Methods for Current and Real Services of Property-Casualty Insurance in the U.S. National Accounts

Baoline Chen
Office of the Director
Bureau of Economic Analysis
1441 L Street, NW
Washington, DC 20230

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Abstract

The two-fold objective of this paper is to review the performance of the method recently introduced to incorporate expected losses into current estimates of property and casualty (P&C) insurance services in the U.S. national accounts and to propose a single deflation method for estimating real P&C insurance services.

The two major innovations of the method are to replace actual losses with expected losses and to include expected investment income from unearned premiums as premium supplements to account for implicit purchases of insurance services. Expected losses and expected investment income are more relevant than actual losses and investment income for understanding the economic behavior of the insurer. Because actual losses and actual investment income are known only ex post, insurance companies must determine the premiums for an upcoming period according to the expectations of future losses and investment income. In this study, the new method is applied to estimate 22 P&C insurance services. Estimates of annual P&C insurance services are higher than using the pervious method because of the inclusion of premium supplements. Switching to expected losses was expected to reduce volatility in the measured services and eliminate large swings caused by catastrophes, but not to significantly affect the aggregate services over time.

Because P&C insurance services are measured as total premiums net of expected losses, a double deflation method would be ideal if price indexes for total premiums and expected losses were available. However, price indexes for expected losses are not available and, thus, a single deflation method using the producers price indexes (PPI) for the net transaction prices of P&C insurances from BLS is being proposed to deflate both total premiums and expected losses. PPIs for P&C insurance services are appropriate deflators for the total premiums because they are conceptually consistent with the total premiums in the national accounts, and they are reasonable deflators for expected losses because information on past losses (used by the insurer to form expected losses), is incorporated in the construction of the PPIs. The proposed single deflation method is being tested in this study using data on 15 P&C insurance services. The resulting real P&C insurance services are compared with the real services estimated using alternative deflation methods.