



KPMG LLP  
One Financial Plaza  
755 Main Street  
Hartford, CT 06103

## ***Report of Independent Registered Public Accounting Firm***

### ***The Board of Directors of C.M. Life Insurance Company and Contract Owners of Panorama Plus Separate Account:***

#### *Opinion on the Financial Statements*

We have audited the accompanying statements of assets and liabilities of Panorama Plus Separate Account (comprised of the sub-accounts listed in Appendix A to the opinion) (collectively, “the Separate Account”) as of December 31, 2018, the related statements of operations and changes in net assets for each of the years in the two-year period then ended, and the related notes (collectively, the “financial statements”) and the financial highlights for each of the years in the five-year period then ended (collectively, the “financial highlights”). In our opinion, the financial statements and financial highlights present fairly, in all material respects, the financial position of the Separate Account as of December 31, 2018, the results of its operations and the changes in its net assets for each of the years in the two-year period then ended, and the financial highlights for each of the years in the five-year period then ended, in conformity with U.S. generally accepted accounting principles.

#### *Basis for Opinion*

These financial statements and financial highlights are the responsibility of the Separate Account’s management. Our responsibility is to express an opinion on these financial statements and financial highlights based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Separate Account in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and financial highlights are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements and financial highlights, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements and financial highlights. Such procedures also included confirmation of securities owned as of December 31, 2018, by correspondence with the underlying mutual funds or their transfer agent. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements and financial highlights. We believe that our audits provide a reasonable basis for our opinion.

**KPMG LLP**

We have served as the Separate Account’s auditor since 2004.

Hartford, Connecticut  
March 19, 2019

KPMG LLP is a Delaware limited liability partnership and the U.S. member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative (“KPMG International”), a Swiss entity.

## Appendix A

Panorama Plus Separate Account is comprised of the following sub-accounts and the activities of each sub-account have been included within the accompanying statements of assets and liabilities as of December 31, 2018 and the related statements of operations and changes in net assets for each of the years in the two-year period then ended.

### Sub-Accounts

- Fidelity® VIP Contrafund® Sub-Account
  - MML High Yield Sub-Account
  - MML Income & Growth Sub-Account
  - MML Managed Bond Sub-Account
  - MML Mid Cap Growth Sub-Account
  - MML Short-Duration Bond Sub-Account
- Oppenheimer Conservative Balanced Sub-Account
- Oppenheimer Government Money Sub-Account
- Oppenheimer International Growth Sub-Account
  - Oppenheimer Main Street Sub-Account
- Oppenheimer Total Return Bond Sub-Account

*Panorama Plus Separate Account*

*STATEMENTS OF ASSETS AND LIABILITIES  
December 31, 2018*

	Fidelity® VIP Contract#	MMML High Yield Sub-Account	MMML Income & Growth Sub-Account	MMML Managed Bond Sub-Account	MMML Mid Cap Growth Sub-Account	MMML Short-Duration Bond Sub-Account	Oppenheimer Conservative Balanced Sub-Account	Oppenheimer Government Money Sub-Account	Oppenheimer International Growth Sub-Account	Oppenheimer Main Street Sub-Account	Oppenheimer Total Return Bond Sub-Account
<b>ASSETS</b>											
Investments											
Number of shares	430,896	49,915	366,498	134,009	1,072,240	45,025	1,057,195	1,206,090	3,979,814	793,741	251,418
Identified cost	\$12,209,159	\$ 528,181	\$ 3,688,308	\$ 1,677,906	\$15,752,201	\$ 447,776	\$13,863,696	\$ 1,206,090	\$ 7,415,966	\$20,905,332	\$ 1,926,918
Value	\$13,844,686	\$ 451,228	\$ 3,111,567	\$ 1,596,100	\$14,947,029	\$ 431,342	\$15,255,329	\$ 1,206,090	\$ 8,079,023	\$21,280,204	\$ 1,883,120
Dividends receivable	-	-	-	-	-	-	-	952	-	-	-
Receivable to C.M. Life Insurance Company	-	1	-	-	-	-	-	-	-	-	-
<b>Total assets</b>	<b>13,844,686</b>	<b>451,229</b>	<b>3,111,567</b>	<b>1,596,100</b>	<b>14,947,029</b>	<b>431,342</b>	<b>15,255,329</b>	<b>1,207,042</b>	<b>8,079,023</b>	<b>21,280,204</b>	<b>1,883,120</b>
<b>LIABILITIES</b>											
Annuitant mortality fluctuation reserve	2,413	-	1,618	-	2,502	-	9,810	83	3,519	6,126	1,356
Payable to C.M. Life Insurance Company	187	-	76	1	175	4	265	2	123	231	45
<b>Total liabilities</b>	<b>2,600</b>	<b>-</b>	<b>1,694</b>	<b>1</b>	<b>2,677</b>	<b>4</b>	<b>10,075</b>	<b>85</b>	<b>3,642</b>	<b>6,357</b>	<b>1,401</b>
<b>NET ASSETS</b>	<b>\$13,842,086</b>	<b>\$ 451,229</b>	<b>\$ 3,109,873</b>	<b>\$ 1,596,099</b>	<b>\$14,944,352</b>	<b>\$ 431,338</b>	<b>\$15,245,254</b>	<b>\$ 1,206,957</b>	<b>\$ 8,075,381</b>	<b>\$21,273,847</b>	<b>\$ 1,881,719</b>
<b>Net Assets:</b>											
Accumulation units - value	13,761,665	451,229	3,055,925	1,596,099	14,860,945	431,338	14,918,248	1,204,199	7,958,070	21,069,637	1,836,507
Contracts in payout (amortization) period	80,421	-	53,948	-	83,407	-	327,006	2,758	117,311	204,210	45,212
<b>Net assets</b>	<b>13,842,086</b>	<b>451,229</b>	<b>3,109,873</b>	<b>1,596,099</b>	<b>14,944,352</b>	<b>431,338</b>	<b>15,245,254</b>	<b>1,206,957</b>	<b>8,075,381</b>	<b>21,273,847</b>	<b>1,881,719</b>
<b>Outstanding units</b>											
Contract owners	4,688,353	284,427	1,777,421	1,247,874	2,949,968	400,158	5,767,296	859,123	2,093,724	10,398,812	980,765
<b>UNIT VALUE</b>											
Panorama Plus	\$ 2.95	\$ 1.59	\$ 1.75	\$ 1.28	\$ 5.07	\$ 1.08	\$ 2.64	\$ 1.40	\$ 3.86	\$ 2.05	\$ 1.92

See Notes to Financial Statements.

*Panorama Plus Separate Account*

**STATEMENTS OF OPERATIONS AND CHANGES IN NET ASSETS  
For The Year Ended December 31, 2018**

	Fidelity® VIP Contratfund® Sub-Account	MML High Yield Sub-Account	MML Income & Growth Sub-Account	MML Managed Bond Sub-Account	MML Mid Cap Growth Sub-Account	MML Short-Duration Bond Sub-Account	Oppenheimer Conservative Balanced Sub-Account	Oppenheimer Government Money Sub-Account	Oppenheimer International Growth Sub-Account	Oppenheimer Main Street Sub-Account	Oppenheimer Total Return Bond Sub-Account
<b>Investment Income</b>											
Dividends	\$ 111,215	\$ 29,138	\$ 63,062	\$ 55,881	\$ -	\$ 11,781	\$ 332,187	\$ 17,203	\$ 88,117	\$ 287,368	\$ 77,716
<b>Expenses</b>											
Mortality and expense risk fees and administrative expense charges	182,955	5,517	43,231	19,974	196,841	4,995	192,025	15,084	115,107	284,300	25,372
<b>Net investment income (loss)</b>	<u>(71,740)</u>	<u>23,621</u>	<u>19,831</u>	<u>35,907</u>	<u>(196,841)</u>	<u>6,786</u>	<u>140,162</u>	<u>2,119</u>	<u>(26,990)</u>	<u>3,068</u>	<u>52,344</u>
<b>Net realized and unrealized gain (loss) on investments</b>											
Realized gain (loss) on sale of fund shares	369,510	(1,934)	244,748	(26,895)	1,051,865	(1,069)	326,614	-	567,051	740,688	(242,076)
Realized gain distribution	1,383,946	-	839,105	-	2,131,805	-	392,803	-	199,404	2,161,475	-
Realized gain (loss)	<u>1,753,456</u>	<u>(1,934)</u>	<u>1,083,853</u>	<u>(26,895)</u>	<u>3,183,670</u>	<u>(1,069)</u>	<u>719,417</u>	<u>-</u>	<u>766,455</u>	<u>2,902,163</u>	<u>(242,076)</u>
Change in net unrealized appreciation/ depreciation of investments	(2,735,667)	(43,836)	(1,561,181)	(45,122)	(3,392,857)	(5,207)	(1,925,160)	-	(2,808,274)	(4,947,007)	134,338
<b>Net gain (loss) on investments</b>	<u>(982,211)</u>	<u>(45,770)</u>	<u>(477,328)</u>	<u>(72,017)</u>	<u>(209,187)</u>	<u>(6,276)</u>	<u>(1,205,743)</u>	<u>-</u>	<u>(2,041,819)</u>	<u>(2,044,844)</u>	<u>(107,738)</u>
<b>Net increase (decrease) in net assets resulting from operations</b>	<u>(1,053,951)</u>	<u>(22,149)</u>	<u>(457,497)</u>	<u>(36,110)</u>	<u>(406,028)</u>	<u>510</u>	<u>(1,065,581)</u>	<u>2,119</u>	<u>(2,068,809)</u>	<u>(2,041,776)</u>	<u>(55,394)</u>
Capital transactions:											
Transfer of net premiums	118,089	-	31,428	12,427	164,395	-	42,625	43,524	103,807	60,038	-
Transfers due to death benefits	(45,007)	-	(47,345)	-	(170,299)	-	(162,405)	(10,035)	(94,538)	(109,994)	(38,333)
Transfers due to annuity benefit payments	(12,050)	-	(7,080)	-	(9,494)	-	(39,178)	(387)	(15,964)	(18,126)	(5,884)
Transfers due to withdrawal of funds	(1,286,624)	(839)	(512,033)	(388,377)	(1,600,751)	(5,436)	(1,294,703)	(537,215)	(948,368)	(2,603,562)	(501,493)
Transfers due to net charge (credit) to annuitant mortality fluctuation	318	-	252	-	242	-	699	-	904	710	21
Transfers between Sub-Accounts and the General Account	22,587	(24,512)	(68,621)	121,928	(148,372)	(11,692)	16,258	(11,771)	64,846	(63,592)	(3,287)
Net increase (decrease) in net assets resulting from capital transactions	<u>(1,202,687)</u>	<u>(25,351)</u>	<u>(603,399)</u>	<u>(254,022)</u>	<u>(1,764,279)</u>	<u>(17,128)</u>	<u>(1,436,704)</u>	<u>(515,884)</u>	<u>(889,313)</u>	<u>(2,734,526)</u>	<u>(548,976)</u>
<b>Total increase (decrease)</b>	<u>(2,256,638)</u>	<u>(47,500)</u>	<u>(1,060,896)</u>	<u>(290,132)</u>	<u>(2,170,307)</u>	<u>(16,618)</u>	<u>(2,502,285)</u>	<u>(513,765)</u>	<u>(2,958,122)</u>	<u>(4,776,302)</u>	<u>(604,370)</u>
<b>NET ASSETS, at beginning of the year</b>	<u>16,098,724</u>	<u>498,729</u>	<u>4,170,769</u>	<u>1,886,231</u>	<u>17,114,659</u>	<u>447,956</u>	<u>17,747,539</u>	<u>1,720,722</u>	<u>11,033,503</u>	<u>26,050,149</u>	<u>2,486,089</u>
<b>NET ASSETS, at end of the year</b>	<u>\$13,842,086</u>	<u>\$ 451,229</u>	<u>\$ 3,109,873</u>	<u>\$ 1,596,099</u>	<u>\$14,944,352</u>	<u>\$ 431,338</u>	<u>\$15,245,254</u>	<u>\$ 1,206,957</u>	<u>\$ 8,075,381</u>	<u>\$21,273,847</u>	<u>\$ 1,881,719</u>

See Notes to Financial Statements.

**Panorama Plus Separate Account**

**STATEMENTS OF OPERATIONS AND CHANGES IN NET ASSETS  
For The Year Ended December 31, 2017**

	Fidelity® VIP Contract <sup>®</sup> Sub-Account	MML High Yield Sub-Account	MML Income & Growth Sub-Account	MML Managed Bond Sub-Account	MML Mid Cap Growth Sub-Account	MML Short-Duration Bond Sub-Account	Oppenheimer Conservative Balanced Sub-Account	Oppenheimer Government Money Sub-Account	Oppenheimer International Growth Sub-Account	Oppenheimer Main Street Sub-Account	Oppenheimer Total Return Bond Sub-Account
<b>Investment Income</b>											
Dividends	\$ 158,819	\$ 34,629	\$ 74,151	\$ 54,875	\$ 6,079	\$ 11,509	\$ 359,384	\$ 5,737	\$ 150,859	\$ 322,702	\$ 62,586
<b>Expenses</b>											
Mortality and expense risk fees and administrative expense charges	182,137	5,766	51,452	21,206	195,688	5,272	206,777	17,083	120,340	294,150	29,430
<b>Net investment income (loss)</b>	<b>(23,318)</b>	<b>28,863</b>	<b>22,699</b>	<b>33,669</b>	<b>(189,609)</b>	<b>6,237</b>	<b>152,607</b>	<b>(11,346)</b>	<b>30,519</b>	<b>28,552</b>	<b>33,156</b>
<b>Net realized and unrealized gain (loss) on investments</b>											
Realized gain (loss) on sale of fund shares	509,164	(886)	167,244	(5,772)	1,065,441	(3,529)	467,491	-	631,085	667,086	(88,393)
Realized gain distribution	846,433	-	308,146	-	1,665,472	-	-	-	-	432,954	-
Realized gain (loss)	1,355,597	(886)	475,390	(5,772)	2,730,913	(3,529)	467,491	-	631,085	1,100,040	(88,393)
Change in net unrealized appreciation/ depreciation of investments	1,638,259	4,359	183,143	31,198	1,043,440	2,778	782,837	-	1,662,063	2,603,565	142,149
<b>Net gain (loss) on investments</b>	<b>2,993,856</b>	<b>3,473</b>	<b>658,533</b>	<b>25,426</b>	<b>3,774,353</b>	<b>(751)</b>	<b>1,250,328</b>	<b>-</b>	<b>2,293,148</b>	<b>3,703,605</b>	<b>53,756</b>
<b>Net increase (decrease) in net assets resulting from operations</b>	<b>2,970,538</b>	<b>32,336</b>	<b>681,232</b>	<b>59,095</b>	<b>3,584,744</b>	<b>5,486</b>	<b>1,402,935</b>	<b>(11,346)</b>	<b>2,323,667</b>	<b>3,732,157</b>	<b>86,912</b>
Capital transactions:											
Transfer of net premiums	92,838	-	22,865	22,616	188,763	35,000	75,453	870	34,847	46,067	-
Transfers due to death benefits	(315,651)	(16,345)	(50,329)	(14,892)	(494,403)	(29,466)	(418,317)	(49,285)	(241,588)	(483,077)	(47,972)
Transfers due to annuity benefit payments	(9,165)	-	(5,832)	-	(6,094)	-	(31,021)	(435)	(15,088)	(13,507)	(5,586)
Transfers due to withdrawal of funds	(1,461,785)	(16,121)	(848,008)	(88,488)	(2,015,056)	(943)	(1,253,469)	(399,224)	(679,158)	(1,859,469)	(164,208)
Transfers due to net charge (credit) to annuitant mortality fluctuation	(309)	-	(189)	-	(294)	-	(777)	1	(949)	(660)	(38)
Transfers between Sub-Accounts and the General Account	(151,308)	28,942	(207,401)	98,666	(55,998)	(17,115)	(65,455)	556,450	(120,300)	(219,335)	-
Net increase (decrease) in net assets resulting from capital transactions	(1,845,380)	(3,524)	(1,088,894)	7,902	(2,383,082)	(12,524)	(1,693,586)	108,377	(1,022,236)	(2,529,981)	(217,804)
<b>Total increase (decrease)</b>	<b>1,125,158</b>	<b>28,812</b>	<b>(407,662)</b>	<b>66,997</b>	<b>1,201,662</b>	<b>(7,038)</b>	<b>(290,651)</b>	<b>97,031</b>	<b>1,301,431</b>	<b>1,202,176</b>	<b>(130,892)</b>
<b>NET ASSETS, at beginning of the year</b>	<b>14,973,566</b>	<b>489,917</b>	<b>4,578,431</b>	<b>1,819,234</b>	<b>15,912,997</b>	<b>454,994</b>	<b>18,038,190</b>	<b>1,623,691</b>	<b>9,732,072</b>	<b>24,847,973</b>	<b>2,616,981</b>
<b>NET ASSETS, at end of the year</b>	<b>\$16,098,724</b>	<b>\$ 498,729</b>	<b>\$ 4,170,769</b>	<b>\$ 1,886,231</b>	<b>\$17,114,659</b>	<b>\$ 447,956</b>	<b>\$17,747,539</b>	<b>\$ 1,720,722</b>	<b>\$11,033,503</b>	<b>\$26,050,149</b>	<b>\$ 2,486,089</b>

See Notes to Financial Statements.

## ***Panorama Plus Separate Account***

# ***Notes To Financial Statements***

### **1. ORGANIZATION**

Panorama Plus Separate Account (the “Separate Account”) is a separate investment account of C.M. Life Insurance Company (“C.M. Life”) established on September 25, 1991. The Separate Account is registered as a unit investment trust under the Investment Company Act of 1940 (“the 1940 Act”).

C.M. Life is a subsidiary of Massachusetts Mutual Life Insurance Company (“MassMutual”).

The assets and liabilities of the Separate Account are clearly identified and distinguished from C.M. Life’s other assets and liabilities. The Separate Account assets are not chargeable with liabilities arising from any other C.M. Life business.

### **2. INVESTMENT OF THE SEPARATE ACCOUNT’S ASSETS**

As of December 31, 2018, the Separate Account consists of eleven sub-accounts which invest in the following mutual funds:

<b>Sub-Accounts</b>	<b>The sub-account listed in the first column invests in the fund in this column</b>
Fidelity® VIP Contrafund® Sub-Account	Fidelity® VIP Contrafund® Portfolio <sup>1</sup>
MML High Yield Sub-Account	MML High Yield Fund <sup>2</sup>
MML Income & Growth Sub-Account	MML Income & Growth Fund <sup>2</sup>
MML Managed Bond Sub-Account	MML Managed Bond Fund <sup>2</sup>
MML Mid Cap Growth Sub-Account	MML Mid Cap Growth Fund <sup>2</sup>
MML Short-Duration Bond Sub-Account	MML Short-Duration Bond Fund <sup>2</sup>
Oppenheimer Conservative Balanced Sub-Account	Oppenheimer Conservative Balanced Fund/VA <sup>3</sup>
Oppenheimer Government Money Sub-Account	Oppenheimer Government Money Fund/VA <sup>3</sup>
Oppenheimer International Growth Sub-Account	Oppenheimer International Growth Fund/VA <sup>3</sup>
Oppenheimer Main Street Sub-Account	Oppenheimer Main Street Fund®/VA <sup>3</sup>
Oppenheimer Total Return Bond Sub-Account	Oppenheimer Total Return Bond Fund/VA <sup>3</sup>

In addition to the eleven sub-accounts, some contract owners may also allocate funds to the Fixed Interest Account (“FIA”), which is part of C.M. Life’s general investment account (“General Account”). Because of exemptive and exclusionary provisions in the securities law, interests in the FIA are not registered under the Securities Act of 1933, and the General Account and the FIA are not registered as an investment company under the 1940 Act.

<sup>1</sup> Fidelity® Management & Research Company is the investment adviser to this Portfolio.

<sup>2</sup> MML Investment Advisers, LLC is the investment adviser to this Fund.

<sup>3</sup> OFI Global Asset Management, Inc. is the investment adviser to this Fund.

### **3. SIGNIFICANT ACCOUNTING POLICIES**

The following is a summary of significant accounting policies followed by the Separate Account in preparation of the financial statements in conformity with generally accepted accounting principles. Separate Account Panorama Plus Separate Account follows the accounting and reporting guidance in FASB Accounting Standards Codification 946.

#### **A. Investment Valuation**

Investments in the investment sub-accounts are valued at the closing net asset value of each of the respective underlying funds, which value their investment securities at fair value.

## *Notes To Financial Statements (Continued)*

### **B. Accounting for Investments**

Investment transactions are accounted for on a trade-date basis and identified cost is the basis followed in determining the cost of investments sold for financial statement purposes. Dividend income and gains from realized gain distributions are recorded on the ex-distribution date, and they are generally reinvested in the underlying investment sub-accounts.

### **C. Federal Income Taxes**

C.M. Life is taxed under federal law as a life insurance company under the provisions of the 1986 Internal Revenue Code, as amended. Under existing federal law, no taxes are payable on net investment income and net realized capital gains attributable to contracts which depend on the Separate Account's investment performance. Accordingly, no provision for federal income tax has been made. C.M. Life may, however, make such a charge in the future if an unanticipated change of current law results in a company tax liability attributable to the Separate Account.

### **D. Contract Charges**

See Note 8B for charges associated with the contracts.

### **E. Estimates**

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

### **F. Annuitant Mortality Fluctuation**

The Separate Account maintains a reserve as required by regulatory authorities to provide for mortality losses incurred. The reserve is adjusted quarterly for mortality losses and gains and its proportionate share of changes in value. Transfers to or from C.M. Life are then made quarterly to adjust the Separate Account. Net transfers from C.M. Life to the Separate Account totaled \$3,145 for the year ended December 31, 2018. Net transfers from C.M. Life to the Separate Account totaled \$371 for the year ended December 31, 2017. The reserve is subject to a maximum of 3% of the Separate Account's annuity reserves. Any mortality losses in excess of this reserve will be borne by C.M. Life. The reserve is not available to owners of the contracts except to the extent necessary to cover mortality losses under the contracts.

### **G. Annuity Reserves**

Annuity reserves are developed by using accepted actuarial methods and are computed using the 1994 MGDB Table.

## **4. FAIR VALUE OF FINANCIAL INSTRUMENTS**

The Separate Account defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In determining fair value, the Separate Account generally uses the market approach as the valuation technique due to the nature of the mutual fund investments offered in the Separate Account. This technique maximizes the use of observable inputs and minimizes the use of unobservable inputs. Investments in mutual funds are valued at the mutual fund's closing net asset value per share on the day of valuation.

**Valuation Inputs:** Various inputs are used to determine the value of the Separate Account's investments. These inputs are summarized in the three broad levels listed below:

- **Level 1** – quoted prices in active markets for identical securities
- **Level 2** – observable inputs other than Level 1 quoted prices (including, but not limited to, quoted prices for similar securities, interest rates, prepayment speeds and credit risk)
- **Level 3** – unobservable inputs

The net assets of the Separate Account are measured at fair value. All the net assets are categorized as Level 1 as of December 31, 2018. There have been no transfers between levels for the year ended December 31, 2018.

## Notes To Financial Statements (Continued)

### 5. RELATED PARTY TRANSACTIONS

#### A. Sales Agreements

Pursuant to separate underwriting agreements with C.M. Life, on its own behalf and on behalf of the Separate Account, MML Investors Services, LLC (“MMLIS”) serves as principal underwriter of the contracts sold by its registered representatives, and MML Strategic Distributors, LLC (“MSD”) serves as principal underwriter of the contracts sold by registered representatives of other broker-dealers who have entered into distribution agreements with MSD.

Both MMLIS and MSD are registered with the Securities and Exchange Commission (the “SEC”) as broker-dealers under the Securities Exchange Act of 1934 and are members of the Financial Industry Regulatory Authority (“FINRA”). Commissions for sales of contracts by MMLIS registered representatives are paid on behalf of MMLIS to its registered representatives. Commissions for sales of contracts by registered representatives of other broker-dealers are paid on behalf of MSD to those broker-dealers. MMLIS and MSD also receive compensation for their actions as principal underwriters of the contracts.

The contracts are no longer offered for sale to the public. Contract owners may continue, however, to make purchase payments under existing contracts.

#### B. Receivable from/Payable to C.M. Life

Certain fees such as cost of insurance fees and mortality and expense risk fees are charges paid between the General Account and the Separate Account.

### 6. PURCHASES AND SALES OF INVESTMENTS

The cost of purchases and proceeds from sales investments for the year ended December 31, 2018 were as follows:

	Fidelity® VIP Contrafund® Sub-Account	MML High Yield Sub-Account	MML Income & Growth Sub-Account	MML Managed Bond Sub-Account	MML Mid Cap Growth Sub-Account
Cost of purchases	\$ 1,716,204	\$ 29,330	\$ 941,322	\$ 283,014	\$ 2,416,411
Proceeds from sales	(1,605,906)	(31,071)	(685,646)	(501,127)	(2,244,494)
	MML Short-Duration Bond Sub-Account	Oppenheimer Conservative Balanced Sub-Account	Oppenheimer Government Money Sub-Account	Oppenheimer International Growth Sub-Account	Oppenheimer Main Street Sub-Account
Cost of purchases	\$ 11,781	\$ 807,781	\$ 239,549	\$ 463,142	\$ 2,536,112
Proceeds from sales	(22,135)	(1,712,052)	(753,772)	(1,180,977)	(3,105,351)
	Oppenheimer Total Return Bond Sub-Account				
Cost of purchases	\$ 91,606				
Proceeds from sales	(588,000)				

### 7. NET INCREASE (DECREASE) IN OUTSTANDING UNITS

The changes in outstanding units for the two years ended December 31, 2018 were as follows:

	Fidelity® VIP Contrafund® Sub-Account	MML High Yield Sub-Account	MML Income & Growth Sub-Account	MML Managed Bond Sub-Account	MML Mid Cap Growth Sub-Account
<b>2018</b>					
Units purchased	52,769	-	25,885	9,740	41,121
Units withdrawn	(417,334)	(506)	(294,585)	(304,690)	(331,829)
Units transferred between Sub-Accounts and the General Account	6,125	(14,838)	(35,120)	94,926	(26,637)
Net increase (decrease)	<u>(358,440)</u>	<u>(15,344)</u>	<u>(303,820)</u>	<u>(200,023)</u>	<u>(317,345)</u>



# Notes To Financial Statements (Continued)

## 7. NET INCREASE (DECREASE) IN OUTSTANDING UNITS (Continued)

	MML Short-Duration Bond Sub-Account	Oppenheimer Conservative Balanced Sub-Account	Oppenheimer Government Money Sub-Account	Oppenheimer International Growth Sub-Account	Oppenheimer Main Street Sub-Account
<b>2018 (Continued)</b>					
Units purchased	-	30,676	31,051	29,925	52,936
Units withdrawn	(5,058)	(553,404)	(390,776)	(228,567)	(1,222,111)
Units transferred between Sub-Accounts and the General Account	(10,903)	5,875	(8,425)	13,442	(27,626)
Net increase (decrease)	<u>(15,962)</u>	<u>(516,853)</u>	<u>(368,150)</u>	<u>(185,200)</u>	<u>(1,196,802)</u>

	Oppenheimer Total Return Bond Sub-Account
<b>2018 (Continued)</b>	
Units purchased	7,478
Units withdrawn	(292,899)
Units transferred between Sub-Accounts and the General Account	(1,717)
Net increase (decrease)	<u>(287,138)</u>

	Fidelity® VIP Contrafund® Sub-Account	MML High Yield Sub-Account	MML Income & Growth Sub-Account	MML Managed Bond Sub-Account	MML Mid Cap Growth Sub-Account
<b>2017</b>					
Units purchased	33,797	-	29,640	17,861	38,570
Units withdrawn	(593,810)	(19,643)	(493,257)	(88,247)	(510,588)
Units transferred between Sub-Accounts and the General Account	(49,503)	18,137	(107,799)	76,384	(9,557)
Net increase (decrease)	<u>(609,516)</u>	<u>(1,506)</u>	<u>(571,416)</u>	<u>5,998</u>	<u>(481,575)</u>

	MML Short-Duration Bond Sub-Account	Oppenheimer Conservative Balanced Sub-Account	Oppenheimer Government Money Sub-Account	Oppenheimer International Growth Sub-Account	Oppenheimer Main Street Sub-Account
<b>2017 (Continued)</b>					
Units purchased	32,798	36,416	618	8,307	39,885
Units withdrawn	(28,267)	(629,287)	(319,335)	(211,102)	(1,125,774)
Units transferred between Sub-Accounts and the General Account	(15,865)	(22,096)	396,559	(28,206)	(103,126)
Net increase (decrease)	<u>(11,334)</u>	<u>(614,967)</u>	<u>77,842</u>	<u>(231,001)</u>	<u>(1,189,015)</u>

	Oppenheimer Total Return Bond Sub-Account
<b>2017 (Continued)</b>	
Units purchased	-
Units withdrawn	(112,183)
Units transferred between Sub-Accounts and the General Account	-
Net increase (decrease)	<u>(112,183)</u>

# Notes To Financial Statements (Continued)

## 8. FINANCIAL HIGHLIGHTS

- A. A summary of units outstanding, unit values, net assets, investment income ratios, expense ratios (excluding expenses of the underlying funds) and total return ratios for each of the five years in the period ended December 31, 2018 follows:

	At December 31,			For the Years Ended December 31,		
	Units	Unit Value <sup>3</sup>	Amount	Investment Income Ratio <sup>1</sup>	Expense Ratio <sup>2</sup>	Total Return <sup>3</sup>
<b>Fidelity® VIP Contrafund® Sub-Account</b>						
2018	4,688,353	\$2.95	\$13,842,086	0.70%	1.14%	(7.44)%
2017	5,046,793	3.19	16,098,724	0.99	1.14	20.50
2016	5,656,309	2.65	14,973,566	0.79	1.14	6.78
2015	6,344,800	2.48	15,729,031	1.03	1.14	(0.47)
2014	6,726,198	2.49	16,753,259	0.96	1.14	10.67
<b>MML High Yield Sub-Account</b>						
2018	284,427	1.59	451,229	6.05	1.14	(4.64)
2017	299,771	1.66	498,729	6.82	1.14	6.66
2016	301,277	1.56	469,917	7.13	1.14	14.94
2015	310,134	1.36	420,856	6.39	1.14	(2.50)
2014	321,093	1.39	446,918	6.83	1.14	(0.43)
<b>MML Income &amp; Growth Sub-Account</b>						
2018	1,777,421	1.75	3,109,873	1.67	1.14	(12.69)
2017	2,081,241	2.00	4,170,769	1.64	1.14	16.11
2016	2,652,657	1.73	4,578,431	1.81	1.14	15.08
2015	2,974,550	1.50	4,461,134	1.88	1.14	(1.23)
2014	3,188,782	1.52	4,841,795	1.85	1.14	7.98
<b>MML Managed Bond Sub-Account</b>						
2018	1,247,874	1.28	1,596,099	3.21	1.14	(1.82)
2017	1,447,898	1.30	1,886,231	2.94	1.14	3.25
2016	1,441,900	1.26	1,819,234	2.59	1.14	1.33
2015	1,533,820	1.25	1,909,733	2.58	1.14	(2.12)
2014	1,699,403	1.27	2,161,720	3.09	1.14	4.99
<b>MML Mid Cap Growth Sub-Account</b>						
2018	2,949,968	5.07	14,944,352	-	1.14	(3.29)
2017	3,267,313	5.24	17,114,659	0.04	1.14	23.40
2016	3,748,887	4.24	15,912,997	-	1.14	5.09
2015	4,114,270	4.04	16,618,699	-	1.14	5.57
2014	4,431,313	3.83	16,954,307	-	1.14	11.99
<b>MML Short-Duration Bond Sub-Account</b>						
2018	400,158	1.08	431,338	2.70	1.14	0.13
2017	416,119	1.08	447,956	2.48	1.14	1.13
2016	427,453	1.06	454,994	2.00	1.14	1.39
2015	411,522	1.05	432,021	2.09	1.14	(0.46)
2014	430,576	1.05	454,130	2.21	1.14	(0.03)
<b>Oppenheimer Conservative Balanced Sub-Account</b>						
2018	5,767,296	2.64	15,245,254	1.98	1.14	(6.40)
2017	6,284,150	2.82	17,747,539	1.98	1.14	8.02
2016	6,899,117	2.61	18,038,190	2.39	1.14	4.07
2015	7,722,098	2.51	19,400,381	2.25	1.14	(0.31)
2014	8,485,388	2.52	21,384,656	2.06	1.14	6.97
<b>Oppenheimer Government Money Sub-Account</b>						
2018	859,123	1.40	1,206,957	1.31	1.14	0.20
2017	1,227,272	1.40	1,720,722	0.38	1.14	(0.75)
2016	1,149,430	1.41	1,623,691	0.01	1.14	(1.12)
2015	1,696,364	1.43	2,423,480	0.01	1.14	(1.12)
2014	1,812,993	1.44	2,619,533	0.01	1.14	(1.12)

# Notes To Financial Statements (Continued)

## 8. FINANCIAL HIGHLIGHTS (Continued)

	At December 31,			For the Years Ended December 31,		
	Units	Net Assets		Investment Income Ratio <sup>1</sup>	Expense Ratio <sup>2</sup>	Total Return <sup>3</sup>
		Unit Value <sup>3</sup>	Amount			
<b>Oppenheimer International Growth Sub-Account</b>						
2018 .....	2,093,724	\$3.86	\$ 8,075,381	0.88%	1.14%	(20.34)%
2017 .....	2,278,924	4.84	11,033,503	1.42	1.14	24.86
2016 .....	2,509,925	3.88	9,732,072	1.12	1.14	(3.22)
2015 .....	2,911,193	4.01	11,663,991	1.16	1.14	2.26
2014 .....	3,139,760	3.92	12,301,783	1.18	1.14	(8.27)
<b>Oppenheimer Main Street Sub-Account</b>						
2018 .....	10,398,812	2.05	21,273,847	1.16	1.14	(8.94)
2017 .....	11,595,613	2.25	26,050,149	1.25	1.14	15.59
2016 .....	12,784,628	1.94	24,847,973	1.12	1.14	10.36
2015 .....	13,810,524	1.76	24,323,163	0.93	1.14	2.16
2014 .....	15,061,797	1.72	25,966,750	0.83	1.14	9.45
<b>Oppenheimer Total Return Bond Sub-Account</b>						
2018 .....	980,765	1.92	1,881,719	3.52	1.14	(2.15)
2017 .....	1,267,903	1.96	2,486,089	2.42	1.14	3.40
2016 .....	1,380,087	1.90	2,616,981	3.71	1.14	2.10
2015 .....	1,499,552	1.86	2,784,952	4.06	1.14	(0.18)
2014 .....	1,623,477	1.86	3,020,641	5.25	1.14	6.05

<sup>1</sup> The investment income ratios represent the dividends, excluding distributions of capital gains, received by the sub-account from the underlying mutual fund, net of management fees assessed by the fund manager, divided by the average net assets. These ratios exclude those expenses, such as mortality and expense charges, that are assessed against contract owners accounts either through reductions in the unit values or the redemption of units. The recognition of investment income by the sub-account is affected by the timing of the declaration of dividends by the underlying fund in which the sub-account invests.

<sup>2</sup> The expense ratios represent the annualized contract expenses of the Separate Account, consisting primarily of mortality and expense charges, for each period indicated. The ratios include only those expenses that result in a direct reduction of unit values. Charges made directly to contract owner accounts through the redemption of units and expenses of the underlying fund have been excluded.

<sup>3</sup> The total returns are for the periods indicated, including changes in the value of the underlying fund, and the expenses assessed through the reduction of unit values. These ratios do not include any expenses assessed through the redemption of units. Investment options with a date notation indicate the effective date of that investment option in the variable account. The total return is calculated for each period indicated or from the effective date through the end of the reporting period.

**B.** The Separate Account assesses charges associated with the contract. These charges are either assessed as a direct reduction in unit values or through a redemption of units for all contracts contained within the Separate Account.

<b>Mortality and Expense Risk Charge</b> This charge is assessed through reduction of unit values.	This charge is equal, on an annual basis, to 1.07% of the daily value of the assets invested in each fund
<b>Administrative Expense Charge</b> This charge is assessed through reduction of unit values.	This charge is equal, on an annual basis, to 0.07% of the daily value of the contracts invested in each fund
<b>Contract Maintenance Fee</b> This charge is assessed through the redemption of units.	\$30 per contract, annually
<b>Surrender Charge</b> This charge is assessed through the redemption of units.	0% - 5%

## 9. SUBSEQUENT EVENTS

The Separate Account's management has reviewed events occurring through March 19, 2019, the date the financial statements were issued, and no subsequent events occurred requiring accrual or disclosure.

