## $\int$ ASSETS

Assets held by life insurers back the companies' life, annuity, and health liabilities. Accumulating these assets-via the collection of premiums from policyholders and earnings on investments-provides the U.S. economy with an important source of investment capital. Life insurers held $\$ 6.8$ trillion in assets in 2016 (Table 2.1). Assets of U.S. life insurers rose 4.5 percent during 2016 (Table 2.2).

Financial instruments comprise most life insurance company assets and can generally be classified into:

- Bonds, both corporate and government
- Stocks
- Mortgage and real estate holdings
- Policy loans

A life insurer divides its assets between two accounts that differ largely in the nature of the liabilities or obligations for which the assets are being held and invested. The general account supports contractual obligations for guaranteed, fixed-dollar benefit payments, such as life insurance policies. The separate account supports liabilities associated with investment risk pass-through products or lines of business, such as variable annuities, variable life insurance, and pension products.

State laws allow assets in separate accounts to be invested without regard to the restrictions usually placed on the general account. A separate account portfolio might comprise only common stocks or bonds or mortgages, or some combination of these and other investments. Separate account assets totaled $\$ 2.5$ trillion at the end of 2016-up 3 percent from the previous year (Table 2.2). General account assets amounted to $\$ 4.3$ trillion in 2016, up 5 percent from 2015.

## BOND HOLDINGS AND ACQUISITIONS

Bonds are publicly traded debt securities. Often referred to as fixed-income securities, bonds generally offer low risk and a greater certainty of rates of return. Not only does the borrower (seller of the bond) agree to pay a fixed amount of interest periodically and repay a fixed amount of principal at maturity, but the obligation to make payments on the bond takes precedence over other claims of lenders and stockholders.

At year-end 2016, 49 percent of life insurer assets were held in bonds. Total bond holdings of both general and separate accounts amounted to $\$ 3.3$ trillion, up $\$ 146$ billion from 2015 (Tables 2.1-2.2). Holdings of bonds in separate accounts increased 4 percent in 2016 to $\$ 383$ billion. Bond holdings in general accounts increased to $\$ 2.96$ trillion (Table 2.2).

Bonds are issued by a variety of borrowing organizations, including domestic and foreign corporations, the U.S. Treasury, various U.S. government agencies, and state, local, and foreign governments. Long-term U.S. Treasury securities in the general account totaled $\$ 147$ billion, U.S. government obligations $\$ 50$ billion, and foreign government bonds $\$ 87$ billion (Table 2.3). The largest portion of long-term bonds was in unaffiliated securities, with both U.S. and foreign investments totaling $\$ 2$ trillion, or two-thirds of all long-term general account bonds ( $68 \%$ ). Long-term bonds issued by U.S. states, territories, and political subdivisions came to $\$ 48$ billion, while bonds issued for revenue, assessment, and industrial development totaled $\$ 114$ billion.

## Types of Bonds

## Corporate Bonds

Life insurers are significant investors in the corporate bond market, having been the largest institutional holder of corporate bonds issued in U.S. markets since the 1930s. Private or direct placements-where the financial institution negotiates directly with the corporation over the terms of the offering-account for a sizable share of life insurer investments in corporate bonds. Life insurance companies are the major lenders in the direct placement market.

Corporate debt issues in 2016 represented the largest component of life insurer assets at 33 percent (Table 2.1). Corporate debt issues totaled $\$ 2.3$ trillion by year's end (Table 2.2). These investments have generally increased steadily for many years and have grown at a 1.8 percent annual rate in the last decade.

## Government Bonds

Bonds of the U.S. government include U.S. Treasury securities and others issued by federal agencies. Government securities rose to $\$ 522$ billion at the end of 2016, up $\$ 26$ billion from the previous year (Tables 2.1-2.2). These holdings include U.S. Treasury and federal agency guaranteed obligations, special revenue, and other issues of the 50 states, District of Columbia, Puerto Rico, and U.S. territories and possessions and their political subdivisions.

The vast majority of long-term securities were invested in U.S. government securities ( $\$ 428$ billion) as opposed to those of foreign governments and international agencies ( $\$ 94$ billion), such as the International Bank for Reconstruction and Development (Table 2.1).

## Characteristics of Bonds

## Maturity

Bonds have limited lives and expire on a given date, called the issue's maturity date. Thirty percent of general account bonds held at year-end 2016 had a maturity between five and 10 years. Another 25 percent matured between one and five years, 21 percent had a maturity over 20 years, 16 percent matured between 10 and 20 years, and 8 percent had a maturity of one year or less (Table 2.4).

At the time of purchase, 39 percent of bonds had a maturity date of 20 years or more, while 33 percent had a maturity date of 10 to 20 years (Table 2.5). Bonds with maturity dates of five to 10 years ( $24 \%$ ), and less than five years ( $4 \%$ ) made up the remainder.

## Quality

In purchasing a bond, investors examine its quality. The higher the quality of the bond, the lower the risk, and the higher the degree of assurance that investors will get their money back at maturity. Consequently, high-quality bonds are ideal for long-term capital accumulation.

Bond holdings can be categorized among six quality classes established by the National Association of Insurance Commissioners. At year-end 2016, 94 percent of total general account bonds were investment grade, Classes 1 and 2 (Table 2.6). The percentage of total bonds in or near default (Class 6 ) was 0.1 percent.

Of the $\$ 3$ trillion in general account bonds held by insurance companies in 2016, \$2.1 trillion was invested in publicly traded bonds and $\$ 904$ billion in privately traded bonds (Table 2.6). Ninety-six percent of the publicly traded bonds were investment grade (Classes 1 and 2) compared with 90 percent of the privately traded bonds. Of the publicly traded bonds, 0.04 percent were in or near default (Class 6), compared with 0.3 percent of the privately traded bonds.

## STOCK HOLDINGS AND ACQUISITIONS

Life insurers' changing portfolios reflect long-term shifts in investment demand. Since the early 1990s, the share of assets held in stocks has been increasing. The average annual growth in equity holdings was 3 percent between 2006 and 2016 (Table 2.2).

Historically, stocks had been a small percentage of total assets for reasons rooted in both the investment philosophy of the industry and the laws regulating life insurance. Stocks had not been heavily used as a major investment medium for funds backing life insurance policies because of the policies' contractual guarantees for specified dollar amounts.

Part of the investment shift is due to changes in the relative yields of various investment types. Other factors are the introduction of variable life insurance and the growth in funding pension plans with equity securities of life insurers and variable annuities. State laws generally permit certain assets of these and other plans to be maintained in an account separate from a company's other assets, with up to 100 percent invested in stocks or other equities.

Life insurer holdings of corporate stock rose 3 percent between 2015 and 2016 to $\$ 2.1$ trillion, accounting for 30 percent of total assets. At year-end 2016, $\$ 1.95$ trillion, or 95 percent, of stock held by life insurance companies was in separate accounts (Table 2.1-2.2).

Common stock accounted for $\$ 2$ trillion, or 99 percent, of all stock held by life insurers in 2016 (Table 2.1). Holdings of common stock increased 3 percent in 2016, while there was a 1 percent increase in preferred-stock holdings (Tables 2.1-2.2).

## MORTGAGES

Mortgages generally are considered riskier fixed-income investments than bonds. Over the past few decades, life insurers have slightly reduced the relative size of their mortgage portfolios in favor of other investments, including mortgage-backed securities (MBS). In 2016,
mortgages increased 8 percent to $\$ 472$ billion and accounting for 7 percent of combined account assets (Tables 2.1-2.2).

Properties underlying life insurer holdings of nonfarm, nonresidential mortgages cover a broad range of commercial, industrial, and institutional uses. Among them are retail stores and shopping centers, office buildings and factories, hospitals and medical centers, and apartment buildings. Commercial mortgages have grown in importance, representing 92 percent ( $\$ 435$ billion) of U.S. mortgages held by life insurers at the end of 2016 (Table 2.1). Mortgages for residential properties were $\$ 17$ billion, or 3.5 percent of total mortgages held by life insurers on U.S. properties. Farm mortgages were $\$ 21$ billion, accounting for 4.3 percent of total mortgages in 2016.

Almost all of the mortgages held by life insurers were in good standing (99.5\%) in 2016. Of industry-held mortgages, only 0.5 percent were either restructured, overdue, or in foreclosure in 2016 (Table 2.7).

At year-end 2016, $\$ 9$ billion (2\%) was held in general account mortgages with a loan-to-value ratio above 95 percent, compared with $\$ 401$ billion ( $89 \%$ ) in mortgages with a loan-to-value ratio below 71 percent (Table 2.8).

## REAL ESTATE

U.S. life insurers' holdings of directly owned real estate were $\$ 47$ billion at the end of 2016. This represents a 6 percent increase from 2015 (Tables 2.9).

By the end of 2016, real estate amounted to .7 percent of life insurers' assets (Table 2.1). Real estate holdings in separate accounts increased $\$ 1.7$ billion during the year as real estate in general accounts increased \$752 million (Table 2.2).

Real estate held to produce income totaled $\$ 40$ billion, or 85 percent of all real estate owned, while real estate held for sale amounted to $\$ 987$ million (Table 2.9, Figure 2.4). The remainder was in land and property held for company use, primarily home and regional offices.

## POLICY LOANS

Life insurance companies can loan money to policyholders up to the cash value of their life insurance. Life insurers must make these policy loans from funds that otherwise would be invested. Since premium rates are based in part on an anticipated investment return, interest must be charged on the loans. Because the amount of a policy's protection is reduced by the amount of the loan, life insurers advise policyholders that an outstanding loan can seriously impair a family's insurance planning. The policy loan amounts shown in Tables 2.1-2.2 do not include loans made to policyholders by banks or other lending institutions holding borrowers' life insurance policies as collateral.

Life insurer loans to policyholders against the cash value of their life insurance amounted to $\$ 135$ billion by yearend 2016, down .1 percent from the loans outstanding a year earlier (Tables 2.1-2.2). Policy loans accounted for 2 percent of company assets at the end of 2016.

## FOREIGN-CONTROLLED ASSETS

Foreign-controlled assets were $\$ 1.4$ trillion, or 21.3 percent of total industry assets in 2016, up from 2015 (Table 2.10). Canada, followed by the United Kingdom, the Netherlands, and France own the most foreigncontrolled assets of U.S. life insurers.

Table 2.1

| Distribution of Life Insurer Assets, by Account Type, 2016 (millions) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | General account |  | Separate account |  | Combined accounts |  |
|  | Year's end | Percent distribution | Year's end | Percent distribution | Year's end | Percent distribution |
| Bonds |  |  |  |  |  |  |
| Government securities |  |  |  |  |  |  |
| U.S. | \$362,040 | 8.5 | \$66,45 I | 2.6 | \$428,491 | 6.3 |
| Foreign | 87,171 | 2.1 | 6,345 | 0.3 | 93,516 | 1.4 |
| Total government | 449,211 | 10.6 | 72,796 | 2.9 | 522,007 | 7.7 |
| Corporate securities | 2,054,33। | 48.3 | 203,089 | 8.1 | 2,257,419 | 33.3 |
| Mortgage-backed securities ${ }^{\prime}$ | 460,685 | 10.8 | 107,503 | 4.3 | 568,188 | 8.4 |
| Total long-term bonds | 2,964,227 | 69.7 | 383,388 | 15.2 | 3,347,615 | 49.4 |
| Stocks |  |  |  |  |  |  |
| Common | 92,810 | 2.2 | 1,951,501 | 77.4 | 2,044,311 | 30.2 |
| Preferred | 10,156 | 0.2 | 1,107 | 0.0 | 11,263 | 0.2 |
| Total | 102,966 | 2.4 | 1,952,608 | 77.5 | 2,055,574 | 30.4 |
| Mortgages |  |  |  |  |  |  |
| Farm | 19,129 | 0.4 | 1,383 | 0.1 | 20,512 | 0.3 |
| Residential | 16,649 | 0.4 | 27 | 0.0 | 16,675 | 0.2 |
| Commercial | 412,987 | 9.7 | 21,930 | 0.9 | 434,917 | 6.4 |
| Total | 448,764 | 10.6 | 23,340 | 0.9 | 472,104 | 7.0 |
| Real estate | 24,746 | 0.6 | 22,178 | 0.9 | 46,925 | 0.7 |
| Policy loans | 129,704 | 3.1 | 4,889 | 0.2 | 134,593 | 2.0 |
| Short-term investments | 58,362 | 1.4 | 17,118 | 0.7 | 75,480 | 1.1 |
| Cash \& cash equivalents | 45,870 | 1.1 | 17,465 | 0.7 | 63,335 | 0.9 |
| Derivatives | 62,046 | 1.5 | 2,474 | 0.1 | 64,520 | 1.0 |
| Other invested assets | s 188,364 | 4.4 | 67,316 | 2.7 | 255,679 | 3.8 |
| Non-invested assets | 226,544 | 5.3 | 29,647 | 1.2 | 256,191 | 3.8 |
| Aggregate total | 4,25I,592 | 100.0 | 2,520,422 | 100.0 | 6,772,014 | 100.0 |

Source: ACLI tabulations of National Association of Insurance Commissioners (NAIC) data, used by permission.
Notes: NAIC does not endorse any analysis or conclusions based on use of its data. Data reflect investments held at year's end. Data represent U.S. life insurers and fraternal benefit societies.
'Includes Ginnie Mae (GNMA).

Figure 2.1
Growth of Life Insurer Assets


Source: ACLI tabulations of National Association of Insurance Commissioners (NAIC) data, used by permission.
Notes: NAIC does not endorse any analysis or conclusions based on use of its data. Data represent U.S. life insurers and, as of 2003, fraternal benefit societies.

Table 2.2

| Distribution of Life Insurer Assets, by Account Type and Year' |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | General account (millions) |  |  | Average annual percent change |  |
|  | 2006 | 2015 | 2016 | 2006/2016 | 2015/2016 |
| Bonds |  |  |  |  |  |
| Government | \$491,718 | \$426,939 | \$449,211 | -0.9 | 5.2 |
| Corporate | I,752,087 | 1,957,032 | 2,054,331 | 1.6 | 5.0 |
| MBS ${ }^{1}$ | NA | 449,748 | 460,685 | NA | 2.4 |
| Total | 2,243,805 | 2,833,719 | 2,964,227 | 2.8 | 4.6 |
| Stocks |  |  |  |  |  |
| Common | 81,326 | 80,521 | 92,810 | 1.3 | 15.3 |
| Preferred | 65,307 | 9,931 | 10,156 | -17.0 | 2.3 |
| Total | 146,633 | 90,452 | 102,966 | -3.5 | 13.8 |
| Mortgages | 303,408 | 414,854 | 448,764 | 4.0 | 8.2 |
| Real estate | 19,148 | 23,994 | 24,746 | 2.6 | 3.1 |
| Policy loans | 112,335 | 129,688 | 129,704 | 1.4 | 0.0 |
| Short-term investments | NA | 60,043 | 58,362 | NA | -2.8 |
| Cash \& cash equivalents | 37,901 | 46,285 | 45,870 | 1.9 | -0.9 |
| Derivatives | NA | 53,856 | 62,046 | NA | 15.2 |
| Other invested assets | 98,871 | 178,107 | 188,364 | 6.7 | 5.8 |
| Non-invested assets | 135,236 | 208,969 | 226,544 | 5.3 | 8.4 |
| Aggregate total | 3,097,338 | 4,039,968 | 4,251,592 | 3.2 | 5.2 |
|  |  |  |  |  | Continued |

Table 2.2
Distribution of Life Insurer Assets, by Account Type and Year-Continued

|  | Separate account (millions) |  |  | Average annual percent change |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2006 | 2015 | 2016 | 2006/2016 | 2015/2016 |
| Bonds |  |  |  |  |  |
| Government | \$87,280 | \$69,246 | \$72,796 | -1.8 | 5.1 |
| Corporate | 130,394 | 192,522 | 203,089 | 4.5 | 5.5 |
| MBS' | NA | 106,498 | 107,503 | NA | 0.9 |
| Total | 217,674 | 368,266 | 383,388 | 5.8 | 4.1 |
| Stocks |  |  |  |  |  |
| Common | I,38ı,141 | 1,909,239 | 1,951,501 | 3.5 | 2.2 |
| Preferred | 3,119 | 1,195 | 1,107 | -9.8 | -7.4 |
| Total | 1,384,259 | 1,910,434 | 1,952,608 | 3.5 | 2.2 |
| Mortgages | 10,334 | 22,317 | 23,340 | 8.5 | 4.6 |
| Real estate | 13,948 | 20,476 | 22,178 | 4.7 | 8.3 |
| Policy loans | 578 | 5,025 | 4,889 | 23.8 | -2.7 |
| Short-term investments | s NA | 19,549 | 17,118 | NA | -12.4 |
| Cash \& cash equivalents | 19,598 | 13,381 | 17,465 | -I.I | 30.5 |
| Derivatives | NA | 1,838 | 2,474 | NA | 34.6 |
| Other invested assets | 51,953 | 56,412 | 67,316 | 2.6 | 19.3 |
| Non-invested assets | 27,141 | 20,151 | 29,647 | 0.9 | 47.1 |
| Aggregate total | I,725,487 | 2,437,850 | 2,520,422 | 3.9 | 3.4 |


|  | Combined accounts (millions) |  |  | Average annual percent change |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2006 | 2015 | 2016 | 2006/2016 | 2015/2016 |
| Bonds |  |  |  |  |  |
| Government | \$578,998 | \$496,184 | \$522,007 | -1.0 | 5.2 |
| Corporate | 1,882,48। | 2,149,554 | 2,257,419 | 1.8 | 5.0 |
| MBS ${ }^{1}$ | NA | 556,247 | 568,188 | NA | 2.1 |
| Total | 2,461,479 | 3,201,985 | 3,347,615 | 3.1 | 4.5 |
| Stocks |  |  |  |  |  |
| Common | 1,462,467 | 1,989,760 | 2,044,311 | 3.4 | 2.7 |
| Preferred | 68,425 | 11,126 | 11,263 | -16.5 | 1.2 |
| Total | 1,530,892 | 2,000,887 | 2,055,574 | 3.0 | 2.7 |
| Mortgages | 313,74I | 437, I7 I | 472,104 | 4.2 | 8.0 |
| Real estate | 33,096 | 44,471 | 46,925 | 3.6 | 5.5 |
| Policy loans | 112,914 | 134,713 | 134,593 | 1.8 | -0.1 |
| Short-term investment | s NA | 79,592 | 75,480 | NA | -5.2 |
| Cash \& cash equivalents | 57,499 | 59,666 | 63,335 | 1.0 | 6.1 |
| Derivatives | NA | 55,695 | 64,520 | NA | 15.8 |
| Other invested assets | 150,825 | 234,519 | 255,679 | 5.4 | 9.0 |
| Non-invested assets | 162,377 | 229,120 | 256,191 | 4.7 | 11.8 |
| Aggregate total | 4,822,824 | 6,477,819 | 6,772,014 | 3.5 | 4.5 |

[^0]Table 2.3

## Distribution of Long-Term General Account Bond Investments

|  | $\mathbf{2 0 1 5}$ |  | 2016 |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Amount <br> (millions) | Percent <br> distribution | Amount <br> (millions) | Percent <br> distribution |
| U.S. Treasury securities | $\$ 139,894$ | 4.9 | $\$ 147,223$ | 5.0 |
| U.S. government obligations | 51,210 | 1.8 | 50,113 | 1.7 |
| Foreign government | 77,432 | 2.7 | 87,171 | 19,572 |
| U.S. states and territories | 18,788 | 0.7 | 28,330 | 2.9 |
| U.S. political subdivisions | 29,689 | 1.0 | 114,029 | 0.7 |
| Revenue and assessment | 107,240 | 3.8 | 2,773 | 1.0 |
| Industrial development | 2,685 | 0.1 | 460,685 | 3.8 |
| Mortgage-backed securities | 449,748 | 15.9 | 12,440 | 0.1 |
| Pass-through securities | 13,957 | 0.5 | 95,441 | 15.5 |
| GNMA | 39,954 | 0.2 | 13,073 | 0.4 |
| FNMA and FHLMC | 11,104 |  |  | 115,563 |

Source: ACLI tabulations of National Association of Insurance Commissioners (NAIC) data, used by permission.
Notes: NAIC does not endorse any analysis or conclusions based on use of its data. Data represent U.S. life insurers and fraternal benefit societies.

Figure 2.2
Asset Distribution of Life Insurers, 2016

## GENERAL ACCOUNT



## SEPARATE ACCOUNT



[^1]Notes: NAIC does not endorse any analysis or conclusions based on use of its data. Data represent U.S. life insurers and fraternal benefit societies.

Table 2.4

| Distribution of General Account Bonds, by Remaining Maturity, 2012-2016 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage of general account bonds held at year's end |  |  |  |  | Total |
|  | I year or less | More than $l$ year to 5 years | More than 5 years to 10 years | More than 10 years to 20 years | More than 20 years |  |
| Government |  |  |  |  |  |  |
| 2012 | 13.5 | 18.8 | 18.3 | 23.2 | 26.3 | 100.0 |
| 2013 | 9.9 | 17.5 | 19.1 | 25.4 | 28.0 | 100.0 |
| 2014 | 8.5 | 17.9 | 19.0 | 25.8 | 28.7 | 100.0 |
| 2015 | 10.2 | 19.1 | 18.2 | 24.8 | 27.7 | 100.0 |
| 2016 | 11.2 | 20.0 | 18.1 | 24.6 | 26.0 | 100.0 |
| Corporate |  |  |  |  |  |  |
| 2012 | 9.3 | 28.6 | 32.6 | 11.3 | 18.2 | 100.0 |
| 2013 | 8.0 | 27.6 | 34.3 | 11.8 | 18.3 | 100.0 |
| 2014 | 8.8 | 26.1 | 34.3 | 12.3 | 18.5 | 100.0 |
| 2015 | 7.7 | 26.2 | 34.4 | 13.0 | 18.7 | 100.0 |
| 2016 | 6.9 | 26.3 | 34.0 | 13.8 | 19.0 | 100.0 |
| Total |  |  |  |  |  |  |
| 2012 | 10.4 | 26.1 | 29.1 | 14.2 | 20.2 | 100.0 |
| 2013 | 8.5 | 25.2 | 30.6 | 15.1 | 20.6 | 100.0 |
| 2014 | 8.8 | 24.1 | 30.7 | 15.5 | 20.9 | 100.0 |
| 2015 | 8.3 | 24.5 | 30.6 | 15.8 | 20.8 | 100.0 |
| 2016 | 7.9 | 24.8 | 30.2 | 16.4 | 20.7 | 100.0 |

Source: ACLI tabulations of National Association of Insurance Commissioners (NAIC) data, used by permission.
Notes: NAIC does not endorse any analysis or conclusions based on use of its data. Data represent U.S. life insurers and fraternal benefit societies.

Table 2.5
Distribution of General Account Long-Term Bonds at Time of Purchase, 2016
Maturity
Percent distribution
20 years and over 39.3
10 years to less than 20 years 32.7
5 years to less than 10 years 23.7
Less than 5 years 4.3
Total 100.0

Source: ACLI tabulations of National Association of Insurance Commissioners (NAIC) data, used by permission.
Notes: NAIC does not endorse any analysis or conclusions based on use of its data. Data represent U.S. life insurers and fraternal benefit societies.

Table 2.6

| Distribution of General Account Bonds, by NAIC Quality Class' |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PUBLIC BONDS <br> NAIC quality class | 2006 |  | 2015 |  | 2016 |  |
|  | Amount (millions) | Percentage of publicly traded bonds | Amount (millions) | Percentage of publicly traded bonds | Amount (millions) | Percentage of publicly traded bonds |
| High quality |  |  |  |  |  |  |
| Class I | \$1,315,293 | 75.5 | \$1,416,849 | 68.2 | \$1,452,156 | 67.8 |
| Class 2 | 349,012 | 20.0 | 572,943 | 27.6 | 598,879 | 27.9 |
| Medium quality |  |  |  |  |  |  |
| Class 3 | 45,779 | 2.6 | 62,758 | 3.0 | 61,607 | 2.9 |
| Low quality |  |  |  |  |  |  |
| Class 4 | 27,690 | 1.6 | 20,735 | 1.0 | 25,135 | 1.2 |
| Class 5 | 4,209 | 0.2 | 3,276 | 0.2 | 4,170 | 0.2 |
| Class 6 | 524 | 0.0 | 1,024 | 0.0 | 863 | 0.0 |
| Total | 1,742,507 | 100.0 | 2,077,586 | 100.0 | 2,142,810 | 100.0 |


| PRIVATE BONDS <br> NAIC quality class | 2006 |  | 2015 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount (millions) | Percentage of privately traded bonds | Amount (millions) | Percentage of privately traded bonds | Amount (millions) | Percentage of privately traded bonds |
| High quality |  |  |  |  |  |  |
| Class I | \$242,079 | 48.3 | \$407,695 | 48.3 | \$446,896 | 49.5 |
| Class 2 | 211,283 | 42.1 | 353,149 | 41.8 | 364,636 | 40.4 |
| Medium quality |  |  |  |  |  |  |
| Class 3 | 27,04I | 5.4 | 50,864 | 6.0 | 55,144 | 6.1 |
| Low quality |  |  |  |  |  |  |
| Class 4 | 15,742 | 3.1 | 23,548 | 2.8 | 23,706 | 2.6 |
| Class 5 | 4,060 | 0.8 | 7,454 | 0.9 | 10,225 | 1.1 |
| Class 6 | 1,093 | 0.2 | 2,035 | 0.2 | 2,907 | 0.3 |
| Total | 501,298 | 100.0 | 844,745 | 100.0 | 903,513 | 100.0 |


| TOTAL BONDS <br> NAIC quality class | 2006 |  | 2015 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount (millions) | Percentage of general account bonds | Amount (millions) | Percentage of general account bonds | Amount (millions) | Percentage of general account bonds |
| High quality |  |  |  |  |  |  |
| Class I | \$1,557,372 | 69.4 | \$1,824,544 | 62.4 | \$1,899,052 | 62.3 |
| Class 2 | 560,295 | 25.0 | 926,093 | 31.7 | 963,514 | 31.6 |
| Medium quality |  |  |  |  |  |  |
| Class 3 | 72,820 | 3.2 | 113,622 | 3.9 | 116,75 \| | 3.8 |
| Low quality |  |  |  |  |  |  |
| Class 4 | 43,432 | 1.9 | 44,283 | 1.5 | 48,842 | 1.6 |
| Class 5 | 8,269 | 0.4 | 10,730 | 0.4 | 14,395 | 0.5 |
| Class 6 | 1,617 | 0.1 | 3,058 | 0.1 | 3,769 | 0.1 |
| Aggregate total | 2,243,805 | 100.0 | 2,922,330 | 100.0 | 3,046,323 | 100.0 |

Source: ACLI tabulations of National Association of Insurance Commissioners (NAIC) data, used by permission.
Notes: NAIC does not endorse any analysis or conclusions based on use of its data. Figures include both government and corporate bonds held in general accounts of U.S. life insurers and fraternal benefit societies.
NAIC bond classes are: Class I—highest quality; Class 2—high quality; Class 3—medium quality; Class 4—low quality; Class 5—lower quality;
Class 6-in or near default. Class I and Class 2 bonds are investment grade.
'Includes long-term bonds, short-term investments, and cash equivalents.

Mortgages Held by Life Insurers, by Type


Source: ACLI tabulations of National Association of Insurance Commissioners (NAIC) data, used by permission.
Notes: NAIC does not endorse any analysis or conclusions based on use of its data. Data represent U.S. life insurers, and for 2016, fraternal benefit societies.

Figure 2.4

## Real Estate Owned by Life Insurers, 2016



[^2]Table 2.7
Quality of Mortgages Held by Life Insurers (millions)

|  | 2006 |  | 2015 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount | Percent distribution | Amount | Percent distribution | Amount | Percent distribution |
| Farm |  |  |  |  |  |  |
| In good standing | \$15,516 | 99.4 | \$19,029 | 99.6 | \$20,389 | 99.4 |
| Restructured | 25 | 0.2 | 13 | 0.1 | 11 | 0.1 |
| Overdue | 32 | 0.2 | 73 | 0.4 | 23 | 0.1 |
| Foreclosed | 30 | 0.2 | - | - | 88 | 0.4 |
| Total | 15,603 | 100.0 | 19,115 | 100.0 | 20,512 | 100.0 |
| Residential |  |  |  |  |  |  |
| In good standing | 7,235 | 99.8 | 13,147 | 96.2 | 15,950 | 95.6 |
| Restructured | 0 | 0.0 | 176 | 1.3 | 306 | 1.8 |
| Overdue | 10 | 0.1 | 277 | 2.0 | 316 | 1.9 |
| Foreclosed | 3 | 0.0 | 62 | 0.5 | 104 | 0.6 |
| Total | 7,249 | 100.0 | 13,662 | 100.0 | 16,675 | 100.0 |
| Commercial |  |  |  |  |  |  |
| In good standing | 290,279 | 99.8 | 402,810 | 99.6 | 433,292 | 99.6 |
| Restructured | 475 | 0.2 | 1,113 | 0.3 | 1,037 | 0.2 |
| Overdue | 98 | 0.0 | 96 | 0.0 | 426 | 0.1 |
| Foreclosed | 37 | 0.0 | 375 | 0.1 | 162 | 0.0 |
| Total | 290,890 | 100.0 | 404,394 | 100.0 | 434,917 | 100.0 |
| All categories |  |  |  |  |  |  |
| In good standing | 313,030 | 99.8 | 434,986 | 99.5 | 469,631 | 99.5 |
| Restructured | 500 | 0.2 | 1,302 | 0.3 | 1,353 | 0.3 |
| Overdue | 141 | 0.0 | 446 | 0.1 | 765 | 0.2 |
| Foreclosed | 70 | 0.0 | 437 | 0.1 | 355 | 0.1 |
| Aggregate total | 313,741 | 100.0 | 437,171 | 100.0 | 472,104 | 100.0 |

Source: ACLI tabulations of National Association of Insurance Commissioners (NAIC) data, used by permission.
Notes: NAIC does not endorse any analysis or conclusions based on use of its data. Data represent U.S. life insurers and fraternal benefit societies.

Table 2.8
General Account Mortgages for Life Insurers, by Type and Loan-to-Value Ratios, 2016 (millions)

| Loan-to-value ratio | Farm | Non-Farm | Total |
| :--- | ---: | ---: | ---: | ---: |
| Above 95\% | $\$ 36$ | $\$ 8,812$ | $\$ 8,848$ |
| $91-95 \%$ | 17 | 1,466 | 1,483 |
| $81-90 \%$ | 64 | 5,551 | 5,615 |
| $71-80 \%$ | 109 | 31,918 | 32,028 |
| Below $71 \%$ | 18,902 | 381,888 | 400,790 |
| Total | 19,129 | 429,635 | 448,764 |

Source: ACLI tabulations of National Association of Insurance Commissioners (NAIC) data, used by permission.
Notes: NAIC does not endorse any analysis or conclusions based on use of its data. Data represent U.S. life insurers and fraternal benefit societies.

Table 2.9
Real Estate Owned by Life Insurers, by Type

|  | Millions |  | Average annual percent change |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2006 | 2015 | 2016 | 2006/2016 | 2015/2016 |
| Investment property |  |  |  |  |  |
| Held for income | \$26,405 | \$38,288 | \$39,794 | 4.2 | 3.9 |
| Held for sale | 768 | 553 | 987 | 2.5 | 78.4 |
| Total | 27,173 | 38,841 | 40,78। | 4.1 | 5.0 |
| Occupied by company | 5,923 | 5,629 | 6,143 | 0.4 | 9.1 |
| Aggregate total | 33,096 | 44,471 | 46,925 | 3.6 | 5.5 |

[^3]Table 2.10

| Foreign-Controlled Assets of U.S. Life Insurers, by Country and Year (millions) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2012 | 2013 | 2014 | 2015 | 2016 |
| Barbados | \$1,100 | \$1,176 | \$1,215 | \$1,194 | - |
| Bermuda | 18,749 | 89,007 | 94,877 | 111,457 | \$121,070 |
| Canada | 374,740 | 344,441 | 367,415 | 350,166 | 356,693 |
| Cayman Islands | 2,095 | 1,822 | 2,096 | 7,342 | 26,800 |
| France | 161,007 | 166,256 | 173,077 | 171,193 | 180,995 |
| Germany | 108,643 | 119,998 | 130,573 | 135,192 | 153,145 |
| Italy | 1,109 | - | - | - |  |
| Japan | 6,181 | 7,022 | 8,566 | 66,381 | 128,467 |
| Netherlands | 372,216 | 393,149 | 209,140 | 207,850 | 213,801 |
| Panama | - | - | - | - | 113 |
| South Africa | 4 | 4 | 4 | 4 |  |
| Spain | - | - | 94 | 84 | 82 |
| Switzerland | 37,791 | 39,600 | 40,636 | 38,626 | 41,056 |
| United Kingdom | 198,523 | 174,609 | 205,913 | 202,752 | 220,391 |
| Total | 1,282,158 | 1,337,085 | 1,233,605 | I,292,24 I | 1,442,612 |
| Percentage of industry assets | 22.2\% | 21.7\% | 19.3\% | 19.9\% | 21.3\% |

Source: ACLI tabulations of National Association of Insurance Commissioners (NAIC) data, used by permission.
Notes: NAIC does not endorse any analysis or conclusions based on use of its data. Companies are defined as foreign controlled if 50 percent or more of stock is owned by a foreign entity or entities.

Table 2.11
Asset Distribution of Life Insurers, by Year (millions)

| Year | Bonds | Stocks | Mortgages | Real estate | Policy Ioans | Miscellaneous assets | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1917 | \$2,537 | \$83 | \$2,021 | \$179 | \$810 | \$311 | \$5,94 1 |
| 1920 | 3,298 | 75 | 2,442 | 172 | 859 | 474 | 7,320 |
| 1925 | 4,333 | 81 | 4,808 | 266 | 1,446 | 604 | 11,538 |
| 1930 | 6,431 | 519 | 7,598 | 548 | 2,807 | 977 | 18,880 |
| 1935 | 10,041 | 583 | 5,357 | 1,990 | 3,540 | 1,705 | 23,216 |
| 1940 | 17,092 | 605 | 5,972 | 2,065 | 3,091 | 1,977 | 30,802 |
| 1945 | 32,605 | 999 | 6,636 | 857 | 1,962 | 1,738 | 44,797 |
| 1950 | 39,366 | 2,103 | 16,102 | 1,445 | 2,413 | 2,591 | 64,020 |
| 1955 | 47,741 | 3,633 | 29,445 | 2,58। | 3,290 | 3,742 | 90,432 |
| 1960 | 58,555 | 4,981 | 41,771 | 3,765 | 5,231 | 5,273 | 119,576 |
| 1965 | 70,152 | 9,126 | 60,013 | 4,681 | 7,678 | 7,234 | 158,884 |
| 1970 | 84,166 | 15,420 | 74,375 | 6,320 | 16,064 | 10,909 | 207,254 |
| 1975 | 121,014 | 28,061 | 89,167 | 9,621 | 24,467 | 16,974 | 289,304 |
| 1980 | 212,618 | 47,366 | 131,080 | 15,033 | 41,411 | 31,702 | 479,210 |
| 1981 | 233,308 | 47,670 | 137,747 | 18,278 | 48,706 | 40,094 | 525,803 |
| 1982 | 268,288 | 55,730 | 141,989 | 20,624 | 52,961 | 48,571 | 588,163 |
| 1983 | 308,738 | 64,868 | 150,999 | 22,234 | 54,063 | 54,046 | 654,948 |
| 1984 | 358,897 | 63,335 | 156,699 | 25,767 | 54,505 | 63,776 | 722,979 |
| 1985 | 421,446 | 77,496 | 171,797 | 28,822 | 54,369 | 71,971 | 825,901 |
| 1986 | 486,583 | 90,864 | 193,842 | 31,615 | 54,055 | 80,592 | 937,551 |
| 1987 | 557,110 | 96,515 | 213,450 | 34,172 | 53,626 | 89,586 | 1,044,459 |
| 1988 | 640,094 | 104,373 | 232,863 | 37,371 | 54,236* | 97,933 | 1,166,870 |
| 1989 | 716,204 | 125,614 | 254,215 | 39,908 | 57,439 | 106,376 | 1,299,756 |
| 1990 | 793,443 | 128,484 | 270,109 | 43,367 | 62,603 | 110,202 | 1,408,208 |
| 1991 | 893,005 | 164,515 | 265,258 | 46,711 | 66,364 | 115,348 | 1,551,201 |
| 1992 | 990,315 | 192,403 | 246,702 | 50,595 | 72,058 | 1 12,458 | 1,664,531 |
| 1993 | 1,113,853 | 251,885 | 229,061 | 54,249 | 77,725 | 1 12,354 | 1,839,127 |
| 1994 | I,186,139 | 281,816 | 215,332 | 53,813 | 85,499 | 119,674 | 1,942,273 |
| 1995 | 1,278,416 | 371,867 | 211,815 | 52,437 | 95,939 | 133,070 | 2,143,544 |
| 1996 | 1,348,425 | 477,505 | 207,779 | 49,484 | 100,460 | 139,894 | 2,323,547 |
| 1997 | 1,451,289 | 598,358 | 209,898 | 46,076 | 104,549 | 168,908 | 2,579,078 |
| 1998 | 1,518,998 | 757,958 | 216,336 | 41,313 | 104,507 | 187,410 | 2,826,522 |
| 1999 | 1,551,618 | 989,762 | 229,797 | 38,186 | 98,757 | 162,533 | 3,070,653 |
| 2000 | 1,605,178 | 997,329 | 236,701 | 36,059 | 101,978 | 204,491 | 3,181,736 |
| 2001 | 1,731,792 | 909,026 | 243,596 | 32,368 | 104,273 | 247,966 | 3,269,019 |
| 2002 | 1,955,548 | 791,429 | 250,531 | 32,848 | 105,229 | 244,414 | 3,380,000 |
| $2003 \ddagger$ | 2,181,533 | 1,022,071 | 268,986 | 30,673 | 107,007 | 277,921 | 3,888,190 |
| 2004 † | 2,347,322 | I,179,397 | 282,534 | 31,005 | 108,658 | 303,470 | 4,252,385 |
| 2005 † | 2,440,412 | 1,285,468 | 294,876 | 32,574 | 109,500 | 319,165 | 4,481,995 |
| $2006 \ddagger$ | 2,461,479 | 1,530,892 | 313,741 | 33,096 | 112,914 | 370,701 | 4,822,824 |
| 2007 † | 2,571,525 | 1,670,338 | 336,150 | 34,943 | 116,633 | 361,997 | 5,091,586 |
| $2008 \ddagger$ | 2,429,173 | 1,135,797 | 352,676 | 32,497 | 122,485 | 575,518 | 4,648,147 |
| 2009 † | 2,581,575 | 1,385,923 | 336,316 | 27,714 | 123,283 | 503,884 | 4,958,693 |
| $2010 \ddagger$ | 2,744,758 | 1,570,225 | 326,988 | 27,851 | 126,821 | 514,561 | 5,311,204 |
| 2011 \# | 2,877,492 | 1,546,085 | 342,831 | 28,909 | 129,333 | 568,008 | 5,492,658 |
| $2012 \ddagger$ | 2,935,705 | 1,725,259 | 354,053 | 30,559 | 130,715 | 601,129 | 5,777,420 |
| $2013 \ddagger$ | 3,000,116 | 2,003,944 | 373,716 | 31,285 | 131,672 | 609,567 | 6,150,300 |
| 2014 † | 3,107,150 | 2,072,474 | 395,079 | 31,511 | 133,350 | 666,396 | 6,405,961 |
| $2015 \ddagger$ | 3,201,985 | 2,000,887 | 437,171 | 44,471 | 134,713 | 658,592 | 6,477,819 |
| $2016 \ddagger$ | 3,347,615 | 2,055,574 | 472,104 | 46,925 | 134,593 | 715,205 | 6,772,014 |

[^4]
[^0]:    Source: ACLI tabulations of National Association of Insurance Commissioners (NAIC) data, used by permission.
    Notes: NAIC does not endorse any analysis or conclusions based on use of its data. Data reflect investments held at year's end. Data represent U.S. life insurers and fraternal benefit societies.
    'Includes Ginnie Mae (GNMA).
    NA: Not available

[^1]:    Source: ACLI tabulations of National Association of Insurance Commissioners (NAIC) data, used by permission.

[^2]:    Source: ACLI tabulations of National Association of Insurance Commissioners (NAIC) data, used by permission.
    Notes: NAIC does not endorse any analysis or conclusions based on use of its data. Data represent U.S. life insurers and fraternal benefit societies.

[^3]:    Source: ACLI tabulations of National Association of Insurance Commissioners (NAIC) data, used by permission.
    Notes: NAIC does not endorse any analysis or conclusions based on use of its data. Data represent U.S. life insurers and fraternal benefit societies.

[^4]:    Source: ACLI tabulations of National Association of Insurance Commissioners (NAIC) data, used by permission.
    Notes: NAIC does not endorse any analysis or conclusions based on use of its data. Beginning with 1962, data include assets in separate accounts.
    Data represent U.S. life insurers and, as 2003 , fraternal benefit societies.
    *Excludes an estimated $\$ 600$ million of securitized policy loans.
    $\ddagger$ Includes fraternal benefit societies.

