

cited in Dorrance v. USA, No.

Historical Dividend Studies From Massachusetts Mutual Life Insurance Company (MassMutual)

As a mutual life insurance company, MassMutual does not have shareholders. Instead, the company operates for the benefit of its participating policyowners. The participating whole life policies issued by MassMutual are eligible to receive a dividend each year.

Company surplus results when overall actual experience is more favorable than the experience that was originally assumed in setting the premiums and guaranteen between soft policies. A portion is set aside to be paid of applied as policy dividends in the following years. Atthough policy dividends are not guaranteed, MassMutual has consistently paid them since the 1860s.

Each year, MassMutual's Board of Directors votes on the total amount of dividends to be paid and how it will be allocated to eligible participating policyowners. When determining the dividend for an individual policy, the amount paid reflects the portion that each specific policy is considered to have contributed to surplus.

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Historical Examples

The numeric tables on the following page illustrate MassMutual's historical dividend information for different whole life insurance policies that were issued in 1980.

Each of the five historical policy examples uses the best underwriting class that was available at the time of issue (nonsmoker). The issue ages are shown in the examples, which assume that dividends are used to buy paid-up additional whole life insurance, or paid-up additions.

The summary for each policy compares what was *illustrated* in 1980, with what had *actually* happened over 36 years. You will also see the *difference* between the two, expressed as a percentage of the illustrated value. Below is a description of the terms used in each summary.

- **Guar Cash Value** The amount of the cash value which is guaranteed under the policy. For this value, there is no difference between illustrated and actual.
- **Cash Dividends** The total annual base policy dividend, assuming it was paid in cash.
- **Total Dividends** The total annual dividend, including dividends payable on paid-up additions.
- **Total Cash Value** The total cash value, including all guaranteed and non-guaranteed values.

- **Total Death Benefit** The total death benefit, including paid-up additions, that would be payable at the end of the policy year.
- "IRR" The Internal Rate of Return (IRR) is the rate at which outlays up to that year must be compounded at each and every year to generate the Total Cash Value or Total Death Benefit. For example, in Policy 1, the IRR on the Total Cash Value was initially illustrated at 3.17%, however, the IRR based on actual dividends paid was 4.95%.

The results shown in the following tables are based on the actual experience of the company over the period of time in terms of interest rates, mortality and expenses. Dividends paid in future years will be lower or higher than illustrated, depending on MassMutual's actual experience.

For more detail about these historical policy examples, please refer to the Appendix at the end of this brochure.

Actual Historical Performance Summary Since 1980

Hypothetical Policies Issued in 1980

Each hypothetical policy below is from the MM Block.¹ For information on the Reserve Basis, see the Appendix at the end of this brochure.

| Policy | Policy 1 - \$250,000 Convertible Life Policy, \$5,910.00 Premium – Male Age 45, Nonsmoker | | | | | | | | | | | | |
|-----------|---|--------------------------|------------------------------|--------------|---|---------------------|---------------|----------------------|---------------------|-----------|----------------------|---------------------|------------|
| | | | | | | | | With Paid-I | Up Additio | ns Option | | | |
| Year | Guar Cash Value | Cash | n Dividena | ls | Total | Dividend | s | Total | Cash Value | 9 | Total D | eath Benefi | t |
| | | Illust. | Actual | Diff. | Illust. | Actual | Diff. | Illust. [†] | Actual [†] | Diff. | Illust. [†] | Actual [†] | Diff. |
| 1990 | 45,540 | 1,808 | 2,735 | 51% | 2,098 | 4,035 | 92% | 58,787 | 69,967 | 19% | 276,724 | 299,279 | 8% |
| 2000 | 99,755 | 3,533 | 5,103 | 44% | 4,894 | 9,047 | 85% | 160,069 | 206,943 | 29% | 342,884 | 416,180 | 21% |
| 2016 | 175,243 | 10,630 ⁺ | 16,333† | 54% | 16,346 ⁺ | 31,810 ⁺ | 95% | 399,232 | 587,854 | 47% | 523,502 | 753,921 | 44% |
| IRR 36 Ye | ears | | | | | | | 3.17% | 4.95% | | 4.43% | 6.04% | |
| Policy | 2 - \$250,000 Converti | ble Life Po | olicy, \$8,6 | 32.50 Pi | remium – Fe | male Age | e 55, Nor | ısmoker | | | | | |
| | | | | | | | | With Paid-U | Up Additio | ns Option | | | |
| Year | Guar Cash Value | Cash | n Dividena | ls | Total | Dividend | s | Total | Total Cash Value | | | eath Benefi | t |
| | | Illust. | Actual | Diff. | Illust. | Actual | Diff. | Illust. [†] | Actual | Diff. | Illust. [†] | Actual [†] | Diff. |
| 1990 | 61,550 | 3,133 | 4,575 | 46% | 3,816 | 7,334 | 92% | 90,695 | 110,512 | 22% | 296,306 | 327,792 | 11% |
| 2000 | 123,863 | 4,995 | 7,833 | 57% | 7,542 | 16,098 | 113% | 225,986 | 312,794 | 38% | 384,164 | 498,373 | 30% |
| 2016 | 198,343 | 10,915† | 16,780 ⁺ | 54% | 18,397† | 38,287† | 108% | 498,828 | 824,273 | 2051/5 | 583,898 | 945,720 | 62% |
| IRR 36 Ye | ears | | | | | | | 2.42% | cen4.76% | , | 3.18% | 5.38% | |
| Policy | 3 - \$250 000 Life Paid | -un at 65 \ | Nhole I if | e Policy | / \$4 427 50 P | romium_ | Mato | Ned Oli P | noker | | | | |
| Toncy | | up ut 05 1 | | | , אין | 13-105 | , on all of t | With Paid-I | In Additio | ns Antion | | | |
| Voar | Guar Cash Value | Cach | Dividend | le u | USA, NO. | USA Total Dividende | | | Cach Value | ns option | Total D | ooth Ronofi | + |
| Tear | Guai Gasii Value | Illust | | nce V. | Illust | Actual | Diff | Illust [†] | | Diff | Illust † | | niff |
| 1990 | 37 885 | Cited | 2 173 | 68% | 1 480 | 3 071 | 108% | 46 865 | 55 467 | 18% | 274 125 | 297 236 | 8% |
| 2000 | 90 868 | 2 848 | 3 435 | 21% | 3 833 | 6 155 | 61% | 137 519 | 168 819 | 23% | 339 030 | 402 328 | 19% |
| 2016 | 176,398 | 9,743 ⁺ | 15,130 ⁺ | 55% | 14,621* | 26,782 ⁺ | 83% | 363,049 | 483,582 | 33% | 512,446 | 681,708 | 33% |
| IBB 36 Ye | ars | | | | | | | 4 45% | 5 65% | | 5 89% | 7.06% | |
| | | (05) | AU 1 1.C | D.I. | 64 077 FO D | | r 1 | | 0.00 /0 | | 0.00 /0 | 7.007,0 | _ |
| Policy | 4 - \$250,000 Life Paid | -up at 65 \ | whole Life | e Policy | /, \$4,077.50 P | remium- | -Female | e Age 35, Non | smoker | 0. / | | | |
| | 0 0 I V I | | D ¹ · · · | | T . 1 | D: | | With Paid- | | ns Uption | T (10 | | |
| Year | Guar Cash Value | Cash | Dividend | IS | lotal | Dividend | S | lotal | Cash Value | | Iotal D | eath Benefi | t |
| 1000 | 07.005 | Illust. | Actual | Diff. | Illust. | Actual | Diff. | Illust.' | Actual' | Diff. | Illust.' | Actual' | Diff. |
| 1990 | 37,885 | 1,290 | Z,1/3 | 08% | 1,480 | 3,071 | 108% 61% | 40,805 | 55,467 | 18% | 274,125 | 297,230 | 8% 100/ |
| 2000 | 176 398 | 2,040 9,7 <u>4</u> 3† | 3,435 15 130 [†] | 21 /0 55% | 14 621 [†] | 26 782 [†] | 83% | 363 049 | 483 582 | 23 % | 512 446 | 681 708 | 33% |
| | 170,000 | 3,743 | 10,100 | 0070 | 14,021 | 20,702 | 0070 | 4.000/ | F 000/ | 00 /0 | C 200/ | 7 400/ | 00 /0 |
| IKK 30 YE | ars | | | | | | | 4.80% | 5.99% | | 0.23% | 7.40% | |
| Policy | 5 - \$250,000 10 Paymo | ent Whole | e Life Poli | cy, \$14,4 | 445.00 Premi | ium – Ma | le Age 5 | 0, Nonsmoke | r | | | | |
| | | | | | | | | With Paid-I | Up Additio | ns Option | | | |
| Year | Guar Cash Value | Cash | n Dividena | ls | Total | Dividend | s | Total | Cash Value | • | Total D | eath Benefi | t |
| | | Illust. | Actual | Diff. | Illust. | Actual | Diff. | Illust. [†] | Actual [†] | Diff. | Illust.† | Actual [†] | Diff. |
| 1990 | 140,593 | 3,645 | 5,828 | 60% | 4,292 | 9,063 | 111% | 169,471 | 199,423 | 18% | 301,351 | 354,611 | 18% |
| 2000 | 173,375 | 4,605 | 8,350 | 81% | 7,121 | 18,407 | 158% | 275,234 | 404,143 | 47% | 394,667 | 579,189 | 47% |
| 2016 | 214,773 | 10,503* | 16,215 | 54% | 18,235 | 43,983* | 141% | 518,346 | 954,458 | 84% | 602,546 | 1,109,576 | 84% |
| IRR 36 Ye | ears | | | | | | | 4.12% | 6.13% | | 4.61% | 6.63% | |
| | | | | | | | | | | | | | |

¹ MM Block refers to eligible participating policies issued by Massachusetts Mutual Life Insurance Company prior to the merger with the former Connecticut Mutual Life Insurance Company in 1996. Policies in this block of business are no longer sold.

⁺ Numbers include termination dividend in 2016 for cash dividends and total dividends. Termination dividend included in Total Cash Value and Total Death Benefit beginning in year 15. 3

Dividend Interest Rate History

The Dividend Interest Rate (DIR) is used to calculate the investment component of policy dividends. The DIR primarily represents the net investment return on the assets supporting the reserves and cash values for a certain block of policies.

The investment component of the dividend for a specific policy is based on the difference between the guaranteed cash value interest rate and the DIR. For example, if the guaranteed cash value interest rate is 4.00% and the Dividend Interest Rate is 7.00%, then the investment component of the dividend will be based on 3.00% (7.00%-4.00%).

The DIR is not the rate of return on the policy. For eligible participating whole life policies, dividends include an investment component, a mortality component and an expense component. Different life insurance companies may quote and apply Dividend Interest Rates differently. For example, some quote their DIR before investment expenses and some, like MassMutual, quote their DIR net of these expenses. As a result, you cannot use the DIR as the sole basis for comparing one whole life policy to another.¹³⁻

Participating Whole Life Policies Issued by Massachusetts Mutual Life Insurance Company Prior to March, 1996

| Year | Dividend Interest Rate | Year | Dividend Interest Rate |
|------|---------------------------|------|---------------------------|
| 1978 | 7.40% | 1998 | 8.40% |
| 1979 | 7.80% | 1999 | 8.40% |
| 1980 | 8.27% | 2000 | 8.30% |
| 1981 | 8.27% | 2001 | 8.30% |
| 1982 | 8.27% ² | 2002 | 8.10% |
| 1983 | 8.27% ² | 2003 | 7.90% |
| 1984 | 11.60% | 2004 | 7.50% |
| 1985 | 12.20% | 2005 | 7.00% |
| 1986 | 12.20% | 2006 | 7.55% |
| 1987 | 12.20% | 2007 | 7.55% |
| 1988 | 11.35% | 2008 | 7.90% |
| 1989 | 11.15% | 2009 | 7.45% |
| 1990 | 10.50% | 2010 | 6.85% |
| 1991 | 10.50% | 2011 | 6.80% |
| 1992 | 9.95% | 2012 | 7.00% |
| 1993 | 9.45% | 2013 | 7.00% |
| 1994 | 9.30% | 2014 | 7.10% |
| 1995 | 9.00% | 2015 | 7.10% |
| 1996 | 8.40% | 2016 | 7.10% |
| 1997 | 8.40% | | |

Participating Whole Life Policies Issued by Massachusetts Mutual Life Insurance Company Since March, 1996

| Year | Dividend Interest Rate | Year | Dividend Interest Rate |
|----------------|---------------------------|--------|---------------------------|
| 1996 | 8.40% | 2007 | 7.50% |
| 1997 | 8.40% | 2008 | 7.90% |
| 1998 | 8.40% | 2009 | 7.60% |
| 1999 | 8.40% | 2010 | 7.00% |
| 2000 | 8.20% | 2011 | 6.85% |
| 2001 | 8.20% | 2012 | 7.00% |
| 2002 | 8.05% | 2013 | 7.00% |
| 2003 | 7.90% | 2014 | 7.10% |
| 2004 | 7.50% 7, 201 | 5 2015 | 7.10% |
| 2005 | Decery.00% | 2016 | 7.10% |
| ts archould or | 7.40% | | |

Participating Whole Life Policies Issued by the Former Connecticut Mutual Life Insurance Company Prior to March, 1996

| Year | Dividend Interest Rate | Year | Dividend Interest Rate |
|------|---------------------------|------|---------------------------|
| 1986 | 11.35% | 2002 | 7.85% |
| 1987 | 11.35% | 2003 | 8.00% |
| 1988 | 10.85% | 2004 | 7.45% |
| 1989 | 9.05% | 2005 | 6.65% |
| 1990 | 9.05% | 2006 | 7.25% |
| 1991 | 9.05% | 2007 | 7.45% |
| 1992 | 9.05% | 2008 | 7.75% |
| 1993 | 8.80% | 2009 | 7.40% |
| 1994 | 8.10% | 2010 | 6.70% |
| 1995 | 8.05% | 2011 | 6.70% |
| 1996 | 7.70% | 2012 | 7.00% |
| 1997 | 7.70% | 2013 | 7.00% |
| 1998 | 7.70% | 2014 | 7.10% |
| 1999 | 7.70% | 2015 | 7.10% |
| 2000 | 7.65% | 2016 | 7.10% |
| 2001 | 7.75% | | |

² Rate applies to Pre-8100 series rate. 8100 series rate was 9.22%.

Eligible participating policies issued by Massachusetts Mutual Life Insurance Company and the former Connecticut Mutual Life Insurance Company prior to March, 1996 are no longer sold. All rates shown assume an Adjustable Loan Rate starting in 1984. The merger between Massachusetts Mutual Life Insurance Company and the former Connecticut Mutual Life Insurance Company was completed in March, 1996.

The Portfolio Average Method

MassMutual's DIR is determined using a portfolio average method that reflects the portfolio earnings on all assets including those supporting eligible participating permanent life insurance blocks. Each portfolio is made up of investments purchased over a number of years, so changes in new money interest rates have a gradual impact on the DIR. The stabilizing effect of the portfolio average method over time is among the reasons MassMutual and many other insurers use this approach to determine their Dividend Interest Rates.

MassMutual's DIR Compared to Common Fixed Income Measures

16.0% 14.0% 12.0% 10.0% amber 7, 2015 cited in Dorrance v. USA. No. 13-16548 archived 8.0% 6.0% 4.0% 2.0% 0.0% 1985 1990 2010 2015 1980 1995 2000 2005 **Dividend Schedule** 1980 2005 2010 2016 1985 1990 1995 2000 MassMutual Dividend Interest Rate¹ 8.27% 12.20% 10.50% 9.00% 8.30% 7.00% 6.85% 7.10% 9.63% 12.71% 9.26% 7.97% 7.05% 5.63% 5.31% 3.85% Moody's Seasoned Aaa Corporate Bond Yield² 10-year Treasury, annual rate³ 9.43% 12.46% 8.49% 7.09% 5.65% 4.27% 3.26% 2.12% One-year Treasury, annual rate⁴ 10.65% 10.91% 8.53% 5.32% 5.08% 1.89% 0.47% 0.27%

This graph shows the relative stability of MassMutual's Dividend Interest Rate compared to three common fixed income measures over an extended period of time. The values plotted in the graph are for each year from 1980-2016.

¹ Refers to the MM-block of business, which comprises policies issued prior to the merger of Massachusetts Mutual Life Insurance Company and the former Connecticut Mutual Life Insurance Company in 1996. Starting with the 2012 dividend schedule, there is a single Dividend Interest Rate for all blocks.

² Moody's yield on seasoned Aaa corporate bonds for all industries, quoted for the year preceding the Dividend Interest Rate shown; for 2016, the rate is the average monthly rate from January to September for the preceding year. Moody's Aaa rates through December 6, 2001, are averages of Aaa utility and Aaa industrial bond rates. As of December 7, 2001, these rates are averages of Aaa industrial bonds only.

³ Market yield on U.S. Treasury securities at 10-year constant maturity, quoted for the year preceding the Dividend Interest Rate shown; for 2016, the rate is the average monthly rate from January to September for the preceding year.

⁴ Market yield on U.S. Treasury securities at 1-year constant maturity, quoted for the year preceding the Dividend Interest Rate shown; for 2016, the rate is the average monthly rate from January to September for the preceding year.

A Long History of Dividends to Policyowners

Strong Performance

Dividends can help policyowners build more value in their participating policies, reinforcing our policy base and our overall financial strength. MassMutual has paid dividends consistently since the 1860s, and the estimated 2015 dividend payout of \$1.7 billion continues that historical trend. The information below shows dividends to policyowners back to 1960.



Over \$27 Billion From 1960 to 2015

| Year | Dividends (000s) | Year | Dividends (000s) | Year | Dividends (000s) | Year | Dividends (000s) |
|------|------------------|------|------------------|------|----------------------|-------------------|------------------|
| 1960 | \$ 41,478 | 1974 | \$148,143 | 1988 | \$ 492,421 | 2002 | \$1,163,238 |
| 1961 | 47,893 | 1975 | 154,541 | 1989 | 488,876 | 2003 | 1,098,500 |
| 1962 | 52,443 | 1976 | 171,760 | 1990 | 527,538 | 2004 | 995,647 |
| 1963 | 55,535 | 1977 | 188,129 | 1991 | 485,497 | 2005 | 1,154,540 |
| 1964 | 59,834 | 1978 | 227,316 | 1992 | 486,608 | 2006 | 1,226,454 |
| 1965 | 63,664 | 1979 | 249,518 | 1993 | 526,928 | 2007 | 1,372,522 |
| 1966 | 75,947 | 1980 | 259,911 | 1994 | 523,496 | 2008 | 1,331,650 |
| 1967 | 85,651 | 1981 | 271,053 | 1995 | 520,539 | 2009 | 1,211,616 |
| 1968 | 91,758 | 1982 | 286,970 | 1996 | 859,897 ³ | 2010 | 1,209,910 |
| 1969 | 101,651 | 1983 | 340,869 | 1997 | 919,514 | 2011 | 1,312,836 |
| 1970 | 106,174 | 1984 | 417,763 | 1998 | 982,823 | 2012 | 1,378,516 |
| 1971 | 112,266 | 1985 | 439,029 | 1999 | 1,030,931 | 2013 | 1,474,794 |
| 1972 | 123,140 | 1986 | 458,715 | 2000 | 1,086,178 | 2014 | 1,553,324 |
| 1973 | \$140,160 | 1987 | \$475,200 | 2001 | \$1,097,026 | 2015 ¹ | \$1,654,000 |

Source: Dividends to Policyholders, Summary of Operations, Massachusetts Mutual Life Insurance Company Annual Statements.

³ 1996 increase reflects, in part, a merger with Connecticut Mutual Life Insurance Company.

⁴ Estimated 2015 statutory incurred dividends. At the time of this printing, year-end results were not yet available.

Appendix – Actual Historical Performance Since 1980 Policy 1 – Hypothetical Policy Issued in 1980*

Convertible Life – MM Block

\$250,000 Policy, Male Age 45, Nonsmoker

| Premium | | \$5,910.00 | | | | | | | | |
|-----------|------------------------|-----------------------|-----------------------|--------------|-----------|-----------------|-----------------------|----------------------|---------------------|--|
| Reserve E | Basis (CSO and percent | i) 1958 CSO | - 4.00 % | | | | | | | |
| | | | | | | With Paid-Up Ad | Jp Additions Option** | | | |
| Year | Guar Cash Value | Cash D | Cash Dividends | | Dividends | Total | Cash Value | Total De | Total Death Benefit | |
| | | Illust. | Actual | Illust. | Actual | Illust.* | Actual | Illust. [†] | Actual | |
| 1981 | \$ 0 | \$ 398 | \$ 398 | \$ 398 | \$ 398 | \$ 398 | \$ 398 | \$251,036 | \$251,036 | |
| 1982 | 4,330 | 560 | 560 | 570 | 570 | 5,310 | 5,310 | 252,479 | 252,479 | |
| 1983 | 9,223 | 715 | 715 | 741 | 741 | 10,973 | 10,973 | 254,297 | 254,297 | |
| 1984 | 14,198 | 875 | 1,453 | 921 | 1,565 | 16,921 | 17,565 | 256,493 | 258,027 | |
| 1985 | 19,253 | 1,030 | 1,793 | 1,102 | 2,072 | 23,158 | 24,790 | 259,045 | 262,826 | |
| 1986 | 24,380 | 1,158 | 2,118 | 1,260 | 2,578 | 29,658 | 32,656 | 261,882 | 268,630 | |
| 1987 | 29,578 | 1,320 | 2,453 | 1,459 | 3,142 | 36,465 | 41,231 | 265,076 | 275,507 | |
| 1988 | 34,838 | 1,478 | 2,595 | 1,660 | 3,539 | 43,579 | 50,357 | 268,611 | 283,042 | |
| 1989 | 40,160 | 1,640 | 2,793 | 1,873 | 3,907 | 51,015 | 60,014 | 272,492 | 291,138 | |
| 1990 | 45,540 | 1,808 | 2,735 | 2,098 | 4,035 | 58,787 | 69,967 | 276,724 | 299,279 | |
| 1991 | 50,885 | 1,968 | 3,120 | 2,322 | 4,726 | 66,806 | 80,687 | 281,288 | 308,567 | |
| 1992 | 56,270 | 2,120 | 2,990 | 2,546 | 4,743 | 75,153, | per 7,914,593 | 286,165 | 317,651 | |
| 1993 | 61,685 | 2,270 | 3,018 | 2,776 | 4,928 | ued on D83,827 | 102,840 | 291,348 | 326,854 | |
| 1994 | 67,123 | 2,438 | 3,295 | 3,032 | 6548,470h | 92,851 | 114,788 | 296,872 | 336,836 | |
| 1995 | 72,578 | 2,608 | 3,500 | NO. 3,301 | 5,848 | 103,205 | 128,227 | 303,709 | 348,202 | |
| 1996 | 78,035 | 2,808 | 3,6051 | 3,611 | 5,976 | 114,096 | 142,081 | 311,092 | 359,692 | |
| 1997 | 83,490 | 29950r | ran 3,890 | 3,921 | 6,589 | 125,526 | 156,994 | 319,005 | 372,293 | |
| 1998 | 88,935 | CILCO 3,178 | 4,405 | 4,238 | 7,495 | 137,493 | 172,696 | 327,439 | 385,896 | |
| 1999 | 94,360 | 3,363 | 4,825 | 4,567 | 8,366 | 148,715 | 189,408 | 335,109 | 400,639 | |
| 2000 | 99,755 | 3,533 | 5,103 | 4,894 | 9,047 | 160,069 | 206,943 | 342,884 | 416,180 | |
| 2001 | 105,105 | 3,703 | 5,333 | 5,233 | 9,872 | 171,812 | 224,849 | 351,027 | 432,126 | |
| 2002 | 110,398 | 3,890 | 5,355 | 5,604 | 10,326 | 183,962 | 243,330 | 359,575 | 448,460 | |
| 2003 | 115,610 | 4,090 | 5,580 | 6,008 | 11,253 | 196,527 | 262,825 | 368,562 | 465,875 | |
| 2004 | 120,728 | 4,300 | 5,123 | 6,442 | 10,943 | 209,521 | 281,501 | 378,019 | 481,940 | |
| 2005 | 125,/38 | 4,538 | 4,640 | 6,929 | 10,517 | 222,980 | 299,787 | 388,010 | 497,105 | |
| 2006 | 130,640 | 4,/65 | 5,785 | /,42/ | 13,145 | 236,917 | 320,/16 | 398,536 | 515,/35 | |
| 2007 | 135,445 | 4,943 | 6,210 | /,881 | 14,338 | 251,304 | 342,905 | 409,520 | 535,/21 | |
| 2008 | 140,165 | 5,085 | 7,038 | 8,302 | 16,626 | 266,125 | 367,475 | 420,907 | 558,525 | |
| 2009 | 144,825 | 5,200 | /,008 | 8,704 | 16,/65 | 281,395 | 392,345 | 432,660 | 581,163 | |
| 2010 | 149,435 | 5,298 | 6,688 | 9,096 | 16,0/9 | 297,121 | 416,/00 | 444,/5/ | 602,547 | |
| 2011 | 153,993 | 5,363 | 6,558 | 9,456 | 16,/10 | 313,268 | 441,835 | 457,146 | 624,442 | |
| 2012 | 158,485 | 5,413 | 6,868 | 9,805 | 18,259 | 329,806 | 468,638 | 469,810 | 648,024 | |
| 2013 | 162,885 | 5,463 | 7,028 | 10,165 | 19,297 | 346,701 | 496,559 | 482,757 | 672,603 | |
| 2014 | 167,160 | 5,520 | 7,250 | 10,547 | 20,655 | 363,923 | 525,851 | 496,012 | 698,562 | |
| 2015 | 1/1,283 | 5,578 | /,423 | 10,942 | 21,826 | 381,439 | 556,273 | 509,591 | /25,648 | |
| 2016 | \$1/5,234 | \$10,630 ⁺ | \$16,333* | \$16,346 | \$ 31,810 | \$399,232 | \$ 587,854 | \$523,502 | \$ /53,921 | |
| Ierminat | tion Dividend | \$ 5,000 | \$ 8,750 | \$ 5,000 | \$ 8,750 | | | | | |
| IRR 36 Ye | ears | | | | | 3.17% | 4.95% | 4.43% | 6.04% | |

* Assumes policy originally issued with fixed loan rate updated to adjustable loan rate in 1983.

**Assumes no paid-up additions are surrendered.

⁺ Numbers include termination dividend in 2016 for cash dividends and total dividends. Termination dividend included in Total Cash Value and Total Death Benefit beginning in year 15.

Appendix – Actual Historical Performance Since 1980 Policy 2 – Hypothetical Policy Issued in 1980*

Convertible Life – MM Block \$250,000 Policy, Female Age 55, Nonsmoker

| Premium Reserve Ba | asis (CSO and percent) | \$8,632.50) 1958 CSO - | - 4.00% | | | | | | | | | |
|-----------------------|------------------------|--|-----------|----------------------------------|---------------------|----------------------|---------------------------|-----------------------|-----------|--|--|--|
| | · · · | | | | | With Paid-Up Ad | aid-Up Additions Option** | | | | | |
| Year | Guar Cash Value | Cash D | ividends | Total Dividends Total Cash Value | | | Total De | eath Benefit | | | | |
| | | Illust. | Actual | Illust. | Actual | Illust. [†] | Actual | Illust. [†] | Actual | | | |
| 1981 | \$ 255 | \$ 1,755 | \$ 1,755 | \$ 1,755 | \$ 1,755 | \$ 2,010 | \$ 2,010 | \$253,449 | \$253,449 | | | |
| 1982 | 7,008 | 1,870 | 1,870 | 1,917 | 1,917 | 10,725 | 10,725 | 257,120 | 257,120 | | | |
| 1983 | 13,800 | 1,983 | 1,983 | 2,082 | 2,082 | 19,695 | 19,695 | 261,008 | 261,008 | | | |
| 1984 | 20,623 | 2,093 | 3,050 | 2,251 | 3,434 | 28,916 | 30,099 | 265,109 | 267,264 | | | |
| 1985 | 27,463 | 2,208 | 3,425 | 2,431 | 4,226 | 38,390 | 41,398 | 269,432 | 274,779 | | | |
| 1986 | 34,308 | 2,395 | 3,863 | 2,691 | 5,044 | 48,188 | 53,620 | 274,105 | 283,538 | | | |
| 1987 | 41,153 | 2,585 | 4,305 | 2,963 | 5,945 | 58,320 | 66,862 | 279,133 | 293,627 | | | |
| 1988 | 47,980 | 2,775 | 4,458 | 3,246 | 6,591 | 68,785 | 80,866 | 284,518 | 304,563 | | | |
| 1989 | 54,785 | 2,955 | 4,700 | 3,527 | 7,132 | 79,578 | 95,534 | 290,242 | 316,140 | | | |
| 1990 | 61,550 | 3,133 | 4,575 | 3,816 | 7,334 | 90,695 | 110,512 | 296,306 | 327,792 | | | |
| 1991 | 68,263 | 3,315 | 5,008 | 4,121 | 8,372 | 102,140 | 126,623 | 302,719 | 340,820 | | | |
| 1992 | 74,898 | 3,505 | 4,923 | 4,446 | 8,589 | 113,909 | per 143,032 | 309,500 | 353,920 | | | |
| 1993 | 81,438 | 3,713 | 5,003 | 4,804 | 9,014 | ued on 126,018 | 159,923 | 316,686 | 367,403 | | | |
| 1994 | 87,858 | 3,933 | 5,450 | 5,190 | 548,082h | 138,470 | 177,907 | 324,306 | 382,204 | | | |
| 1995 | 94,143 | 4,173 | 5,688 | NO. 5,617 | 10,736 | 152,546 | 197,817 | 333,660 | 398,941 | | | |
| 1996 | 100,290 | 4,423 | 5,733 | 6,071 | 10,878 | 167,181 | 218,048 | 343,685 | 415,777 | | | |
| 1997 | 106,315 | ited in 1,0051 | 5,900 | 6,468 | 11,708 | 182,330 | 239,614 | 354,278 | 433,997 | | | |
| 1998 | 112,235 | 4,760 | 6,953 | 6,843 | 13,528 | 197,004 | 262,676 | 364,411 | 454,077 | | | |
| 1999 | 118,080 | 4,890 | 7,515 | 7,201 | 14,987 | 211,307 | 287,307 | 374,134 | 475,838 | | | |
| 2000 | 123,863 | 4,995 | 7,833 | 7,542 | 16,098 | 225,986 | 312,794 | 384,164 | 498,373 | | | |
| 2001 | 129,580 | 5,070 | 8,263 | 7,856 | 17,486 | 241,013 | 338,693 | 394,458 | 521,284 | | | |
| 2002 | 135,215 | 5,130 | 8,450 | 8,160 | 18,258 | 256,353 | 365,495 | 404,997 | 544,865 | | | |
| 2003 | 140,735 | 5,193 | 8,938 | 8,476 | 19,790 | 271,977 | 393,910 | 415,793 | 570,071 | | | |
| 2004 | 146,095 | 5,265 | 8,605 | 8,814 | 19,495 | 287,845 | 422,046 | 426,870 | 594,573 | | | |
| 2005 | 151,265 | 5,338 | 8,405 | 9,163 | 19,168 | 303,926 | 449,799 | 438,241 | 618,360 | | | |
| 2006 | 156,233 | 5,403 | 9,230 | 9,516 | 22,273 | 320,200 | 480,553 | 449,909 | 645,669 | | | |
| 2007 | 160,993 | 5,463 | 9,455 | 9,875 | 23,663 | 336,660 | 512,598 | 461,880 | 6/4,352 | | | |
| 2008 | 165,560 | 5,510 | 9,660 | 10,227 | 25,819 | 353,312 | 546,716 | 4/4,143 | 705,312 | | | |
| 2009 | 169,958 | 5,553 | 9,140 | 10,584 | 25,069 | 370,189 | 580,045 | 486,704 | 735,064 | | | |
| 2010 | 174,213 | 5,590 | 8,210 | 10,947 | 22,947 | 387,331 | 611,234 | 499,569 | 762,030 | | | |
| 2011 | 178,348 | 5,623 | 7,833 | 11,310 | 23,414 | 404,770 | 642,874 | 512,741 | /89,285 | | | |
| 2012 | 182,390 | 5,698 | 8,318 | 11,/34 | 25,846 | 422,595 | 6/6,981 | 526,274 | 819,094 | | | |
| 2013 | 186,378 | 5,763 | 8,258 | 12,148 | 20,087 | 440,858 | 712,049 | 540,160 | 849,598 | | | |
| 2014 | 190,343 | 5,823 | δ,130 | 12,569 | 27,007 | 459,617 | 748,310 | 554,400 | 012,042 | | | |
| 2015 | 194,320 | 5,8/5 ¢10,015t | 1,9/3 | 12,989 ¢10,007t | 20,30/ ¢ 20,207+ | 4/8,924 ¢ 400 020 | / 85,54U | 508,986 \$ 502,000 | \$12,843 | | | |
| ZUIO | 3 190,343 | φ Γ 000 | \$10,700° | \$ 18,397' | Φ 0.7F0 | ֆ 498,828 | \$ 824,273 | \$ 283,898 | ֆ 945,720 | | | |
| | | \$ 5,000 | \$ 0,/50 | \$ 5,000 | \$ 8,/50 | 2 120/ | 1 760/ | 2 100/ | E 200/ | | | |
| 1111 30 188 | 10 | | | | | 2.4270 | 4.70/0 | 0.1070 | 0,0070 | | | |

Assumes policy originally issued with fixed loan rate updated to adjustable loan rate in 1983. *

**Assumes no paid-up additions are surrendered.

Numbers include termination dividend in 2016 for cash dividends and total dividends. Termination dividend included in Total Cash Value and Total Death Benefit t beginning in year 15.

Appendix – Actual Historical Performance Since 1980 Policy 3 – Hypothetical Policy Issued in 1980*

Life Paid-up at 65 Whole Life – MM Block \$250,000 Policy<u>, Male Age 35, Nonsmoker</u>

| Premium | | \$4,427.50 | | | | | | | | |
|------------|------------------------|----------------------|------------------------|-----------|-----------|----------------------|---------------------|-----------|---------------------|--|
| Reserve Ba | isis (CSO and percent) | 1958 CSO - | - 4.00% | | | | | | | |
| | | | | | | With Paid-Up Ad | ditions Optio | n** | | |
| Year | Guar Cash Value | Cash D | ividends | Total D | Dividends | Total | Cash Value | Total De | Total Death Benefit | |
| | | Illust. | Actual | Illust. | Actual | Illust. ⁺ | Actual [*] | lllust.⁺ | Actual [*] | |
| 1981 | \$ 0 | \$ 270 | \$ 270 | \$ 270 | \$ 270 | \$ 270 | \$ 270 | \$250,965 | \$250,965 | |
| 1982 | 2,823 | 355 | 355 | 362 | 362 | 3,463 | 3,463 | 252,218 | 252,218 | |
| 1983 | 6,793 | 448 | 448 | 464 | 464 | 7,919 | 7,919 | 253,773 | 253,773 | |
| 1984 | 10,880 | 548 | 955 | 577 | 1,026 | 12,620 | 13,069 | 255,643 | 257,102 | |
| 1985 | 15,088 | 650 | 1,205 | 695 | 1,384 | 17,579 | 18,733 | 257,827 | 261,450 | |
| 1986 | 19,408 | 770 | 1,475 | 835 | 1,774 | 22,814 | 24,944 | 260,366 | 266,847 | |
| 1987 | 23,848 | 893 | 1,753 | 981 | 2,207 | 28,345 | 31,769 | 263,259 | 273,353 | |
| 1988 | 28,405 | 1,028 | 1,985 | 1,145 | 2,615 | 34,190 | 39,192 | 266,530 | 280,826 | |
| 1989 | 33,083 | 1,155 | 2,188 | 1,306 | 2,945 | 40,355 | 47,154 | 270,148 | 288,985 | |
| 1990 | 37,885 | 1,290 | 2,173 | 1,480 | 3,071 | 46,865 | 55,467 | 274,125 | 297,236 | |
| 1991 | 42,660 | 1,425 | 2,425 | 1,660 | 3,550 | 53,577 | 64,334 | 278,452 | 306,487 | |
| 1992 | 47,553 | 1,568 | 2,230 | 1,854 | 3,461 | 60,657 | per 773,349 | 283,141 | 315,241 | |
| 1993 | 52,560 | 1,718 | 2,213 | 2,063 | 3,553 | und on D68,122 | 82,688 | 288,205 | 323,964 | |
| 1994 | 57,685 | 1,865 | 2,360 | 2,275 | 548,890h | 75,985 | 92,599 | 293,629 | 333,239 | |
| 1995 | 62,923 | 2,015 | 2,498 | NO. 2,497 | 4,138 | 84,962 | 103,705 | 300,118 | 343,528 | |
| 1996 | 68,278 | 2,153 | 2,513 | 2,713 | 4,157 | 94,467 | 115,196 | 307,045 | 353,706 | |
| 1997 | 73,745 | ind inf, Barr | 2,735 | 2,982 | 4,614 | 104,555 | 127,469 | 314,508 | 364,706 | |
| 1998 | 79,330 | CITEC 2,500 | 2,988 | 3,253 | 5,139 | 115,244 | 140,437 | 322,491 | 376,454 | |
| 1999 | 85,038 | 2,673 | 3,260 | 3,536 | 5,713 | 126,560 | 154,261 | 330,998 | 389,103 | |
| 2000 | 90,868 | 2,848 | 3,435 | 3,833 | 6,155 | 137,519 | 168,819 | 339,030 | 402,328 | |
| 2001 | 96,825 | 3,008 | 3,738 | 4,123 | 6,804 | 148,707 | 183,929 | 347,131 | 416,103 | |
| 2002 | 102,915 | 3,165 | 3,830 | 4,421 | 7,113 | 160,441 | 199,670 | 355,598 | 430,128 | |
| 2003 | 109,138 | 3,320 | 4,070 | 4,726 | 7,751 | 172,734 | 216,380 | 364,424 | 445,008 | |
| 2004 | 115,503 | 3,485 | 3,705 | 5,059 | 7,354 | 185,626 | 233,039 | 373,640 | 458,809 | |
| 2005 | 122,018 | 3,653 | 3,250 | 5,407 | 6,748 | 199,144 | 249,427 | 383,255 | 471,212 | |
| 2006 | 128,693 | 3,833 | 4,115 | 5,786 | 8,586 | 213,331 | 267,978 | 393,302 | 486,528 | |
| 2007 | 135,545 | 4,010 | 4,390 | 6,180 | 9,324 | 228,225 | 287,645 | 403,789 | 502,754 | |
| 2008 | 142,588 | 4,188 | 5,118 | 6,590 | 11,024 | 243,856 | 309,405 | 414,724 | 521,447 | |
| 2009 | 149,848 | 4,353 | 4,815 | 6,999 | 10,696 | 260,253 | 331,290 | 426,084 | 539,213 | |
| 2010 | 157,350 | 4,515 | 4,203 | 7,422 | 9,677 | 277,452 | 352,465 | 437,876 | 554,849 | |
| 2011 | 160,650 | 4,118 | 4,363 | 7,301 | 10,418 | 290,468 | 370,091 | 449,238 | 571,061 | |
| 2012 | 163,913 | 4,223 | 4,898 | 7,690 | 12,112 | 303,954 | 389,541 | 460,967 | 589,534 | |
| 2013 | 167,128 | 4,340 | 5,265 | 8,117 | 13,412 | 317,936 | 410,422 | 473,109 | 609,597 | |
| 2014 | 170,285 | 4,465 | 5,788 | 8,579 | 15,176 | 332,426 | 433,187 | 485,704 | 631,878 | |
| 2015 | 173,375 | 4,605 | 6,193 | 9,090 | 16,834 | 347,458 | 457,723 | 498,811 | 656,152 | |
| 2016 | \$176,398 | \$9,743 ⁺ | \$ 15,130 ⁺ | \$14,621* | \$26,782* | \$363,049 | \$483,582 | \$512,446 | \$681,708 | |
| Terminatio | on Dividend | \$5,000 | \$ 8,750 | \$ 5,000 | \$ 8,750 | | | | | |
| IRR 36 Yea | ars | | | | | 4.45% | 5.65% | 5.89% | 7.06% | |

* Assumes policy originally issued with fixed loan rate updated to adjustable loan rate in 1983.

**Assumes no paid-up additions are surrendered.

⁺ Numbers include termination dividend in 2016 for cash dividends and total dividends. Termination dividend in Total Cash Value and Total Death Benefit beginning in year 15.

Appendix – Actual Historical Performance Since 1980 Policy 4 – Hypothetical Policy Issued in 1980*

Life Paid-up at 65 Whole Life – MM Block \$250,000 Policy, Female Age 35, Nonsmoker

| Premium | | \$4,077.50 | | | | | | | | | |
|------------|-----------------------|--------------------------------|----------|------------------------|---------------------|-----------|-----------------|---------------------|------------|----------------------------|--|
| Reserve Ba | sis (CSO and percent) | 1958 CSO - | - 4.00% | | | | | | | | |
| | | | | | | | With Paid-Up Ad | ditions Optio | n** | | |
| Year | Guar Cash Value | Guar Cash Value Cash Dividends | | Total Dividends | | | Total | Cash Value | Total De | Total Death Benefit | |
| | | Illust. | Actual | | Illust. | Actual | Illust.* | Actual [†] | Illust.⁺ | Actual [†] | |
| 1981 | \$ 0 | \$ 270 | \$ 270 | \$ | 270 | \$ 270 | \$ 270 | \$ 270 | \$ 250,965 | \$250,965 | |
| 1982 | 2,823 | 355 | 355 | | 362 | 362 | 3,463 | 3,463 | 252,218 | 252,218 | |
| 1983 | 6,793 | 448 | 448 | | 464 | 464 | 7,919 | 7,919 | 253,773 | 253,773 | |
| 1984 | 10,880 | 548 | 955 | | 577 | 1,026 | 12,620 | 13,069 | 255,643 | 257,102 | |
| 1985 | 15,088 | 650 | 1,205 | | 695 | 1,384 | 17,579 | 18,733 | 257,827 | 261,450 | |
| 1986 | 19,408 | 770 | 1,475 | | 835 | 1,774 | 22,814 | 24,944 | 260,366 | 266,847 | |
| 1987 | 23,848 | 893 | 1,753 | | 981 | 2,207 | 28,345 | 31,769 | 263,259 | 273,353 | |
| 1988 | 28,405 | 1,028 | 1,985 | | 1,145 | 2,615 | 34,190 | 39,192 | 266,530 | 280,826 | |
| 1989 | 33,083 | 1,155 | 2,188 | | 1,306 | 2,945 | 40,355 | 47,154 | 270,148 | 288,985 | |
| 1990 | 37,885 | 1,290 | 2,173 | | 1,480 | 3,071 | 46,865 | 55,467 | 274,125 | 297,236 | |
| 1991 | 42,660 | 1,425 | 2,425 | | 1,660 | 3,550 | 53,577 | 64,334 | 278,452 | 306,487 | |
| 1992 | 47,553 | 1,568 | 2,230 | | 1,854 | 3,461 | 60,657 | per 773,349 | 283,141 | 315,241 | |
| 1993 | 52,560 | 1,718 | 2,213 | | 2,063 | 3,553 | und on D68, 122 | 82,688 | 288,205 | 323,964 | |
| 1994 | 57,685 | 1,865 | 2,360 | | 2,275 | 548,890 | 75,985 | 92,599 | 293,629 | 333,239 | |
| 1995 | 62,923 | 2,015 | 2,498 | N | 2. ^{497 (} | 4,138 | 84,962 | 103,705 | 300,118 | 343,528 | |
| 1996 | 68,278 | 2,153 | 2,513 | JSA, ·· | 2,713 | 4,157 | 94,467 | 115,196 | 307,045 | 353,706 | |
| 1997 | 73,745 | ind in 2.030 | 2,735 | | 2,982 | 4,614 | 104,555 | 127,469 | 314,508 | 364,706 | |
| 1998 | 79,330 | CITEC 2,500 | 2,988 | | 3,253 | 5,139 | 115,244 | 140,437 | 322,491 | 376,454 | |
| 1999 | 85,038 | 2,673 | 3,260 | | 3,536 | 5,713 | 126,560 | 154,261 | 330,998 | 389,103 | |
| 2000 | 90,868 | 2,848 | 3,435 | | 3,833 | 6,155 | 137,519 | 168,819 | 339,030 | 402,328 | |
| 2001 | 96,825 | 3,008 | 3,738 | | 4,123 | 6,804 | 148,707 | 183,929 | 347,131 | 416,103 | |
| 2002 | 102,915 | 3,165 | 3,830 | | 4,421 | 7,113 | 160,441 | 199,670 | 355,598 | 430,128 | |
| 2003 | 109,138 | 3,320 | 4,070 | | 4,726 | 7,751 | 172,734 | 216,380 | 364,424 | 445,008 | |
| 2004 | 115,503 | 3,485 | 3,705 | | 5,059 | 7,354 | 185,626 | 233,039 | 373,640 | 458,809 | |
| 2005 | 122,018 | 3,653 | 3,250 | | 5,407 | 6,748 | 199,144 | 249,427 | 383,255 | 471,212 | |
| 2006 | 128,693 | 3,833 | 4,115 | | 5,786 | 8,586 | 213,331 | 267,978 | 393,302 | 486,528 | |
| 2007 | 135,545 | 4,010 | 4,390 | | 6,180 | 9,324 | 228,225 | 287,645 | 403,789 | 502,754 | |
| 2008 | 142,588 | 4,188 | 5,118 | | 6,590 | 11,024 | 243,856 | 309,405 | 414,/24 | 521,447 | |
| 2009 | 149,848 | 4,353 | 4,815 | | 6,999 | 10,696 | 260,253 | 331,290 | 426,084 | 539,213 | |
| 2010 | 157,350 | 4,515 | 4,203 | | 7,422 | 9,677 | 277,452 | 352,465 | 437,876 | 554,849 | |
| 2011 | 160,650 | 4,118 | 4,363 | | 7,301 | 10,418 | 290,468 | 370,091 | 449,238 | 5/1,061 | |
| 2012 | 163,913 | 4,223 | 4,898 | | 7,690 | 12,112 | 303,954 | 389,541 | 460,967 | 589,534 | |
| 2013 | 167,128 | 4,340 | 5,265 | | 8,117 | 13,412 | 317,936 | 410,422 | 4/3,109 | 609,597 | |
| 2014 | 170,285 | 4,465 | 5,788 | | 8,5/9 | 15,176 | 332,426 | 433,18/ | 485,704 | 631,878 | |
| 2015 | 1/3,3/5 | 4,605 | 6,193 | | 9,090 | 16,834 | 347,458 | 457,723 | 498,811 | 656,152 | |
| 2016 | \$176,398 | \$ 9,743 | \$15,130 | \$ | 14,621 | \$26,782* | \$363,049 | \$483,582 | \$512,466 | \$681,708 | |
| Terminatio | on Dividend | \$ 5,000 | \$ 8,750 | \$ | 5,000 | \$ 8,750 | 1.000/ | F 000/ | 0.0001 | 7 400/ | |
| IKK 36 Yea | rs | | | | | | 4.80% | 5.99% | 6.23% | 1.40% | |

* Assumes policy originally issued with fixed loan rate updated to adjustable loan rate in 1983.

**Assumes no paid-up additions are surrendered.

⁺ Numbers include termination dividend in 2016 for cash dividends and total dividends. Termination dividend in Total Cash Value and Total Death Benefit beginning in year 15.

Appendix – Actual Historical Performance Since 1980 Policy 5 – Hypothetical Policy Issued in 1980*

10 Payment Whole Life – MM Block \$250,000 Policy, Male Age 50, Nonsmoker

| Premium | | \$14,445.00 | | | | | | | |
|------------|------------------------|-------------|----------|------------|-----------|-----------------|---------------------|-----------|---------------------|
| Reserve Ba | isis (CSO and percent) | 1958 CSO - | 4.00% | | | | | | |
| | | | | | | With Paid-Up Ad | ditions Optio | n** | |
| Year | Guar Cash Value | Cash Di | vidends | Total I | Dividends | Total | Cash Value | Total De | eath Benefit |
| | | Illust. | Actual | Illust. | Actual | Illust.⁺ | Actual [*] | Illust.⁺ | Actual [†] |
| 1981 | \$ 5,510 | \$ 1,365 | \$ 1,365 | \$ 1,365 | \$ 1,365 | \$ 6,875 | \$ 6,875 | \$253,073 | \$ 253,073 |
| 1982 | 18,408 | 1,548 | 1,548 | 1,584 | 1,584 | 21,395 | 21,395 | 256,539 | 256,539 |
| 1983 | 31,748 | 1,728 | 1,728 | 1,807 | 1,807 | 36,625 | 36,625 | 260,386 | 260,386 |
| 1984 | 45,558 | 1,910 | 3,633 | 2,040 | 3,948 | 52,610 | 54,518 | 264,613 | 268,566 |
| 1985 | 59,870 | 2,098 | 4,353 | 2,286 | 5,104 | 69,399 | 74,177 | 269,225 | 278,863 |
| 1986 | 74,728 | 2,405 | 5,195 | 2,660 | 6,397 | 87,170 | 95,812 | 274,452 | 291,434 |
| 1987 | 90,170 | 2,708 | 6,055 | 3,041 | 7,829 | 105,978 | 119,633 | 280,276 | 306,428 |
| 1988 | 106,253 | 3,013 | 6,055 | 3,436 | 8,471 | 125,901 | 144,940 | 286,692 | 322,246 |
| 1989 | 123,035 | 3,330 | 6,100 | 3,858 | 8,920 | 147,034 | 171,612 | 293,720 | 338,496 |
| 1990 | 140,593 | 3,645 | 5,828 | 4,292 | 9,063 | 169,471 | 199,423 | 301,351 | 354,611 |
| 1991 | 143,958 | 3,598 | 9,043 | 4,380 | 12,974 | 177,907 | 217,170 | 308,957 | 377,142 |
| 1992 | 147,323 | 3,708 | 8,283 | 4,633 | 12,678 | 186,698 | per 234,924 | 316,818 | 398,656 |
| 1993 | 150,680 | 3,815 | 7,770 | 4,894 | 12,609 | und on D95,847 | 252,887 | 324,938 | 419,575 |
| 1994 | 154,025 | 3,918 | 7,058 | 5,159 | 548,600h | 205,354 | 271,110 | 333,312 | 440,042 |
| 1995 | 157,350 | 4,015 | 6,650 | No. 5,430 | 12,566 | 216,330 | 290,641 | 343,053 | 461,120 |
| 1996 | 160,650 | 4,118 | 5,988 | JSA, 5,718 | 11,987 | 227,831 | 309,970 | 353,221 | 481,044 |
| 1997 | 163,913 | in 4.223r | 6,248 | 6,022 | 13,062 | 239,860 | 330,934 | 363,834 | 502,621 |
| 1998 | 167,128 | cited 4,340 | 6,923 | 6,358 | 14,735 | 252,038 | 353,426 | 374,535 | 526,008 |
| 1999 | 170,285 | 4,465 | 7,338 | 6,719 | 16,311 | 263,424 | 377,660 | 384,399 | 551,303 |
| 2000 | 173,375 | 4,605 | 8,350 | 7,121 | 18,407 | 275,234 | 404,143 | 394,667 | 579,189 |
| 2001 | 176,398 | 4,743 | 8,565 | 7,537 | 19,804 | 287,482 | 431,524 | 405,349 | 607,929 |
| 2002 | 179,360 | 4,853 | 8,370 | 7,930 | 20,319 | 300,157 | 458,946 | 416,403 | 636,253 |
| 2003 | 182,270 | 4,935 | 8,543 | 8,295 | 21,721 | 313,241 | 487,971 | 427,780 | 666,046 |
| 2004 | 185,143 | 5,008 | 7,865 | 8,657 | 20,984 | 326,755 | 516,508 | 439,470 | 694,381 |
| 2005 | 187,985 | 5,068 | 7,160 | 9,011 | 19,963 | 340,707 | 544,266 | 451,454 | 720,930 |
| 2006 | 190,798 | 5,113 | 8,318 | 9,350 | 24,078 | 355,079 | 576,356 | 463,705 | 752,479 |
| 2007 | 193,568 | 5,148 | 8,430 | 9,683 | 25,488 | 369,844 | 610,085 | 4/6,211 | /85,398 |
| 2008 | 196,280 | 5,183 | 9,100 | 10,025 | 28,/12 | 384,982 | 647,224 | 488,979 | 821,968 |
| 2009 | 198,915 | 5,223 | 8,440 | 10,386 | 27,927 | 400,469 | 683,723 | 502,033 | 857,068 |
| 2010 | 201,458 | 5,268 | 7,433 | 10,766 | 25,729 | 416,291 | /18,0/9 | 515,394 | 888,997 |
| 2011 | 203,900 | 5,310 | 6,725 | 11,156 | 25,935 | 432,433 | /52,614 | 529,072 | 920,795 |
| 2012 | 206,240 | 5,353 | 7,035 | 11,55/ | 28,432 | 448,896 | /89,583 | 543,082 | 955,260 |
| 2013 | 208,485 | 5,390 | 7,148 | 11,958 | 30,007 | 465,686 | 828,090 | 557,421 | 991,242 |
| 2014 | 210,648 | 5,428 | 7,338 | 12,371 | 31,957 | 482,835 | 868,545 | 5/2,103 | 1,029,169 |
| 2015 | 212,740 | 5,465 | 7,383 | 12,/96 | 33,523 | 500,379 | 910,609 | 587,141 | 1,068,563 |
| 2016 | \$214,773 | \$10,503* | \$16,215 | \$18,235 | \$43,983 | \$518,346 | \$ 954,458 | \$602,546 | \$1,109,576 |
| Terminatio | on Dividend | \$ 5,000 | \$ 8,750 | \$ 5,000 | \$ 8,750 | | 0.400 | | 0.000 |
| IKK 36 Yea | ars | | | | | 4.12% | 6.13% | 4.61% | 6.63% |

* Assumes policy originally issued with fixed loan rate updated to adjustable loan rate in 1983.

**Assumes no paid-up additions are surrendered.

⁺ Numbers include termination dividend in 2016 for cash dividends and total dividends. Termination dividend in Total Cash Value and Total Death Benefit beginning in year 15.

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