

Property/Casualty Insurance Results: 2016

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Private U.S. property/casualty insurers' net income after taxes dropped to \$42.6 billion in 2016 from \$56.8 billion in 2015. Insurers' overall profitability as measured by their rate of return on average policyholders' surplus declined to 6.2 percent from 8.4 percent a year earlier, according to ISO, a Verisk Analytics (Nasdaq:VRSK) business, and the Property Casualty Insurers Association of America (PCI).¹

Insurers' combined ratio² deteriorated to 100.7 percent for 2016 from 97.8 percent for 2015, and their \$4.7 billion in net underwriting losses³ in 2016 compares with an \$8.9 billion gain a year earlier. Net written premium growth slowed to 2.7 percent for 2016 from 3.5 percent for 2015.

Insurers' net investment income declined to \$46.3 billion in 2016 from \$47.2 billion a year earlier, and insurers' realized capital gains dropped to \$7.3 billion from \$9.4 billion, resulting in \$53.7 billion in net investment gains⁴ for 2016, down \$3.0 billion from \$56.6 billion for 2015. The 25.0 percent decrease in net income after taxes drove insurers' 2016 rate of return on average surplus to 6.2 percent—2.2 percentage points below the 8.4 percent value for 2015 and 1.9 percentage points below the 30-year average rate of return for 1987–2016.

The industry's surplus⁵ reached a new all-time-high value of \$700.9 billion as of December 31, 2016, surpassing \$675.2 billion as of December 31, 2014, and \$674.2 billion as of December 31, 2015.

Underwriting Results

In 2016, earned premiums grew 3.4 percent to \$523.5 billion, while LLAE rose 8.0 percent to \$378.3 billion, other underwriting expenses grew 2.3 percent to \$147.6 billion, and policyholders' dividends declined 8.4% to \$2.3 billion. As a result, the industry reported a \$4.7 billion net underwriting loss, in contrast to the \$8.9 billion gain for 2015.

Net written premiums climbed \$13.8 billion to \$528.2 billion in 2016 from \$514.4 billion in 2015. Net written premium growth slowed to 2.7 percent from 3.5 percent for 2015. The growth rate in net earned premiums also slowed, to 3.4 percent in 2016 from 3.7 percent for 2015.

Net written premium and earned premium growth slowed.

The 8.0 percent increase in LLAE in 2016 exceeds premium growth and compares unfavorably to the 4.6 percent increase a year earlier. LLAE growth in 2016 was accelerated by an increase in catastrophe losses. Private U.S. insurers' net LLAE from catastrophes grew \$6.5 billion to \$23.3 billion for 2016 from \$16.7 billion a year earlier. Net LLAE for losses other than catastrophes rose \$21.5 billion, or 6.4 percent, to \$355.0 billion in 2016 from \$333.6 billion in 2015.

Private U.S. insurers' net LLAE includes both their domestic and foreign catastrophic losses.⁶ However, U.S. insurers' \$23.3 billion in net LLAE from catastrophes in 2016 is primarily

1. This study defines the U.S. property/casualty insurance industry as all private property/casualty insurers domiciled in the United States, including excess and surplus insurers and domestic insurers owned by foreign parents but excluding state funds for workers' compensation and other residual market carriers. The figures are consolidated estimates based on reports accounting for at least 96 percent of all business written by U.S. property/casualty insurers. All figures are net of reinsurance unless otherwise noted and occasionally may not balance due to rounding.

2. Combined ratio, defined as the sum of loss ratio, expense ratio, and dividend ratio, is a key measure of losses and other underwriting expenses per dollar of premium. The loss ratio is the ratio of losses and loss adjustment expenses (LLAE) to earned premiums; the expense ratio is the ratio of other underwriting expenses to written premiums; and the dividend ratio is the ratio of policyholders' dividends to earned premiums.

- 3. Underwriting gains (or losses) equal earned premiums minus LLAE, other underwriting expenses, and dividends to policyholders.
- 4. Net investment gains equal the sum of net investment income and realized capital gains (or losses) on investments.
- 5. Policyholders' surplus is insurers' net worth measured according to Statutory Accounting Principles.

6. Net LLAE from catastrophes also includes revisions to LLAE from catastrophes that occurred during prior periods but excludes LLAE covered by the National Flood Insurance Program, residual market insurers, and foreign insurers and reinsurers.





Property Casualty Insurer Association of America attributable to catastrophes that struck the United States. Though estimating U.S. insurers' LLAE from catastrophes elsewhere around the globe is difficult, the available information suggests that U.S. insurers' net LLAE arising from such events was not large in either 2015 or 2016.

Higher catastrophe losses and less favorable reserve development pushed up the combined ratio and generated net underwriting losses for insurers.

Direct insured property losses from catastrophes striking the United States totaled \$21.6 billion in 2016, up from \$15.2 billion in 2015 and \$2.3 billion above the \$19.2 billion average direct catastrophe losses for the past ten years.⁷ The above-average 2016 catastrophe losses came from 43 catastrophic events, which is the highest number of such events since 51 events in 1980.

Reflecting the differences between premium growth and the growth in LLAE and other costs of providing insurance, the combined ratio deteriorated 2.9 percentage points to 100.7 percent in 2016 from 97.8 percent in 2015.

Underwriting results benefited from \$3.8 billion in favorable development of LLAE reserves in 2016, based on new information and updated estimates for the ultimate cost of claims from prior accident years. The \$3.8 billion of favorable reserve development in 2016 followed \$8.0 billion of favorable development in 2015. Favorable development reduced the combined ratio by 0.7 percentage points in 2016 and by 1.6 percentage points in 2015.

Excluding development of LLAE reserves, net LLAE grew \$23.8 billion, or 6.6 percent, to \$382.0 billion in 2016 from \$358.3 billion in 2015. Excluding development of LLAE reserves, net noncatastrophe LLAE grew \$17.3 billion, or 5.1 percent, to \$358.9 billion in 2016 from \$341.5 billion a year earlier. In sum, the changes in LLAE attributable to catastrophes and reserve development account for 2.0 percentage points out of the 3.0-percentagepoint deterioration of the loss ratio in 2016. The \$4.7 billion in net losses on underwriting in 2016 amounted to 0.9 percent of the \$523.5 billion in net premiums earned during the period. The \$8.9 billion in net gains on underwriting in 2015 amounted to 1.8 percent of the \$506.0 billion in net premiums earned during that period.

While overall net written premium growth in 2016 declined to 2.7 percent from 3.5 percent a year earlier, the dynamics varied across industry segments.

Net written premium growth in 2016 was the strongest for insurers writing mostly personal lines. At 5.7 percent, it accelerated 0.5 percentage points from 2015. Excluding mortgage and financial guaranty insurers, net written premium growth for insurers writing predominantly commercial lines dropped 2.9 percentage points to negative 1.4 percent in 2016, while premium growth for insurers writing more balanced books of business slowed 0.2 percentage points to 3.1 percent. The negative growth for commercial lines insurers is attributable to several special transactions of U.S. insurers with their foreign affiliates in 2016 that suppressed reported net premiums. The direct premiums by segment are not immediately available, but for the industry overall, direct premium growth was more robust than on the net basis. While net written premium growth dropped to 2.7 percent in 2016 from 3.5 percent in 2015, direct premium growth barely slowed to 3.8 percent from 3.9 percent in 2015.

Underwriting profitability as measured by the combined ratio deteriorated across all major segments. Excluding mortgage and financial guaranty insurers, commercial lines insurers' combined ratio deteriorated 2.6 percentage points to 99.3 percent in 2016. Personal lines insurers' combined ratio deteriorated 2.9 percentage points to 103.0 percent, and balanced insurers' combined ratio deteriorated 2.8 percentage points to 99.4 percent in 2016 from 96.6 percent in 2015.

Investment Results

Insurers' net investment income—primarily dividends from stocks and interest on bonds declined 1.9 percent to \$46.3 billion in 2016 from \$47.2 billion in 2015. This is the lowest annual investment income since the \$40.0 billion in 2004. Insurers' realized capital gains on investments fell 22.0 percent to \$7.3 billion in 2016 from \$9.4 billion a year earlier. Combining net investment income and realized capital gains, overall net investment gains dropped 5.2 percent to \$53.7 billion in 2016 from \$56.6 billion a year earlier.

Insurers' \$7.3 billion in realized capital gains in 2016 resulted from \$10.0 billion in net realized gains on asset sales partially offset by \$2.7 billion in realized losses on asset impairments. Net realized gains on asset sales decreased \$2.9 billion in 2016 from \$12.9 billion for 2015, and realized losses on impairments decreased \$0.8 billion.

Both net investment income and realized capital gains dropped in 2016.

Insurers' net investment income decreased 1.9 percent despite a 1.9 percent increase in average cash and invested assets for 2016 compared with 2015. The yield on insurers' investments in 2016 dropped to 3.1 percent from 3.2 percent a year earlier. Both yields are significantly below the 3.7 percent average investment yield for the last ten years. Moreover, the last time insurers' investment yield was lower than in 2016 was more than 50 years ago.

^{7.} Estimates are from Verisk's Property Claim Services* (PCS*) based on information available as of May 1, 2017. Direct losses are before reinsurance recoveries and exclude loss adjustment expenses. These figures are for all types of insurers, including residual market insurers, foreign insurers, and reinsurers, but exclude ocean marine losses and losses covered by the National Flood Insurance Program.

Specifically, that was in 1964, when the yield was 3.0 percent. From 1960 to 2015, insurers' investment yield averaged 5.1 percent but ranged from as low as 2.8 percent in 1961 to as high as 8.2 percent in 1984 and 1985.

Combining the \$7.3 billion in realized capital gains in 2016 with the \$15.2 billion in unrealized capital gains⁸ during the same period, insurers posted \$22.5 billion in overall capital gains for 2016—a \$32.7 billion improvement from \$10.2 billion in overall capital losses for 2015. Over the past 30 years, insurers' total capital gains have averaged \$10.5 billion per year but have ranged from as high as \$47.6 billion in 2013 to as low as negative \$72.7 billion in 2008 during the financial crisis.

Pretax Operating Income

Pretax operating income⁹ declined \$15.0 billion to \$42.6 billion for 2016 from \$57.7 billion for 2015. The decline in operating income is mostly due to the \$13.7 billion decrease in net gains on underwriting and the \$0.9 billion decrease in net investment income.

Net Income after Taxes

Combining operating income, realized capital gains (losses), and federal and foreign income taxes, the insurance industry's net income after taxes fell \$14.2 billion to \$42.6 billion for 2016 from \$56.8 billion for 2015. The 2016 net income after taxes is still above the \$40.3 billion average annual income for the last ten years, but that comparison does not account for inflation. When the income for each year is adjusted to 2016 dollars using the Consumer Price Index, the ten-year average is essentially the same as insurers' net income for 2016. As insurers' surplus continues to increase, both in nominal and constant-dollar terms, the stagnant income translates into deterioration of insurers' profitability measured by returns on average surplus.

Policyholders' Surplus

Policyholders' surplus increased \$26.8 billion to a new record-high \$700.9 billion as of December 31, 2016, from \$674.2 billion as of December 31, 2015. Additions to surplus in 2016 included \$42.6 billion in net income after taxes, \$15.2 billion in unrealized capital gains on investments (not included in net income), and \$0.2 billion in new funds. The deductions from surplus consisted of \$27.5 billion in dividends to shareholders and \$3.8 billion in miscellaneous charges against surplus.

Policyholders' surplus continued to grow, reaching a new record level.

Unrealized capital gains increased \$34.8 billion to \$15.2 billion in 2016 from \$19.6 billion in losses a year earlier. Net new funds paid in decreased to \$0.2 billion in 2016 from \$9.0 billion in 2015. Dividends to shareholders dropped 28.0 percent to \$27.5 billion in 2016 from \$38.1 billion in 2015. Miscellaneous charges against surplus decreased to \$3.8 billion in 2016 from \$9.3 billion in 2015.

The premium-to-surplus ratio declined to 0.75 as of December 31, 2016, from 0.76 as of December 31, 2015, while the ratio of loss and loss adjustment expense reserves to surplus declined to 0.85 as of December 31, 2016, from 0.87 a year earlier. The 0.75 premium-to-surplus ratio is only about half of the 1.42 average premium-to-surplus ratio based on annual data for the 57 years from 1959 to 2015. Similarly, the 0.85 LLAE-reserves-to-surplus ratio as of December 31, 2016, is far below the 1.38 average for the 57 years ending 2015.

Fourth-Quarter Results

The property/casualty insurance industry's consolidated net income after taxes fell to \$10.8 billion in fourth-quarter 2016 from \$12.7 billion in fourth-quarter 2015. Property/ casualty insurers' annualized rate of return on average surplus dropped to 6.2 percent in fourthquarter 2016 from 7.6 percent a year earlier. The \$10.8 billion in net income after taxes for the insurance industry in fourth-quarter 2016 was the result of \$10.1 billion in pretax operating income, \$1.7 billion in realized capital gains on investments, and \$1.1 billion in federal and foreign income taxes.

The industry's \$10.1 billion in pretax operating income for fourth-quarter 2016 was down \$4.2 billion from the \$14.3 billion for fourthquarter 2015. The industry's fourth-quarter 2016 pretax operating income was the net result of \$3.0 billion in net losses on underwriting, \$13.3 billion in net investment income, and negative \$0.1 billion in miscellaneous other income.

Underwriting results deteriorated to \$3.0 billion of net underwriting losses in fourth-quarter 2016 from \$1.7 billion of net underwriting gains in fourth-quarter 2015.

Net LLAE from catastrophes included in private U.S. insurers' financial results in fourth-quarter 2016 increased to \$4.4 billion from \$2.5 billion in fourth-quarter 2015.¹⁰ The contribution of catastrophe LLAE to the fourth-quarter combined ratio increased to 3.3 percentage points in 2016 from 1.9 percentage points in 2015.

Direct insured losses from catastrophes striking the United States in fourth-quarter 2016 totaled \$4.1 billion, up from the \$2.1 billion in direct insured losses caused by catastrophes that struck the United States in fourth-quarter 2015.¹¹

Fourth-quarter 2016 net losses on underwriting amounted to 2.3 percent of the \$132.8 billion in premiums earned during the period, a deterioration compared with fourth-quarter 2015 net gains on underwriting, which were 1.3 percent of the \$129.0 billion in premiums earned during that period. The industry's combined ratio rose to 104.1 percent in fourthquarter 2016 from the 100.4 percent in fourthquarter 2015. Over the last 30 years, the fourth-quarter combined ratio averaged 106.2 percent but reached as high as 123.3 percent in 1992 and as low as 94.9 percent in 2006.

^{8.} Unrealized capital gains or losses contribute directly to surplus change, but they do not affect net income.

^{9.} Pretax operating income is the sum of net gains or losses on underwriting, net investment income, and miscellaneous other income.

^{10.} Net LLAE from catastrophes also includes revisions to LLAE from catastrophes that occurred during prior periods but excludes LLAE covered by the National Flood Insurance Program, residual market insurers, and foreign insurers and reinsurers.

^{11.} Estimates are from Verisk's Property Claim Services (PCS) based on information available as of May 1, 2017. Direct losses are before reinsurance recoveries and exclude loss adjustment expenses. These figures are for all types of insurers, including residual market insurers, foreign insurers, and reinsurers, but exclude ocean marine losses and losses covered by the National Flood Insurance Program.

Net written premiums rose \$2.9 billion, or 2.4 percent, to \$124.4 billion in fourth-quarter 2016 from \$121.5 billion in fourth-quarter 2015. This was the 27th consecutive quarter of growth in written premiums, beginning in the second quarter of 2010 and following 12 quarters of declines.

Net earned premiums grew 2.9 percent to \$132.8 billion in fourth-quarter 2016 from \$129.0 billion in fourth-quarter 2015. LLAE grew 9.2 percent to \$98.4 billion in fourthquarter 2016 from \$90.1 billion in fourthquarter 2015. Noncatastrophe LLAE rose 7.2 percent to \$94.0 billion from \$87.6 billion in fourth-quarter 2015.

Net investment income for the industry rose \$0.9 billion to \$13.3 billion in fourth-quarter 2016 from \$12.4 billion in fourth-quarter 2015. Fourth-quarter miscellaneous other income declined \$0.4 billion to negative \$0.1 billion. Realized capital gains on investments increased to \$1.7 billion in fourth-quarter 2016 from \$0.5 billion in fourth-quarter 2015. Combining net investment income and realized capital gains, fourth-quarter 2016 net investment gains were \$15.0 billion, up \$2.1 billion from \$12.9 billion in fourth-quarter 2015.

Insurers posted \$12.8 billion in unrealized capital gains on investments in fourth-quarter 2016, a \$9.9 billion improvement from \$3.0 billion a year earlier. Combining realized and unrealized amounts, the insurance industry posted \$14.5 billion in overall capital gains in fourth-quarter 2016—an \$11.0 billion improvement from the \$3.5 billion in overall capital gains on investments in fourthquarter 2015.

The key operating results for the industry are summarized in the table on page 5.

2016: BY THE NUMBERS

700_9 billion

Industry surplus, compared with \$688.3 billion last quarter and \$674.2 billion at year-end 2015

\$42_6 billion Net income after taxes, a 25.0% drop from \$56.8 billion for 2015

> **2.7**[%] Net written premium growth, after 3.5% in 2015

100.7[%] Combined ratio, following 97.8% for 2015

^{\$}4.7_{billion}

Net underwriting loss, after an \$8.9 billion underwriting gain for 2015

3.1^{*}

Investment yield for 2016, 0.6 percentage points below the 3.7% average value for the last ten years and the lowest since the mid-1960s

^s21.6 billion

Direct catastrophe losses—a \$6.3 billion increase from 2015 and \$2.3 billion above the ten-year average

Catastrophic events for 2016, the highest since 51 catastrophes in 1980



Beth Fitzgerald is president of ISO Solutions. The unit develops ISO's core products and services, such as advisory prospective loss costs (projections of future claims), policy forms, underwriting rules, and related information products that most insurers use to write one or more lines of commercial or personal business. Ms. Fitzgerald's area is instrumental in the development of ISO's various predictive analytical products for underwriting personal and commercial insurance. Under her direction, ISO also collects and compiles data from insurers, acts as statistical agent for all U.S. insurance regulators, supplies actuarial and data management consulting services, and conducts cutting-edge research on various issues in property/casualty insurance.



Robert Gordon is senior vice president of policy development and research for PCI. He is responsible for working with PCI members to develop and frame public policy positions on the opportunities and challenges facing the property/casualty insurance industry at the state, federal, and international levels. Mr. Gordon also coordinates policy support for PCI's extensive state and federal advocacy efforts, media outreach, and information products.

Operating Results for 2016 and 2015 (\$ Millions)			
Full Year	2016	2015	
Net Written Premiums	\$528,221	\$514,422	
Percent Change (%)	2.7	3.5	
Net Earned Premiums	523,469	506,020	
Percent Change (%)	3.4	3.7	
Incurred Losses & Loss Adjustment Expenses	378,277	350,280	
Percent Change (%)	8.0	4.6	
Statutory Underwriting Gains (Losses)	(2,447)	11,463	
Policyholders' Dividends	2,302	2,515	
Net Underwriting Gains (Losses)	(4,749)	8,949	
Pretax Operating Income	42,616	57,652	
Net Investment Income Earned	46,341	47,242	
Net Realized Capital Gains (Losses)	7,314	9,381	
Net Investment Gains	53,654	56,622	
Net Income (Loss) after Taxes	42,609	56,826	
Percent Change (%)	-25.0	1.7	
Surplus (Consolidated)	700,931	674,151	
Loss & Loss Adjustment Expense Reserves	597,175	583,145	
Combined Ratio, Post-Dividends (%)	100.7	97.8	

Fourth Quarter	2016	2015
Net Written Premiums	\$124,402	\$121,513
Percent Change (%)	2.4	1.5
Net Earned Premiums	132,772	128,973
Percent Change (%)	2.9	2.9
Incurred Losses & Loss Adjustment Expenses	98,399	90,135
Percent Change (%)	9.2	10.3
Statutory Underwriting Gains (Losses)	(2,032)	2,950
Policyholders' Dividends	1,002	1,258
Net Underwriting Gains (Losses)	(3,034)	1,693
Pretax Operating Income	10,145	14,324
Net Investment Income Earned	13,305	12,380
Net Realized Capital Gains (Losses)	1,700	538
Net Investment Gains	15,005	12,918
Net Income (Loss) after Taxes	10,789	12,677
Percent Change (%)	-14.9	-29.8
Surplus (Consolidated)	700,931	674,151
Loss & Loss Adjustment Expense Reserves	597,175	583,145
Combined Ratio, Post-Dividends (%)	104.1	100.4

Commercial Lines Premium Analysis 2016

Construction, Small and Middle Markets, and Sun Belt States Led the Way

The commercial insurance market expanded 3.1 percent in 2016, with carriers writing \$258.6 billion in direct premiums in lines covered by ISO MarketStance.¹ The increase in direct premiums was mostly the result of exposure growth² in small commercial (0–49 employees) and middle market (50–999 employees) risks, such as specialty trade contractors, building construction, real estate, and new and used car dealers. Insurers focusing on these sectors benefited from economic tailwinds, such as historically low vacancy rates, demographic shifts to multifamily housing, and record levels of single-family remodeling and vehicle sales.

Exposure growth averaging 4 percent or more in these small and midsized accounts counterbalanced a notably soft pricing environment in 2016. Construction led this increase, which was, by premium volume, the single-largest commercial lines segment, at \$35.2 billion direct written premiums.

Anecdotal evidence reported in a recent CIAB broker survey well supported by economic theory and empirical studies³ suggested that many insureds traded new coverages, lowered deductibles, and raised limits in response to rate reductions. This demand elasticity somewhat mitigated the challenging soft market environment, with particular lines such as cyber liability benefiting from the price-induced increase in demand for coverages of various types.

Nevertheless, soft markets proved a drag on many largeaccount-oriented (>1,000 employees) industries, such as manufacturing (at \$28.9 billion in direct premiums, the secondlargest industry sector), healthcare (\$22.5 billion), transportation and warehousing (\$18.0 billion), wholesale trade (\$16.3 billion), and utilities (\$4.2 billion). Flat or declining rates offset aboveaverage exposure growth in manufacturing and amplified subpar exposure growth in healthcare, transportation, wholesale trade, and utilities, significantly depressing 2016 commercial market results. Despite these significant headwinds in larger accounts, 2016 direct written premium growth was relatively broad-based, with five of the nine one-digit industry sectors expanding at or above the 3.1 percent pace of the commercial market.

Nearly half of the commercial lines growth in 2016 came from California, Colorado, and Florida and their respective Pacific, Mountain, and South Atlantic regions—where exposure growth was typically 1 to 2 percent above the U.S. average—as the long-term shifts of population to Sun Belt states for retirement, tech, and other reasons continued.

Following years of subpar growth in the weak recovery, direct premiums in New England's construction, real estate, auto dealer, and administrative/technical services sectors grew at or significantly above the national average, led by states such as Massachusetts and New Hampshire.

On a coverage basis, 2016 downward rate pressures were most intense in property and workers' compensation lines, which comprised more than 50 percent of the market by premium volume. These lines performed far more poorly than exposure growth alone would have predicted. On the other hand, liability lines—in particular, special liability errors and omissions (E&O) and cyber—saw robust 2016 exposure and premium growth, with significantly less rate pressure.

Looking ahead, if rate pressures continue to the degrees experienced in 2016 (and early indications are that they will) and exposure growth diminishes (as is expected in 2017), the commercial market will show substantially weaker growth—or none at all—in 2017. This will be the case at least for written premiums, accentuating the need for careful targeting and analytics by size, industry, class, and coverage.

To view this article with charts, visit: http:// www.marketstance.com/iso_ms_cl_analysis_2016.html.

1. According to results modeled by ISO MarketStance for the following lines of business: Allied, Boiler & Machinery, Commercial Auto, Commercial Multi-Peril, Farmowners Multi-Peril, Fire, Inland Marine, Medical Professional Liability, Other Liability, Products Liability, Workers' Compensation, and Excess Workers' Compensation, as reported by U.S. domiciled carriers, the Texas Windstorm Insurance Authority, and estimated for alien surplus lines carriers; excludes personal inland marine, personal umbrella liability, and captive premiums.

 Industry, location, and account-size-specific estimates of 2015–16 rates of growth in the number of employees, payrolls, revenues, and property values appropriate for each of 20 separately estimated lines of coverage, weighted by 2015 direct written premiums reported in ISO MarketStance Commercial Insight (v16.1) products.
For example, Michel-Kerjan, E., Raschky, P. and Kunreuther, H., "Corporate Demand for Insurance: An Empirical Analysis of the U.S. Market for Catastrophe and

Non-Catastrophe Risks", AEA (2010), https://www.aeaweb.org/conference/2010/retrieve.php?pdfid=538.



