Producer Price Index for Property and Casualty Insurance

Insurance Output

Two different approaches:

- Pooling of risk
- Transfer or assumption of risk and financial intermediation

Pooling of Risk

- Insurer is an intermediary between various policyholders
- Insurer collects premiums and disburses them to claimants
- Insurer assumes no risk
- Policyholders retain risk

Pooling of Risk Methodology

- Value added
- Premiums less claims

Transfer of Risk

- Insurer provides protection from casualties and liabilities
- Insurer collects premiums and invests a portion of the premiums
- Insurer assumes risk
- Policyholders do not retain risk

Transfer of Risk Pricing Methodology United States

- Risk protection plus financial intermediation

- Premiums plus return on the invested portion of the premium

Price = Premium + Return on investments

Transfer of Risk Pricing Methodology Japan

- Risk protection

- Price = Premium

Financial Intermediation

- Financial intermediation is taking someone else's money and investing it with the goal of increasing its value

- Premiums are paid a year in advance, so the insurer invests a portion of the premium

- Return on the invested portion of the premium is used to offset the premium payment

Risk Protection

Protects against economic losses resulting from casualties and liabilities related to the property of the insured

Defining and Classifying Risk

- Actuaries set rates for general classes of risk
- Underwriters ascertain which class of risk is appropriate for a policy
- Finance department determines the amount of investment income through its investment strategy

Treatment of Risk Change

United States

- Quality change
- Supply side

Japan

- Price change
- Demand side

Risk Change?

Severe hurricane season?

- Short-term: *Perceived* as risk change
- Long-term: Hurricane activity is cyclical, so no shift in risk

Risk Change?

Significant increase in population density?

- More crime, increased auto theft
- More auto accidents
- Permanent shift in risk

Adjusting for Inflation-Sensitive Characteristics

Adjusted:

- Valuation of property insured or risk (business assets, receipts, gross sales, payroll, etc.)
- Valuation of repair or replacement

Adjusting for Inflation-Sensitive Characteristics

Not adjusted:

- Liability coverages/limits
- Deductibles/coinsurance

Pricing Characteristics

- Anniversary or renewal month
- Premium
- Dividend rebate
- Rate of return
- Adjustment method

Pricing Characteristics

- Coverage amount/limits
- Deductible/coinsurance
- Specific risks or perils covered
- Past loss experience
- Valuation of property insured or risk

Pricing Procedures

- Policy characteristics not affected by inflation are fixed or frozen
- Policy characteristics affected by inflation are adjusted (escalated)
- After initiation, actual policy becomes hypothetical policy

Pricing Procedures

- Price is the premium plus rate of return
- Any dividends are subtracted
- Each policy is priced once a year in the anniversary or renewal month for that policy
- Policy’s price is held unchanged for the year

Publication Structure

524126	Direct Property and Casualty Insurance Carriers
524126P	Primary services
5241261	Private passenger auto insurance
5241262	Homeowners insurance
5241263	Commercial auto insurance
5241264	Non-auto liability insurance
524126402	Medical malpractice insurance
524126403	Product liability and other non-auto liability insurance
5241265	Commercial multiple peril insurance
5241266	Workers compensation insurance
5241267	Other property and casualty insurance
524126SM	Other receipts