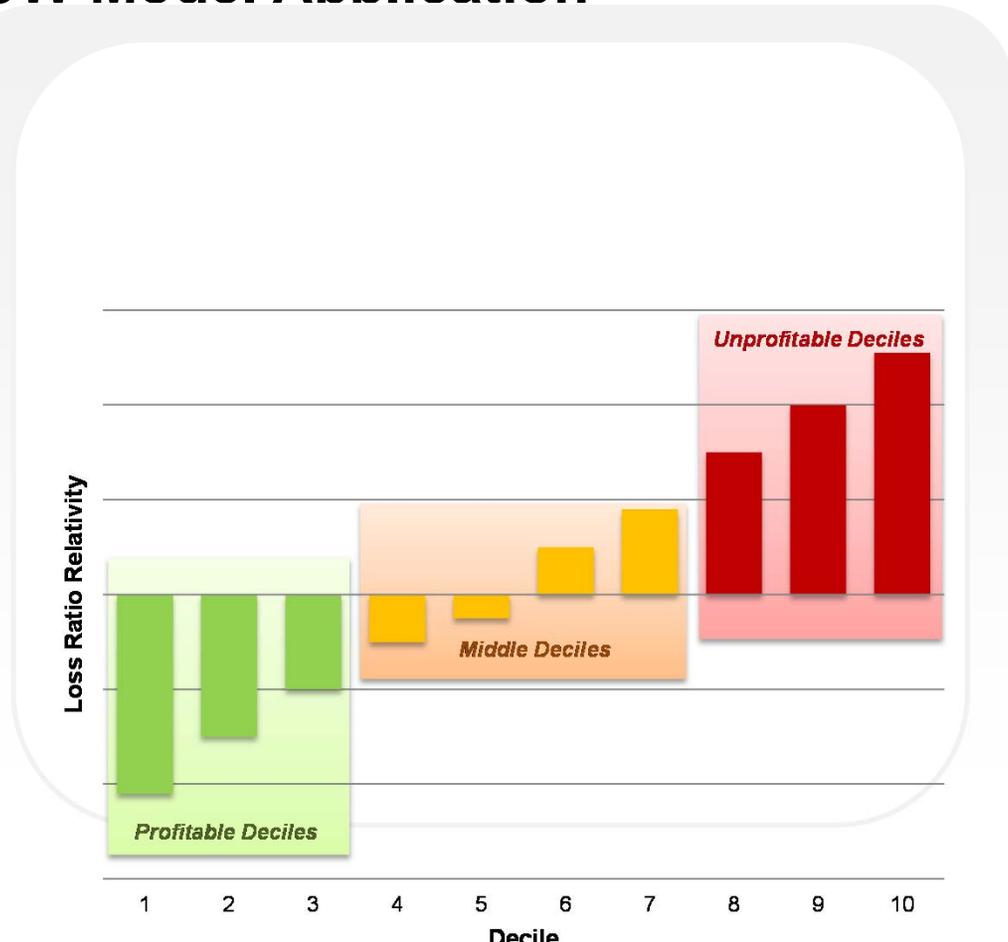
Pingan, Baidu, DIDI, UBER etc. have already begun to collect driving data

Pilot UBI product of Pingan

- Pingan Xing' is a product that is tailored based on driving behavior and vehicle usage of the insured. Destined to become an UBI motor insurance in the future, it is an important component of Pingan P&C's 3.0 business strategy.
- Main Features: Record driving actions, analyze driving behaviors, obtain rewards, participate in monthly promotions
- Have **135,200** users and a total of **104,685,955** recorded km, it has its own driving scoring model
- Main pages are illustrated below:

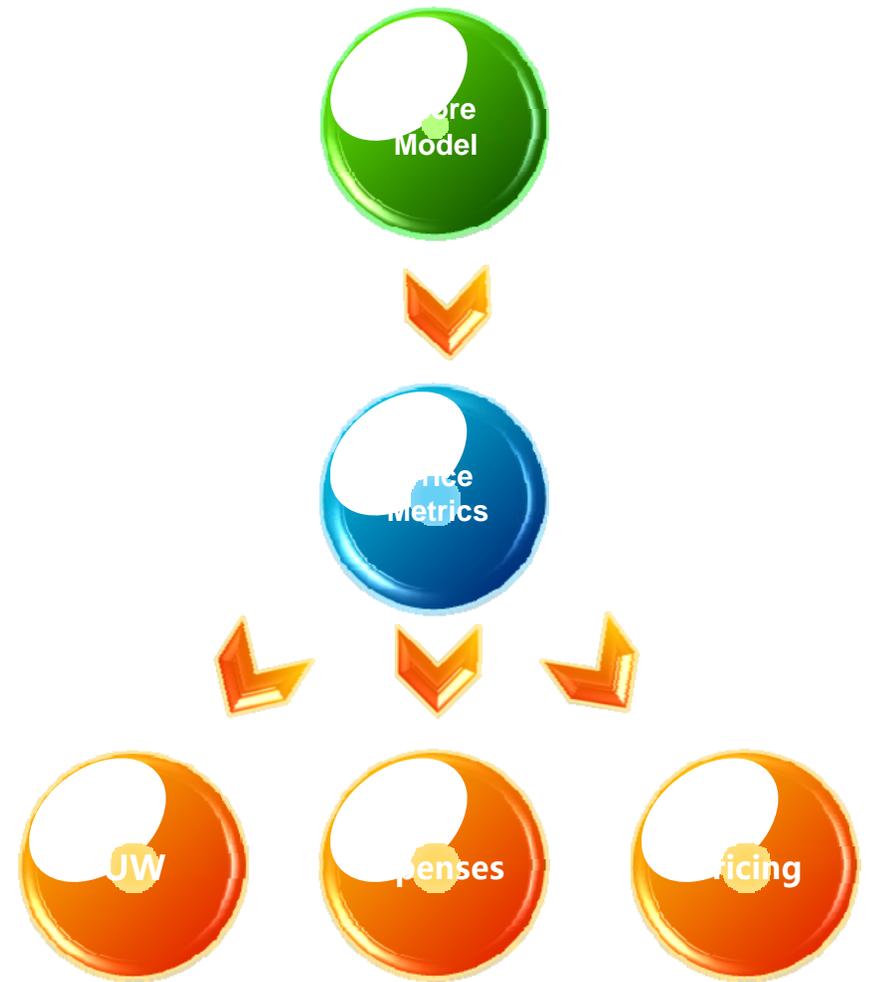


UW Model Application



Pingan and Deloitte worked jointly to build underwriting models for various product lines and significantly strengthen risk assessment abilities.

- 2014.7 , Model for personal lines
- 2013.7 , Model for commercial lines
- 2013.4 , Model for small enterprise



Thank you !