

Introduction of P/C Insurance Market in China

Context

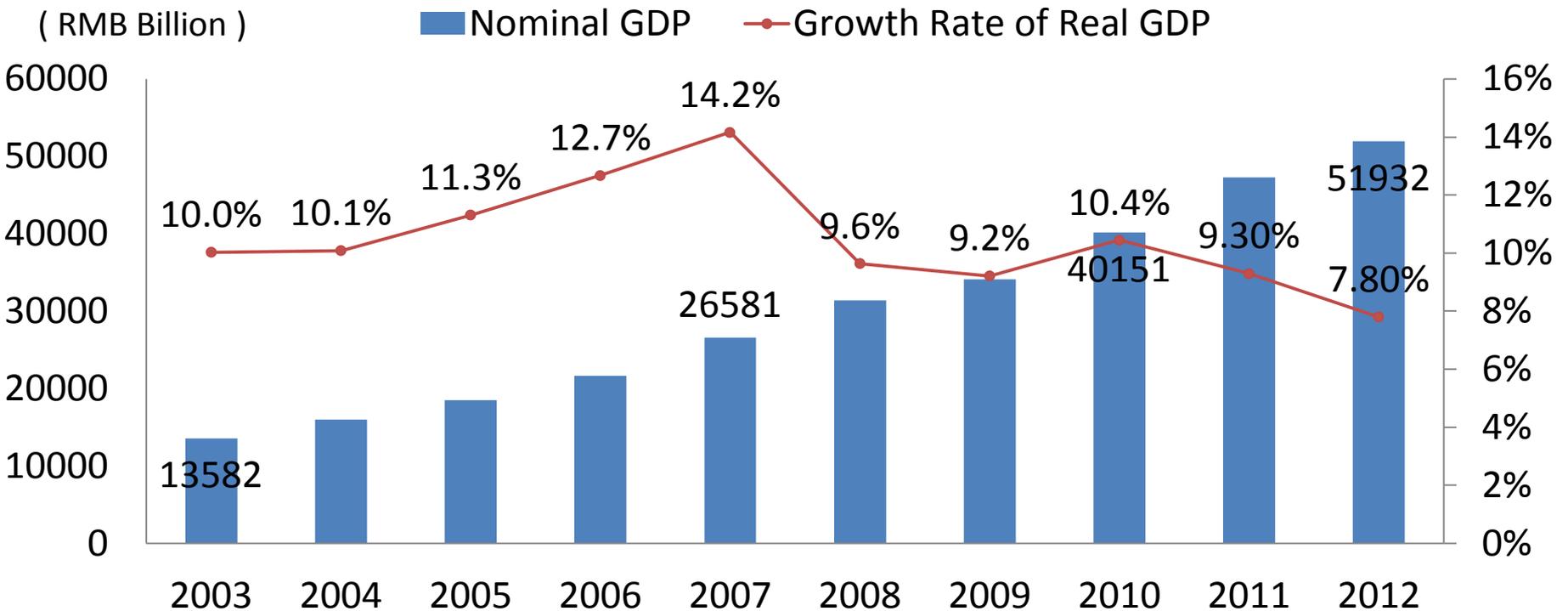
- **Economic Environment in China**
- **P/C Insurance Market in China**
 - Development Status
 - Market Potential
- **P/C Insurance Regulation in China**
 - Overview
 - Solvency Regulation
 - Reserve Regulation

Economic Environment in China

Rapid Economy Growth

- The world's **second-largest** economy since 2010.

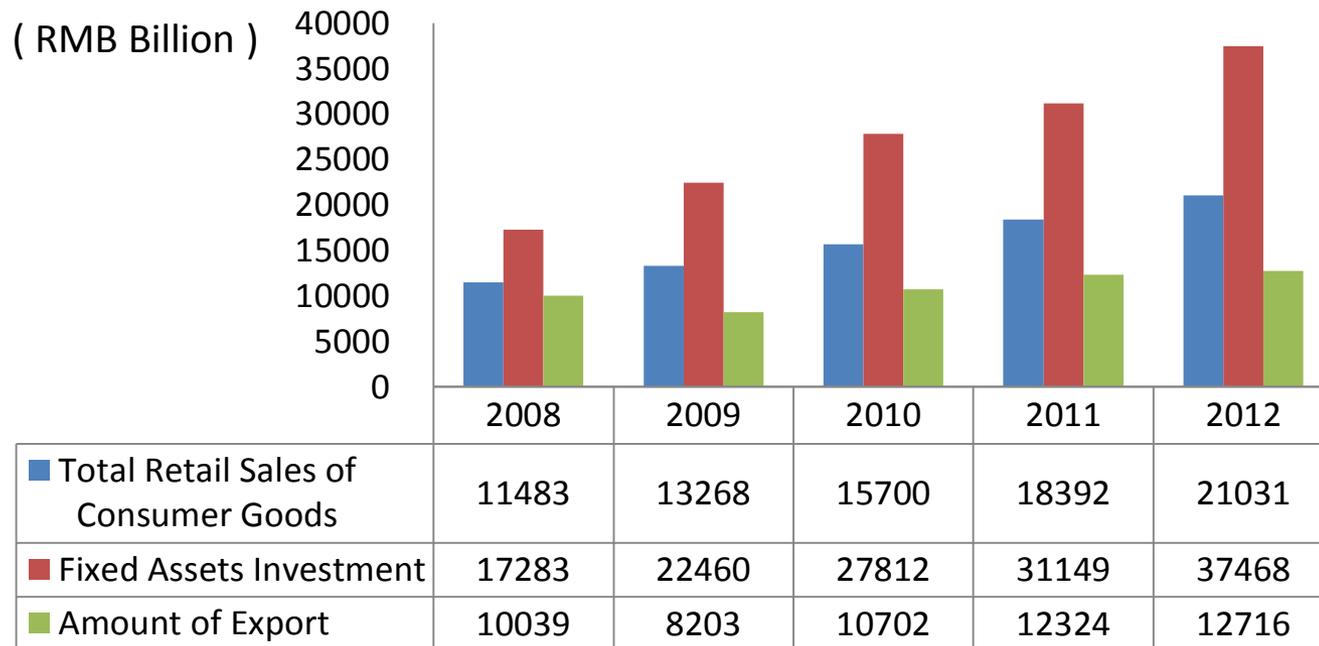
GDP Development of China in Last Decade



Economic Environment in China

Rapid Economy Growth

- Consumption and investment are rising continuously and rapidly.
- And their growth rates reach 16.3% and 21.3%, respectively.
- Net export maintains a stable growth.



P/C Insurance Market in China

Development Status

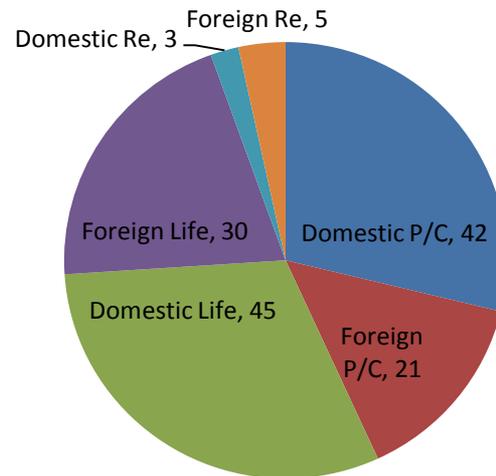
- **Market Structure**
- **Highly Concentrated Market**
- **Investment**
- **Rapid Growth – Premium, Sum Insured, Assets and Equity, Companies**
- **Profitability**
- **Auto Insurance**

P/C Insurance Market in China -- Development Status

Market Structure -- Companies

- Foundation of new insurance companies must be approved by CIRC, with at least 0.2 billion RMB registered capital.
- Insurance companies must be organized as limited liability company or wholly state-owned company.
- By 2012, there are 11 insurance groups, 138 insurance companies, and 16 insurance asset management companies in China.

Numbers of insurance companies in 2012



P/C Insurance Market in China -- Development Status

Highly Concentrated Market

- Top 3 cover over 65% market share in 2012.
 - ✓ PICC, the largest P/C company in China, ranks **the first in Asia**, and **second in the world**, among all single brand P/C companies.

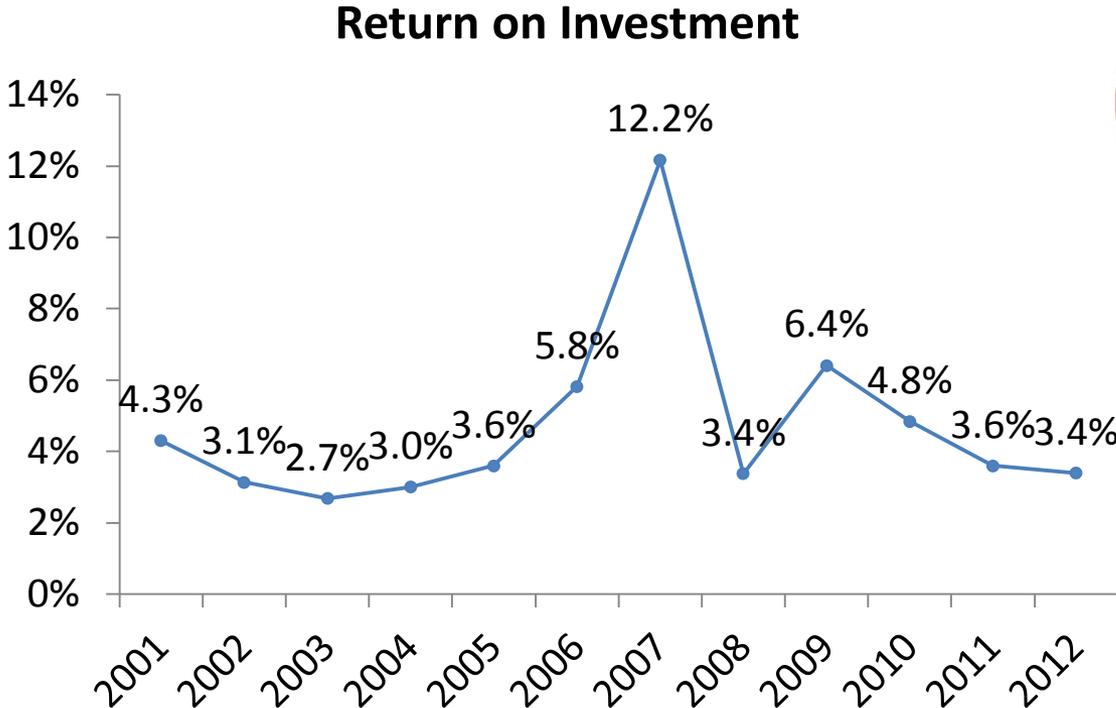
- Auto insurance accounts for over 70% market share in 2012.

Company	Direct Premium Written 2012 (RMB Billion)	Market Share	Cumulated Market Share
PICC	193	34.9%	34.9%
Pin An	99	17.9%	52.8%
CPIC	70	12.6%	65.3%
China United	25	4.4%	69.8%
China Life	24	4.3%	74.0%

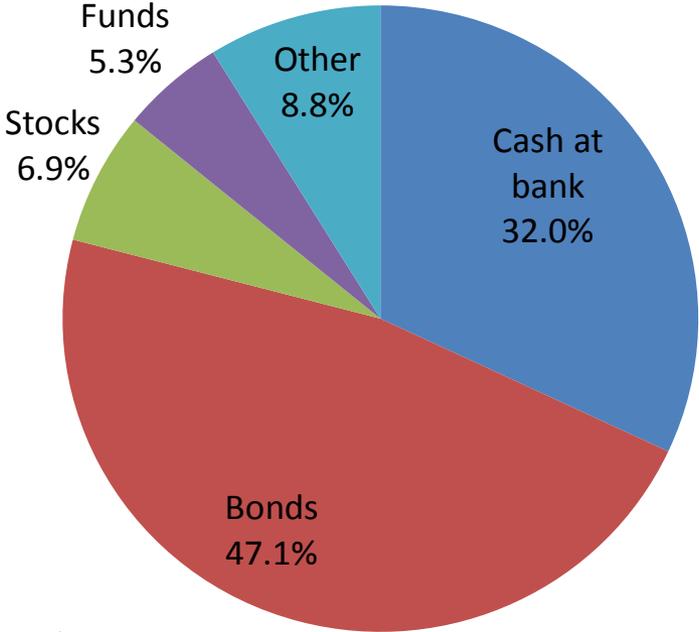
Coverage	Direct Premium Written 2012 (RMB Billion)	Market Share	Cumulated Market Share
Commercial Auto	289	52.3%	52.3%
CTPL	111	20.1%	72.4%
Enterprise Property	36	6.5%	78.9%
Agriculture	24	4.4%	83.3%
Liability	18	3.3%	86.6%

P/C Insurance Market in China -- Development Status

Investment



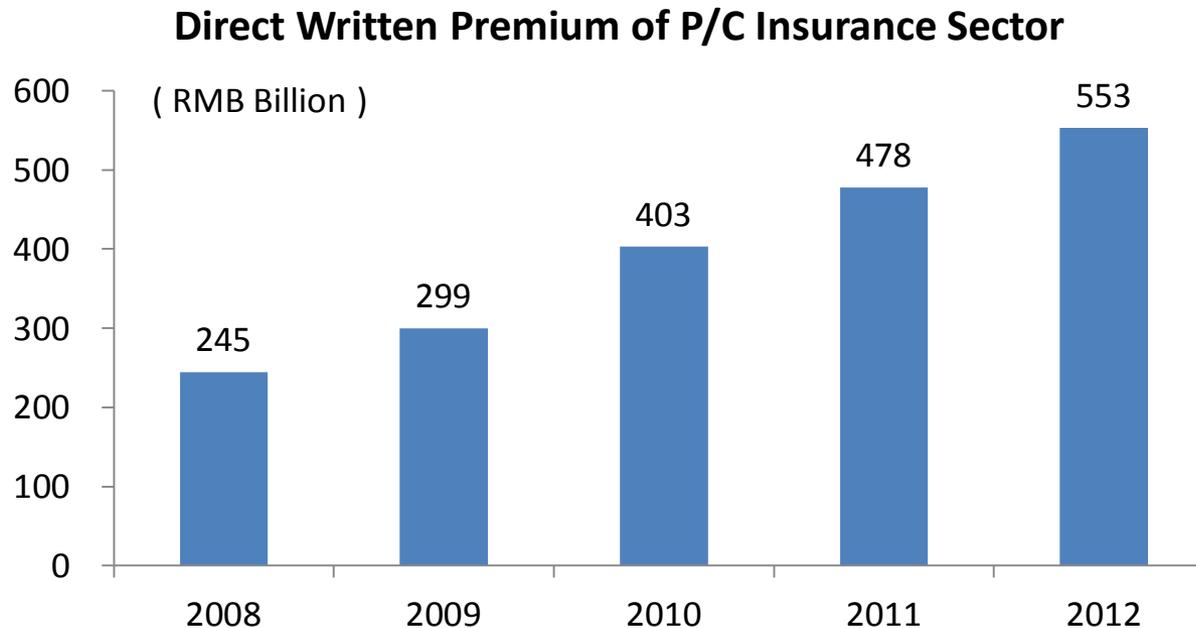
Insurance Industry Investment Portfolio in 2011



P/C Insurance Market in China -- Development Status

Rapid Growth -- Premium

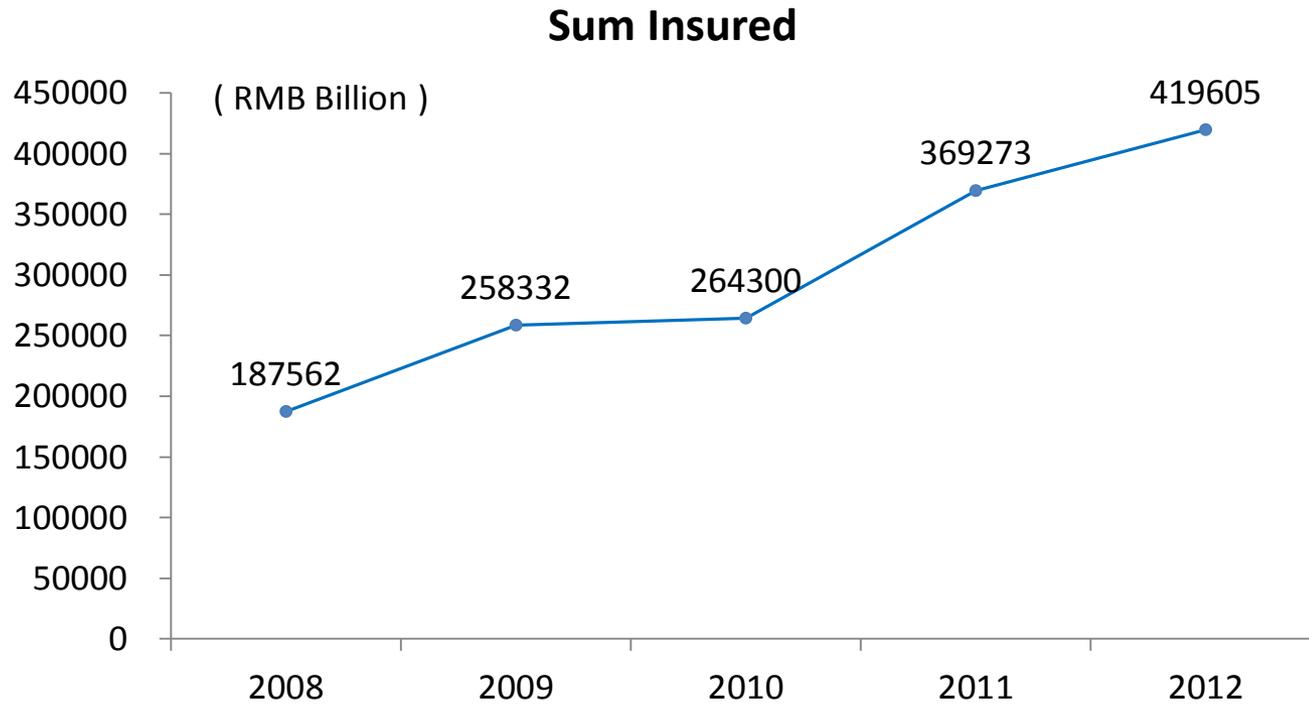
- The growth rate of P/C direct written premium reaches 22.6%.
- Growth trend tends to be stable.



P/C Insurance Market in China -- Development Status

Rapid Growth -- Sum Insured

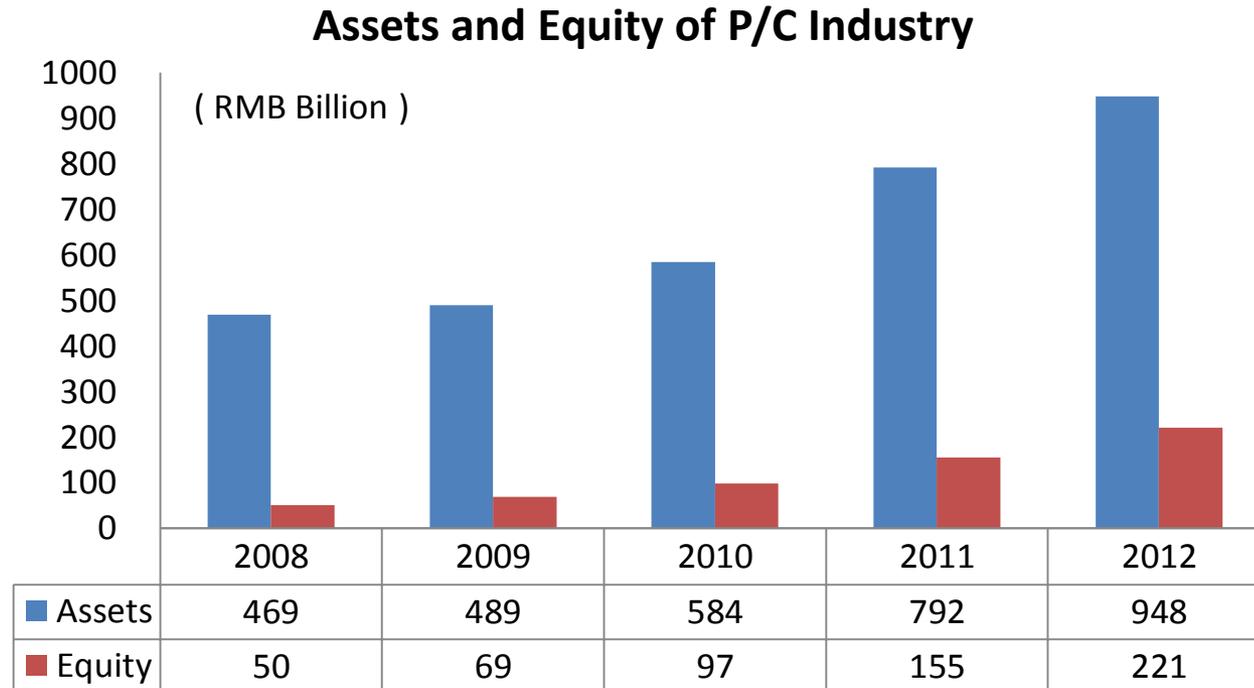
- The growth rate of Sum Insured reaches 22.3%.



P/C Insurance Market in China -- Development Status

Rapid Growth -- Assets and Equity

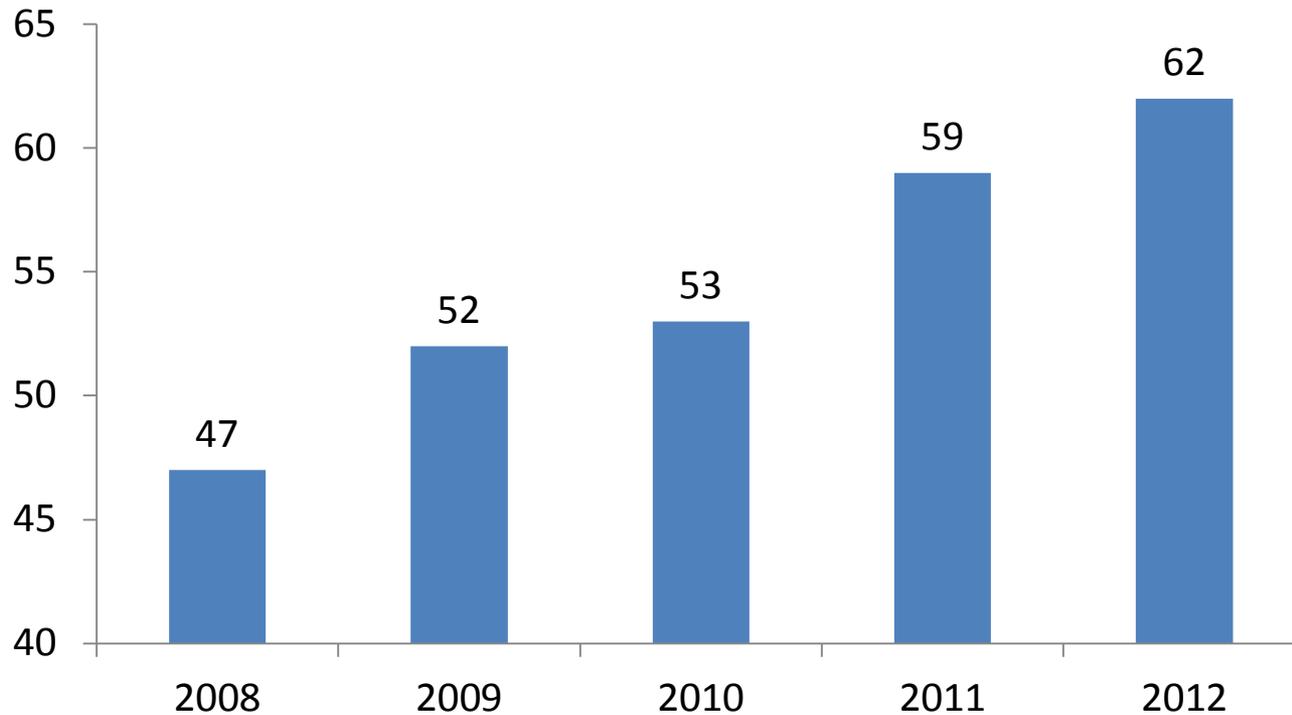
- Assets and equity of P/C industry increase by 19.7% and 42.3% , respectively, in 2012.



P/C Insurance Market in China -- Development Status

Rapid Growth -- Companies

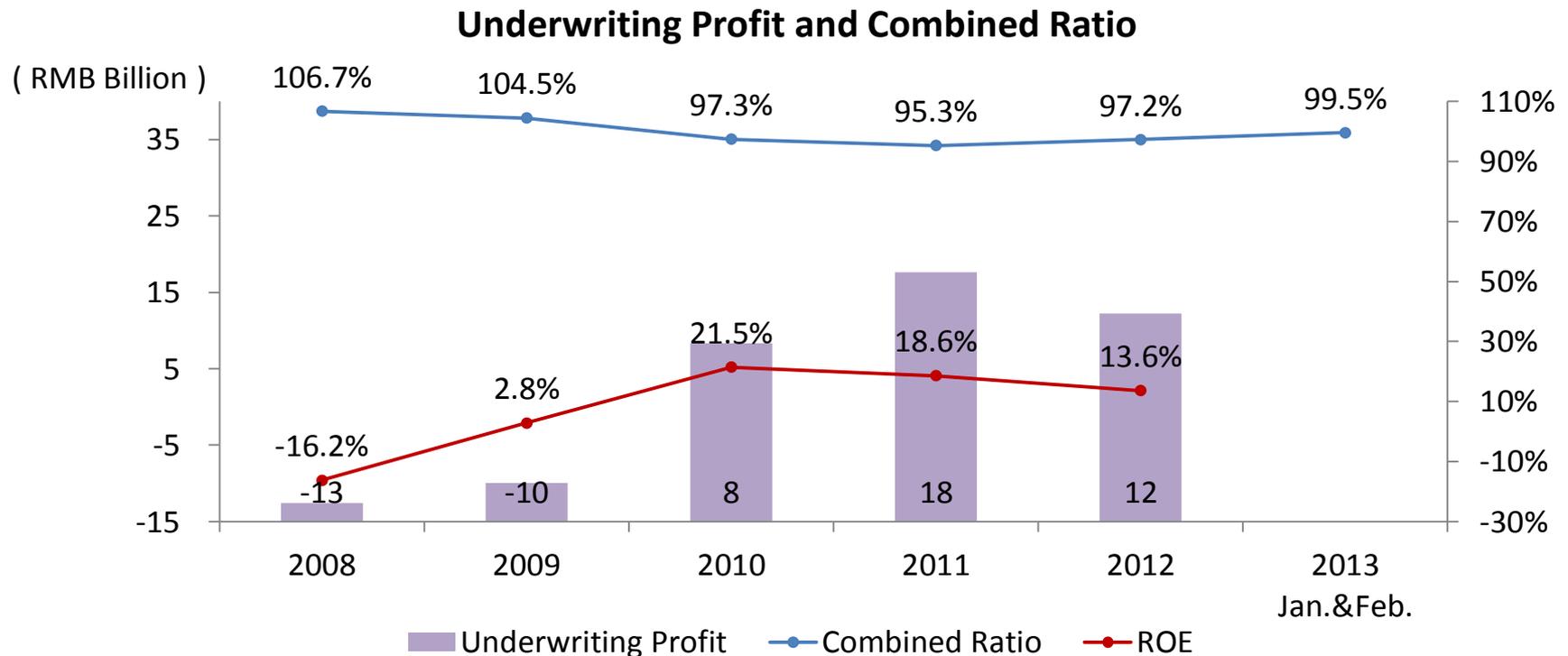
Number of P/C Insurance Companies



P/C Insurance Market in China -- Development Status

Profitability

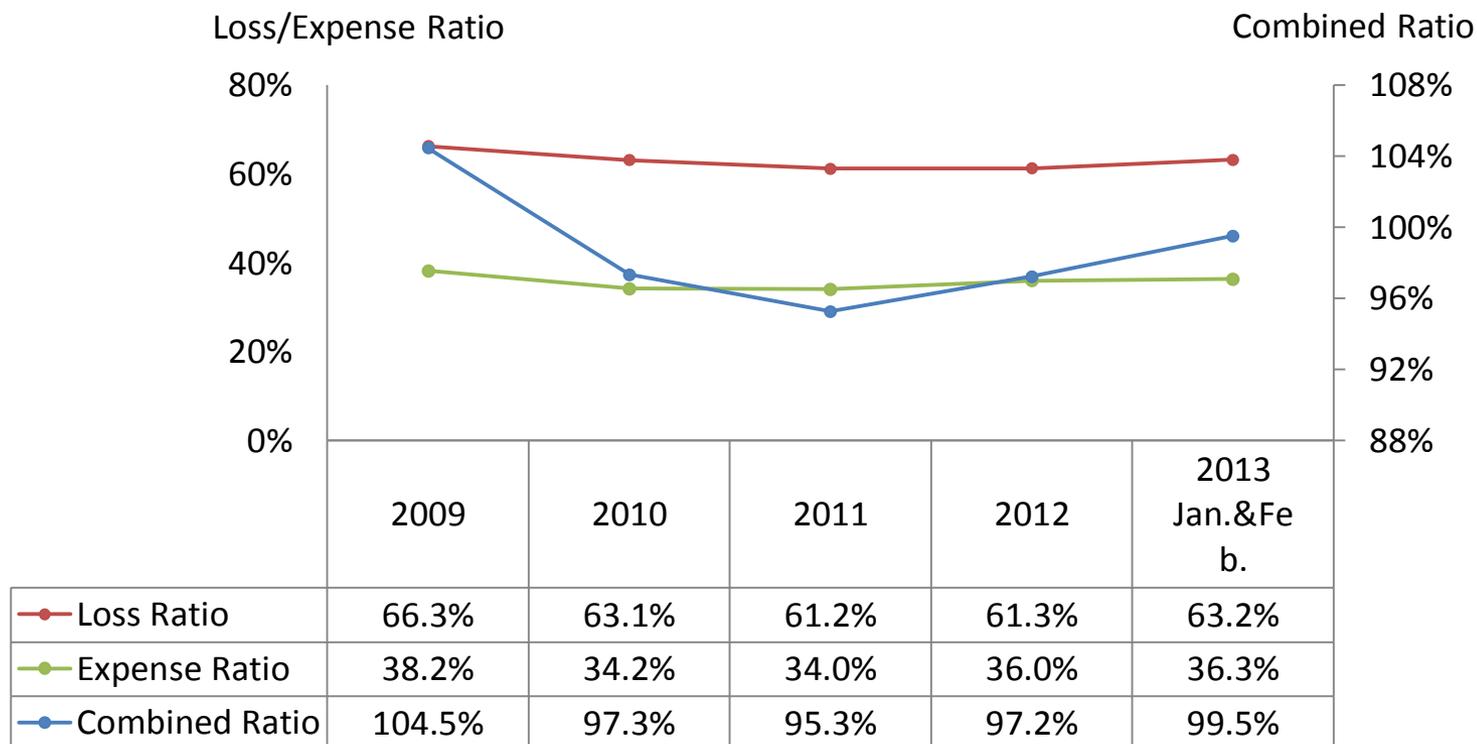
- **Underwriting profit** has been falling since 2010 .
- The most profitable year in underwriting is 2011.
- **Combined ratio** jumped 4.26% from 2011 to 2013.



P/C Insurance Market in China -- Development Status

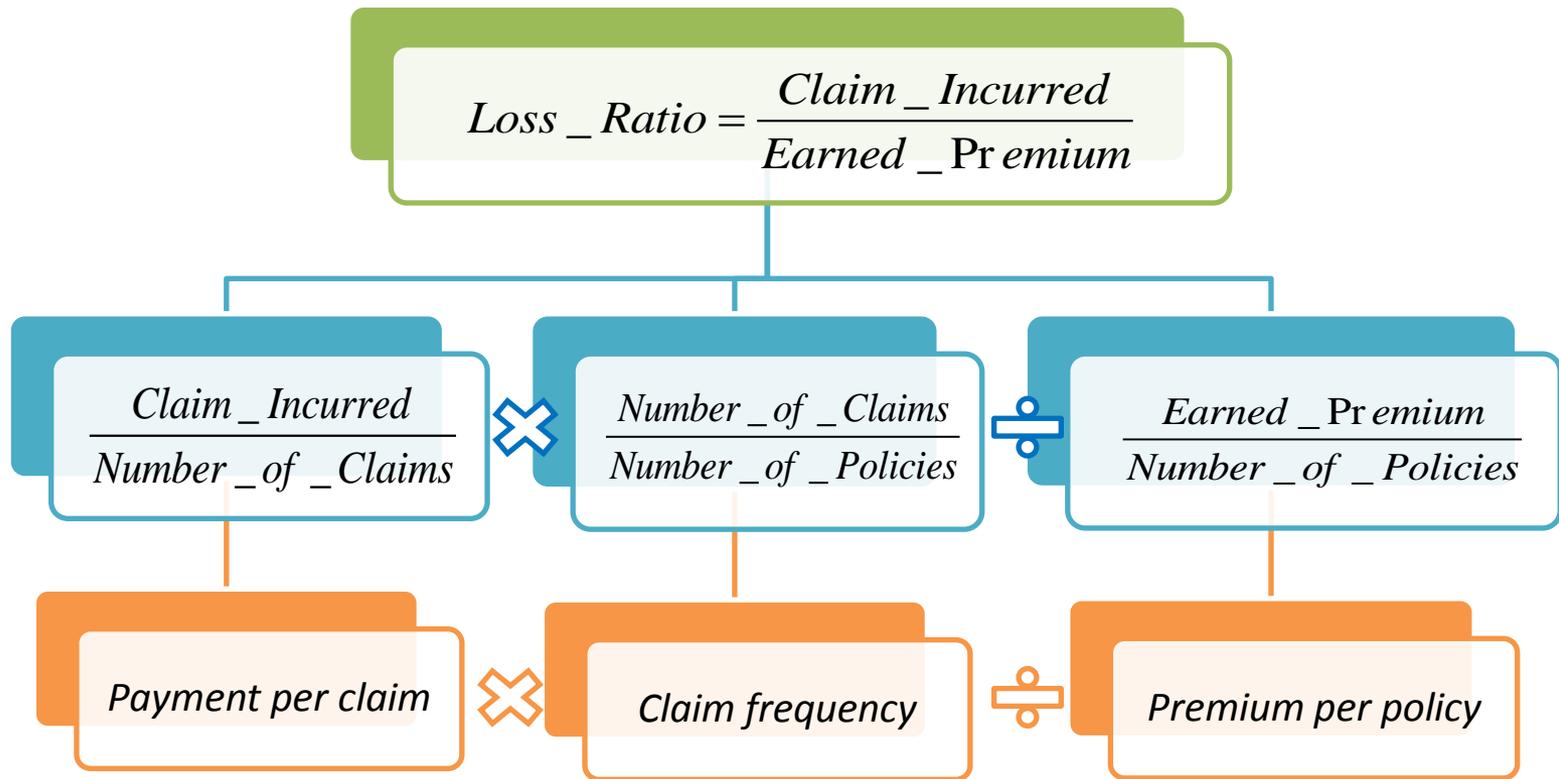
Profitability

- **Decomposition of combined ratio**
 - Combined Ratio = Loss Ratio + Expense Ratio



P/C Insurance Market in China -- Development Status

Decomposition of Loss Ratio



P/C Insurance Market in China -- Development Status

Auto Insurance

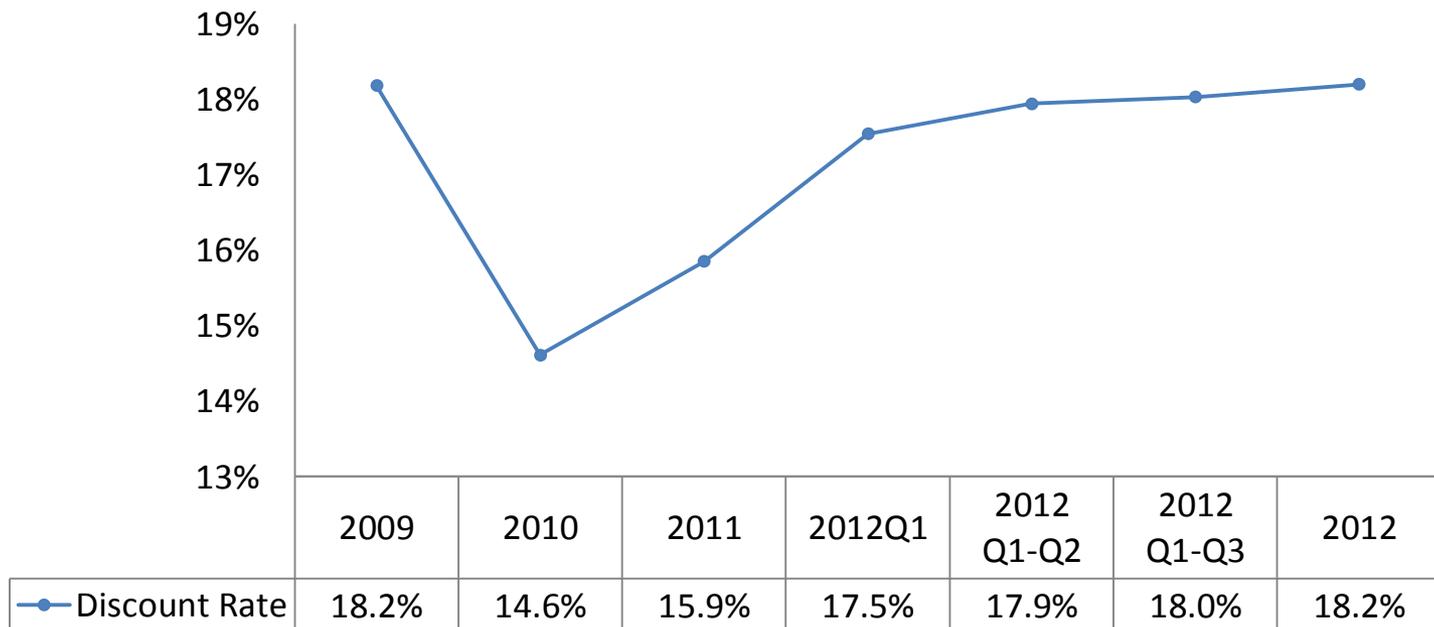
- **Auto insurance accounts for over 70% market share in 2012, with rising loss ratio.**
- **Claim severity in 2012 increased by 3.4%.**
 - Compensation for body injury went up by 10%;
 - Auto parts price rose by 10%;
 - Hourly wage for Mechanic increased by 13.5%.
- **Claim frequency in 2012 increased by 2.3%.**
 - NCD became less and less effective on reducing claim frequency.
 - Deductible clauses were not strictly enforced.
 - Competition between companies got more intense.

P/C Insurance Market in China -- Development Status

Auto Insurance

- **Premium adequacy is declining.**
 - Discount rate rises since 2010.
 - Premium per policy has a slight growth of 0.78%, caused by rapid increase in sum insured of commercial insurance (18.68%).

Growth Trend of Discount Rate



P/C Insurance Market in China

Market Potential

- Penetration and Density of P/C Insurance Sector
- Changing Coverage Structure
- Oversupply and Undersupply of Products
- Enormous Demands

P/C Insurance Market in China -- Market Potential

Penetration and Density of P/C Insurance Sector

- Penetration in China is 17% of U.S.
- Density is only 3% of U.S.

Top Ten Countries by P/C Direct Premiums Written (2011)

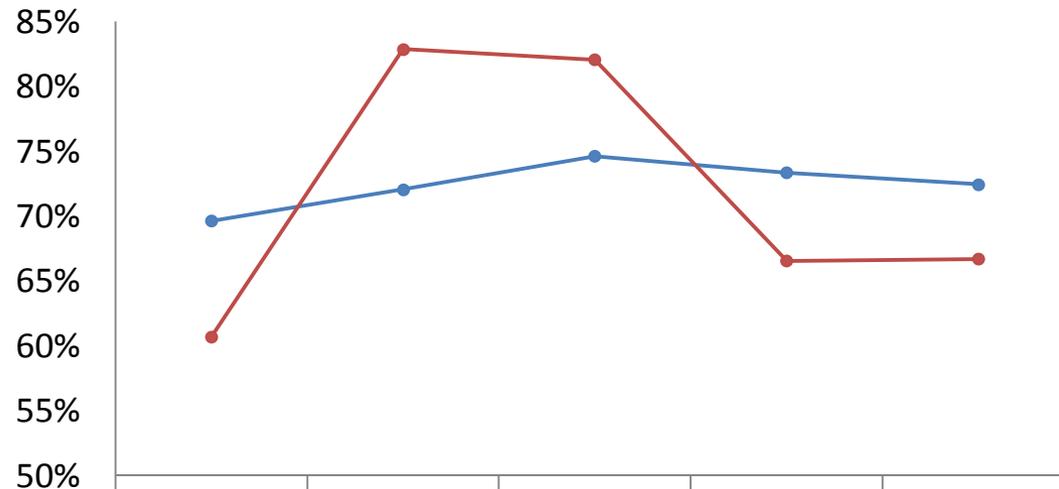
Rank	Nonlife Premiums	Country	P/C Insurance Penetration	P/C Insurance Density
1	\$667,107	U.S.	4.44%	\$2,126
2	\$131,292	Germany	4.26%	\$1,615
3	\$130,741	Japan	2.98%	\$1,026
4	\$109,486	U.K.	4.87%	\$1,737
5	\$98,359	France	4.44%	\$1,499
6	\$87,319	China	0.77%	\$65
7	\$79,722	Netherlands	11.30%	\$4,765
8	\$69,045	Canada	4.97%	\$2,013
9	\$55,426	Italy	3.04%	\$905
10	\$51,223	South Korea	3.30%	\$1,048

P/C Insurance Market in China -- Market Potential

Changing Coverage Structure

- Over 70% of P/C premium comes from auto insurance.
- Auto's contribution to premium increment is decreasing.
- Other coverage is emerging, e.g. agriculture insurance.

Contribution of Auto Insurance



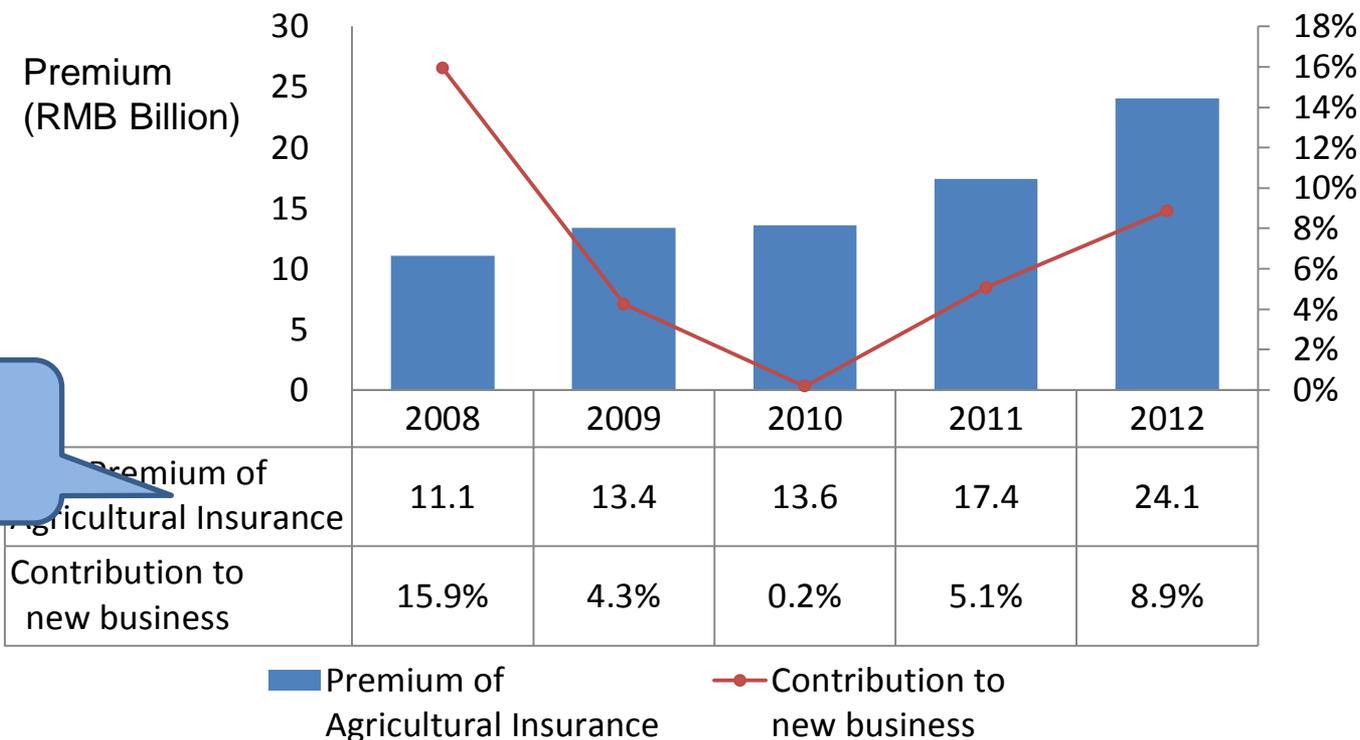
— Premium Contribution	69.6%	72.0%	74.6%	73.3%	72.4%
— Contribution to new business	60.7%	82.9%	82.1%	66.5%	66.7%

P/C Insurance Market in China -- Market Potential

Changing Coverage Structure -- Agriculture

- Premium volume of agriculture insurance ranks **No.2** over the world.

Contribution of Agricultural Insurance



GR:21.4%

P/C Insurance Market in China -- Market Potential

Oversupply and Undersupply of Products

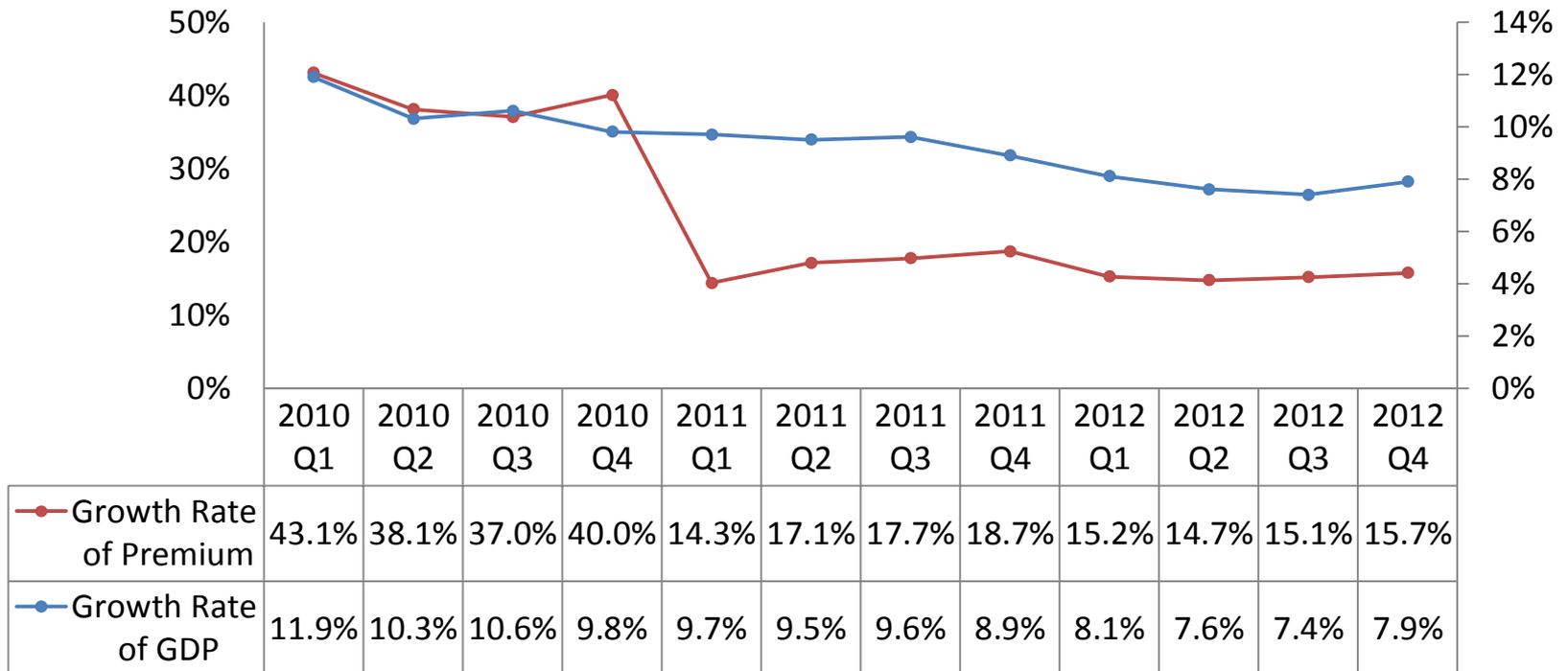
- ✓ Over 18,000 products in market, with 90% products barely have premium income.
- ✓ Lack of product innovation;
- ✓ Short of customized products according to region, season or special need of consumers.

P/C Insurance Market in China -- Market Potential

Enormous Demands

- **Booming macro economy of China stimulates domestic demand, which leads to rapid development of insurance industry.**
 - Growth rate of P/C premium is highly related to growth rate of GDP, with correlation coefficient of **0.8** during past three years.

Growth rate of P/C premium and GDP

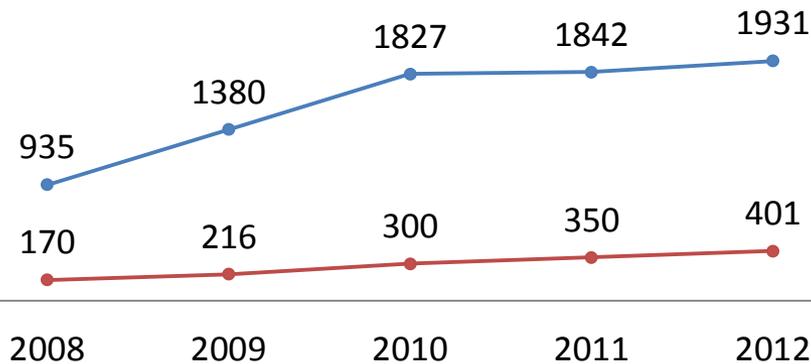


P/C Insurance Market in China -- Market Potential

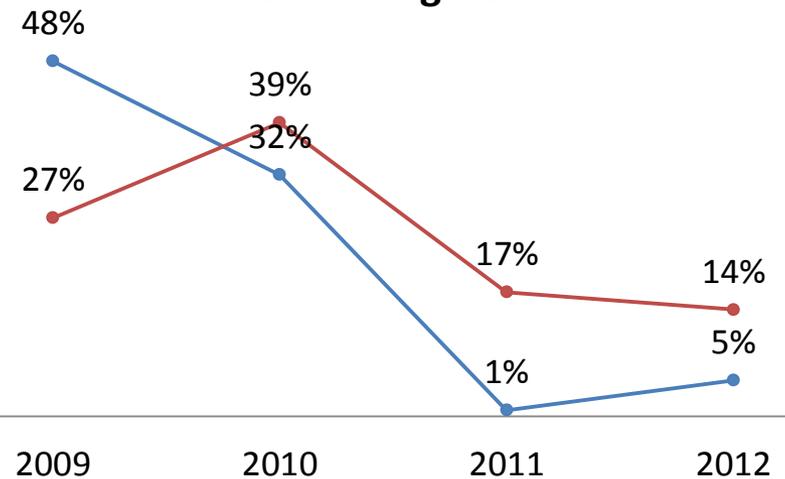
Enormous Demands

- The world's **No. 1** vehicle producer & Emerging stage of vehicle industry.
- New car sales will continue to stimulate premium growth.
- New demand of auto insurance emerging
 - Auto insurance is highly related to new car sales, with correlation coefficient 0.94 during 2008-2012.
 - Recently, increasing rate of premium is larger than vehicle sales, which indicates new demand of auto insurance is emerging.

Sales of vehicle and Premium of Auto Insurance



Increasing Rate



—●— Sale of Vehicle (Million)

—●— Premium of Auto Insurance (RMB Billion)

—●— Increasing rate of auto insurance premium

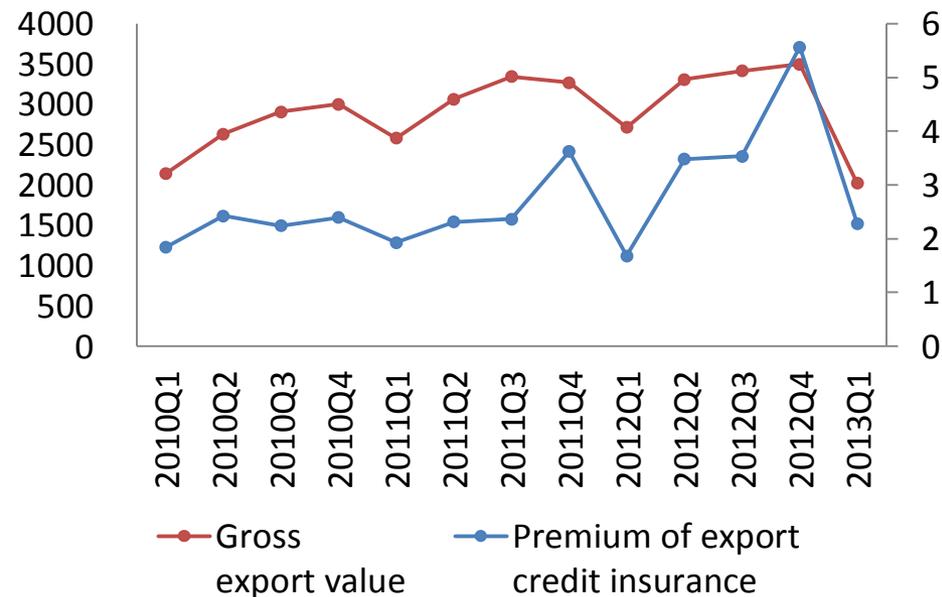
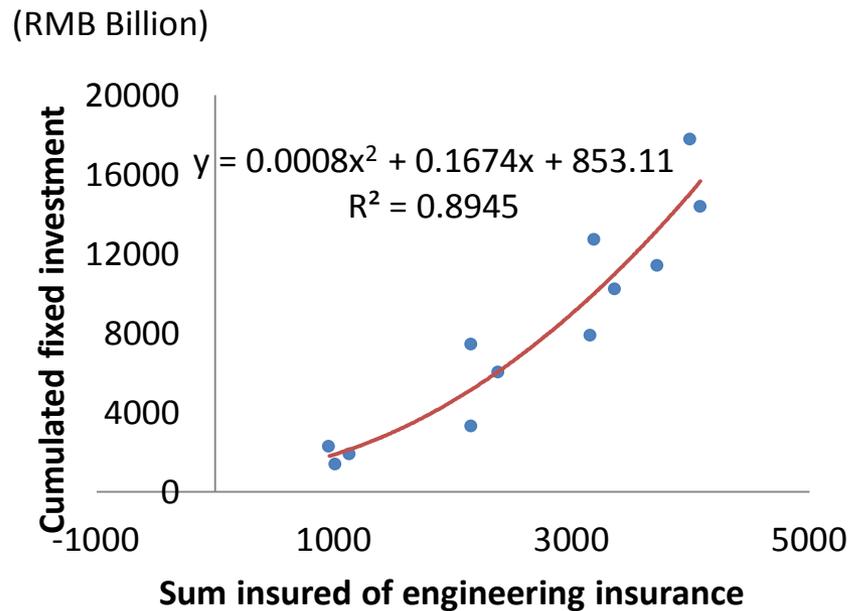
—●— Increasing rate of vehicle sales

P/C Insurance Market in China -- Market Potential

Enormous Demands

- Increasing fixed Investments demand engineering insurance
 - Correlation coefficient of cumulated fixed investment and sum insured of engineering insurance is 0.93 during 2010-2012.

- Foreign trade demands export credit insurance
 - Correlation coefficient of gross export value and premium of export credit insurance is 0.7 during 2010-2012.



P/C Insurance Market in China -- Market Potential

Enormous Demands

- **Premium volume of agriculture insurance ranks No.2 over the world.**
- **Potential**
 - ✓ Crop insurance covers for 40% of arable area, with some region under 10%.
 - ✓ Start-up stage of livestock Insurance, forest insurance.
- **“Agricultural insurance act” officially carried out on March 1st, 2013**
 - Focus on crop insurance, livestock Insurance, forest insurance
 - Supporting policy for seed production insurance, fishery insurance, agricultural machinery insurance, farm house insurance and
 - Corporation of agriculture-related credit and insurance.

P/C Insurance Regulation in China

- Overview
- Solvency regulation
- Reserve regulation

P/C Insurance Regulation in China

Regulation Scheme: Three Pillars

- ✓ Solvency
 - ✓ Establish dynamic solvency regulation system, complete actuarial system, unified statistical method and valuation standards.
- ✓ Corporation governance
 - ✓ Establish corporate governance structure with general meeting, board of directors, board of supervisors and manager group which have their own responsibility, cooperate and counterbalance with each other.
- ✓ Market behavior
 - ✓ Protection of consumers' interests
 - ✓ Regulation of affiliate transaction of insurance companies, insurance sellers' behavior, customers' information management and etc.

P/C Insurance Regulation in China

Regulation with Chinese Characteristics

➤ **Adapting to international trend**

- ✓ Accounting principles
- ✓ Actuarial technologies
- ✓ Solvency

➤ **Adapting to the emerging market**

- ✓ Consideration of rapid growth and market order
- ✓ Protection of consumer's rights and interests
 - Consumer Protection Bureau, including over 4400 Insurance Consumer Affairs Committees.
 - Consumer hotline specialized in insurance: 12378
- ✓ Products regulation
 - Improper products lead to many market problems directly or indirectly
 - Pre-sale review system of insurance product
 - Promoting rating mechanism reformation

P/C Insurance Regulation in China

Five Pillars of Non-life Insurance Risk Regulation

➤ Core capital

- ✓ Premium retained should be no more than 4 times of the sum of book capital and provident fund.

➤ Cash flow

- The cash flow indexes of the insurance market, especially of the non-life investment insured productions should be under regulation.

➤ Asset-liability matching

- Asset-Liability management committee has been founded in 2013, doing research to establish a preliminary regulation system.

➤ Solvency

➤ Reserving

P/C Insurance Regulation in China -- Solvency

Overview of Solvency Regulation

➤ **Position**

- ✓ The core of insurance regulation

➤ **History**

- ✓ Stage 1 of China Solvency System was established in 2008, **mutually recognized with European Solvency II.**
 - Mutual recognition questionnaire was replied to European Union in 2012.
- ✓ Stage 2 of China Solvency System is around the corner.

P/C Insurance Regulation in China -- Solvency

- **Solvency quota requirements of Stage 1 in China**
 - ✓ **Minimum capital requirements**
 - Based on premiums and claims
 - Similar to Solvency I in Europe
 - ✓ **Actual capital measurement**
 - Admitted assets: a discount of book value
 - Admitted liabilities: measured on a statutory-accounting basis
 - Similar principal to RBC
 - ✓ **Comparison of solvency results**
 - Results of China Stage 1 is basically consistent with EU Solvency II and RBC.
 - Solvency regulation in China now is quite strict, which conforms to international solvency regulation requirements.

Company	Premium 2011 (100 Million RMB)	Market Share	Solvency quota	MCR quota of EU SII	SCR quota of EU SII	RBC quota
1 PICC	1,734	36.3%	184%	137%	34%	275%
2 Pin An	833	17.4%	166%	153%	38%	251%
3 CPIC	616	12.9%	233%	209%	52%	337%
4 CCIC	163	3.4%	154%	144%	36%	202%
5 Sunshine	133	2.8%	172%	172%	43%	343%
6 Sino safe	49	1.0%	479%	450%	113%	566%
7 Huatai	48	1.0%	152%	137%	34%	324%
8 Tianpin	40	0.8%	152%	146%	36%	222%

P/C Insurance Regulation in China -- Solvency

Framework of China Stage 2

➤ **Regulation Foundation**

- ✓ Enterprise Solvency Management
- ✓ Refer to 26 Insurance Core Principles, and Common Framework for the Supervision of Internationally Active Insurance Groups published by IAIS

➤ **Three Regulation Pillars: Consistent with international trends**

- ✓ Quantitative capital requirements,
- ✓ Qualitative regulatory requirements,
- ✓ Market restraint mechanism.

➤ **Characteristic**

- ✓ Unified regulation;
- ✓ Risk oriented, balance with valuation of insurance companies
- ✓ Includes operation risk, systemically important risk and countercyclical risk in the second pillar
- ✓ Attach importance to emerging market: considering a lower confidence level of VaR.

➤ **A Glance at First Pillar: Quantitative capital requirements**

- ✓ Capital requirements of insurance risk, market risk, credit risk; Prudential regulatory capital requirement on macro level; And adjustable capital requirement.
- ✓ Consideration of correlation between risks

P/C Insurance Regulation in China -- Reserving

Mature Reserving Regulation

➤ **Legal Basis:**

- Feb. 2009, “Law of Insurance”

➤ **Accounting Standard:**

- ✓ Aug. 2008, “Accounting Standards for Business Enterprises No. 2”, adapted to international accounting standards

➤ **General Requirements:**

- ✓ Definition, valuation methods, reporting system of reserve
- ✓ Feb. 2004 “Reserving Regulation for P/C Business of Insurance Company” and its implementing rules

P/C Insurance Regulation in China -- Reserving

Mature Reserving Regulation

➤ **Responsibility Supervision:**

- ✓ Jul. 2010 Standard for Appointed responsible actuary for P/C company, who should sign actuarial statements of reserving reports, rating reports of new product and etc.

➤ **Reference Requirements:**

- ✓ Jul. 2010, “Standard of Reference Marital of Valuation Process for P/C Business”

➤ **Valuation Process:**

- ✓ Mar. 2012 “Internal Control Standard of Reserving for P/C Business of Insurance Company”

- **Valuation Results:** Reserving adequacy regulation, insight into reserving quality in time.

- ✓ May. 2012 “Retrospective Analyses for P/C reserve of Insurance Company”

➤ **Third-party Audits**

P/C Insurance Regulation in China -- Reserving

“Internal Control Standard of Reserving for P/C Business of Insurance Company”

➤ Principles

- ✓ responsibility assignment : actuarial, financial, underwriting, reinsurance, IT, investment departments and etc.

➤ Fundamental Data

- ✓ Compulsively automatic registration of reported claims
 - Time limit: 3 days for auto insurance, 15 days for others;
 - Automatic assignment of case reserve and ,
 - Update in time according to development of the case;
 - Case reserve compulsively raised according to delay of loss assessment.
- ✓ Update automatic assignment rules in time according to claim experience

➤ Valuation

- ✓ Data extraction and reconciliation, assumption setting, reinsurance analysis, volatility analysis, adequacy analysis, corporation of financial and actuarial teams and etc.

➤ Accounting

- ✓ Compare actuarial valuation results with accounting statement
- ✓ Retrospective analysis requirement

P/C Insurance Regulation in China -- Reserving

Empirical Study of the Non-life Reserve Adequacy Pretest

➤ **financial ratio method**

- ✓ Some financial index is related to retrospective analyses result, e.g. “Outstanding Reserve/Claim Paid”
- ✓ Choose the best financial ratio from more than ten selections in consideration of *stability, accuracy and economic interpretation*.

➤ **Triangle method**

- ✓ Use *uniform assumption* and method to evaluation reserves

➤ **claim management index method**

- ✓ Speed of claim payment,
- ✓ Sufficiency of loss assessment,
- ✓ Management of claims in transit and
- ✓ Reopened claims

Welcome to Round-table Discussion for Details and Share Your Idea!

P/C Insurance Regulation in China

Regulation Results

- **Elimination of Solvency Deficiency**
 - ✓ In 2012, all P/C companies meet solvency requirements.
 - ✓ Industry risk is under control.
- **Major Risks including solvency, investment and surrender are under control.**
- **Elimination of Regional Risk**

P/C Insurance Regulation in China

Future Development of Regulation

- Reserving and margin setting of agriculture catastrophe risk
- Unearned premium reserving rules of agriculture insurance
- Third-party audits regulation for reserving
- Instruction and standard of compulsively automatic registration and adjustment, as a supplement for “Internal Control Standard of Reserving “
- Internal control cycle of pricing