

Merck & Co., Inc.  
Form 11-K  
June 19, 2017

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549  
FORM 11-K  
FOR ANNUAL REPORTS OF EMPLOYEE STOCK PURCHASE, SAVINGS AND SIMILAR PLANS  
Pursuant to Section 15(d) of the Securities Exchange Act of 1934  
(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2016

OR  
 TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: 1-06571

Employer Identification Number: 98-0658260

Plan Number: 061

MSD PUERTO RICO SAVINGS & SECURITY PLAN

---

(Full title of the plan)

MERCK & CO., INC.

---

(Name of issuer of the securities held pursuant to the plan)

2000 Galloping Hill Road

Kenilworth, New Jersey 07033

---

(Address of principal executive office)

---

MSD Puerto Rico Savings & Security Plan  
Index

	Page(s)
<u>Report of Independent Registered Public Accounting Firm</u>	<u>1</u>
Financial Statements:	
<u>Statements of Net Assets Available for Benefits as of December 31, 2016 and 2015</u>	<u>2</u>
<u>Statement of Changes in Net Assets Available for Benefits for the Year Ended December 31, 2016</u>	<u>3</u>
<u>Notes to Financial Statements</u>	<u>4-12</u>
Supplemental Schedules*:	
<u>G - Part III - Schedule of Nonexempt Transactions for the Year Ended December 31, 2016</u>	<u>13</u>
<u>H – Line 4i – Schedule of Assets (Held at End of Year)</u>	<u>14</u>
<u>Signature</u>	<u>15</u>
<u>Exhibit Index</u>	<u>16</u>
<u>Exhibit 23 - Consent of Independent Registered Public Accounting Firm</u>	<u>17</u>
<p>Other schedules required by Section 2520.103-10 of the Department of Labor Rules and Regulations for Reporting *and Disclosure under the Employee Retirement Income Security Act of 1974 are omitted because they are not applicable.</p>	

Report of Independent Registered Public Accounting Firm

To the Administrator of  
MSD Puerto Rico Savings & Security Plan

In our opinion, the accompanying statements of net assets available for benefits and the related statement of changes in net assets available for benefits present fairly, in all material respects, the net assets available for benefits of MSD Puerto Rico Savings & Security Plan (the "Plan") as of December 31, 2016 and 2015, and the changes in net assets available for benefits for the year ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

The supplemental schedules of nonexempt transactions for the year ended December 31, 2016 and assets (held at end of year) as of December 31, 2016 have been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. The supplemental schedules are the responsibility of the Plan's management. Our audit procedures included determining whether the supplemental schedules reconcile to the financial statements or the underlying accounting and other records, as applicable, and performing procedures to test the completeness and accuracy of the information presented in the supplemental schedules. In forming our opinion on the supplemental schedules, we evaluated whether the supplemental schedules, including their form and content, are presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. In our opinion, the schedule of nonexempt transactions and schedule of assets (held at end of year) are fairly stated, in all material respects, in relation to the financial statements as a whole.

/s/ PricewaterhouseCoopers LLP  
New York, New York  
June 19, 2017

MSD Puerto Rico Savings & Security Plan  
 Statements of Net Assets Available for Benefits

	December 31,	
(in thousands)	2016	2015
Assets		
Investments		
Investments, at fair value	\$ 127,644	\$ 117,953
Receivables		
Employer contributions	43	34
Participant contributions	86	68
Notes receivable from participants	2,934	3,143
Total receivables	3,063	3,245
Net assets available for benefits	\$ 130,707	\$ 121,198

The accompanying notes are an integral part of these financial statements.

MSD Puerto Rico Savings & Security Plan  
Statement of Changes in Net Assets Available for Benefits

(in thousands)	Year Ended December 31, 2016
Additions to net assets attributed to	
Investment income	
Net appreciation in fair value of investments	\$7
Interest and dividends	14
Plan interest in Master Trust investment income	10,160
Total investment income	10,181
Interest income on notes receivable from participants	133
Contributions to the Plan	
By participants	4,158
By employer	1,909
Total contributions	6,067
Total additions	16,381
Deductions from net assets attributed to	
Benefits paid to participants	(6,872 )
Total deductions	(6,872 )
Net increase	9,509
Net assets available for benefits	
Beginning of year	121,198
End of year	\$130,707

The accompanying notes are an integral part of these financial statements.



MSD Puerto Rico Savings & Security Plan  
Notes to Financial Statements

1. Description of Plan

The following description of the MSD Puerto Rico Savings & Security Plan (the "Plan") provides only general information. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

General

The Plan is a defined contribution plan established effective July 1, 1997. The Plan is a profit sharing plan designed to provide a systematic means of saving and investing for the future and an opportunity for employees of MSD International GmbH (Puerto Rico Branch) LLC, Merck Sharp & Dohme de Puerto Rico, Inc., MSD Supply Services Inc., and the Puerto Rico branch of Merck Sharp & Dohme (I.A.) LLC (the "Companies") to become shareholders of Merck & Co., Inc. ("Merck" or the "Company"). Regular full-time employees of the Companies, as defined in the Plan document, who are not covered by a collective bargaining agreement are eligible to enroll in the Plan as soon as administratively feasible after such employee begins service with one of the Companies. MSD International GmbH (Puerto Rico Branch) LLC, a branch of MSD International GmbH, a Swiss limited liability company, is the Plan sponsor (the "Sponsor"). The Plan's recordkeeper is Fidelity Investments Institutional Services Company ("Fidelity" or the "Recordkeeper"). Banco Popular de Puerto Rico serves as the Plan's trustee (the "Trustee").

Participants direct the investment of their contributions into any fund investment option available under the Plan, including Merck common stock. At December 31, 2016, the Plan offered a three-tiered approach to investing:

- \* Retirement Portfolios - custom set of target date retirement funds;
- \* Core Funds - a selection of investment options (active and passive) that span a range of asset classes;
- \* Fidelity Brokerage Link® - a self-directed brokerage account that provides access to more than 12,000 mutual funds.

The Plan is administered by management committees appointed by the Company's Chief Executive Officer, the Compensation and Benefits Committee of the Board of Directors of Merck or their delegates.

The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 ("ERISA").

Master Trust

A portion of the assets of the Plan are maintained, for investment purposes only, with all the assets of the MSD Employee Stock Purchase and Savings Plan, the Merck US Savings Plan, and the Telrx Marketing, Inc. 401(k) Plan in a single master trust (the "Master Trust"). The plans do not own specific Master Trust assets but rather maintain individual beneficial interests in such assets.

The portion of Master Trust assets allocable to each plan is based upon the participants' account balances within each plan. Investment income for the Master Trust is allocated to each plan based on the relationship of each plan's beneficial interest in the Master Trust to the total beneficial interest of all plans in the Master Trust.

Contributions

Participants may contribute up to 25% of their annual eligible compensation on a before-tax basis. However, before-tax contributions cannot exceed the lesser of: (i) the amount as in effect under Section 402(g) of the U.S. Internal Revenue Code of 1986, as amended (the "U.S. Code") or Section 1081.01(d)(7)(A) of the Internal Revenue Code for a New Puerto Rico of 2011, as amended (the "2011 PR Code"); or (ii) in the case of highly compensated employees, the average actual deferral percentage limit. Also, total annual additions to a participant's accounts during a plan year are limited to the lesser of: (i) the applicable limit for a particular tax year under Section 415(c) of the U.S. Code as adjusted by the Secretary of the Treasury; or (ii) one hundred percent (100%) of the participant's compensation paid by the employer during the calendar year. Participants may also contribute up to 25% of their annual eligible compensation on an after-tax basis subject to the limit provided under Section 1081.01(a)(15). Upon reaching the before-tax statutory limit, or upon reasonable expectations that any of the aforementioned limits will be exceeded, the participant may elect to suspend contributions for the remainder of the plan year or elect to continue on an after-tax basis. The combination of before-tax and after-tax contributions may not exceed the statutory limit (\$53,000 in 2016).





MSD Puerto Rico Savings & Security Plan  
Notes to Financial Statements

In addition, the Company makes matching contributions of \$0.75 for every \$1.00 of an employee's contributions, up to 6% of such employee's eligible compensation (maximum match is 4.5% of eligible compensation) per pay period (to the statutory limit). Participant and Company matching contributions are invested according to a participant's elections.

Participants are automatically enrolled in the Plan 60 days after first becoming eligible with a before-tax contribution rate of 6%. In addition, each participant with a before-tax base pay contribution rate of at least 1% may elect to participate in an annual automatic increase program, in whole percentages of at least 1% and not more than 3% per year. The automatic percentage increase may not cause a participant's before-tax base pay contribution rate to exceed 25%.

Legacy Schering-Plough Transitional Contributions – The Company shall make additional contributions of 0.5% of annual eligible compensation for participants that were eligible to participate in the Schering-Plough Puerto Rico Employees' Retirement Savings Plan as of December 31, 2012, and who have maintained continuous employment with the Company thereafter. These transitional contributions will apply for the period from January 1, 2013 through December 31, 2019, to those employees who remain eligible to contribute to the Plan.

Age 50 and above — In addition, the Plan permits unmatched before-tax “catch-up contributions” of up to \$1,500 by participants who are at least age 50 by year-end.

#### Participant Accounts

Each participant's account is credited with the participant's contributions, the Companies' contributions, and an allocation of Plan earnings. The allocation is based on participants' account balances, as defined in the Plan document.

#### Vesting

Participants are immediately vested in their contributions, all Companies' matching contributions, plus actual earnings thereon.

#### Notes Receivable from Participants

Participants may borrow from their account balances with interest charged at the prime rate plus 1%. Loan terms range from one to five years for a short-term loan or up to fifteen years for the purchase of a primary residence and bear interest at rates that range from 4.25% to 10.00%. The minimum loan is \$1,000 and the maximum loan is the lesser of (i) \$50,000 less the highest outstanding loan balance(s) during the one year period prior to the new loan application date, or (ii) 50% of the participant's account balance less any current outstanding loan balance(s) and defaulted loan amounts. Principal and interest is paid ratably through payroll deductions.

#### Payment of Benefits

Participants are entitled to receive automatic, voluntary, in-service (which include hardship withdrawals), or mandatory distributions as provided in the applicable Plan provisions.

## 2. Summary of Accounting Policies

#### Basis of Accounting

The accompanying financial statements are prepared on the accrual basis of accounting.

#### Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, and disclosure of contingent assets and liabilities at the date of the financial statements. Management believes that these estimates are adequate. Actual results could differ from those estimates.

MSD Puerto Rico Savings & Security Plan  
Notes to Financial Statements

Investment Valuation and Income Recognition

All investments are recorded at fair value in the accompanying financial statements. Valuation of investments of the Plan that are in the Master Trust represents the Plan's allocable portion of the Master Trust. The Plan's investment in the Master Trust is stated at fair value and is based on the beginning of year value of the Plan's interest in the Master Trust plus actual Plan contributions and allocated investment income less Plan distributions, allocated investment losses and allocated expenses.

Purchases and sales of securities are recorded on a trade-date basis. Dividend income is recorded on the ex-dividend date. Interest income is recorded as earned. Realized gains and losses from security transactions are reported on the average cost method.

Notes Receivable from Participants

Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Delinquent participant loans are reclassified as benefit payments based upon the terms of the Plan document. No allowance for credit losses has been recorded as of December 31, 2016 and 2015.

Contributions

Employee and matching contributions by the Companies are recorded in the period in which the Companies make the payroll deductions from the participants' earnings.

Payment of Benefits

Benefits are recorded when paid.

Expenses

The Plan's administrative expenses are generally paid by the Companies. Inactive participants pay an annual recordkeeping fee from their account balance.

Recently Issued Accounting Standards

In May 2015, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2015-07, Disclosures for Investments in Certain Entities that Calculate Net Asset Value per Share (or Its Equivalent), which amends disclosure requirements of Accounting Standards Codification Topic 820, Fair Value Measurement ("Topic 820"), for reporting entities that measure the fair value of an investment using the net asset value per share (or its equivalent) as a practical expedient. The amendments remove the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value per share practical expedient, and also remove the requirements to make certain disclosures for all investments that are eligible to be measured at fair value using the net asset value per share practical expedient. ASU No. 2015-07 is effective for the Plan's fiscal years beginning after December 15, 2015, with early application permitted. The amendments have been applied retrospectively to all periods presented.

In July 2015, the FASB issued ASU No. 2015-12, Plan Accounting: Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), Health and Welfare Benefit Plans (Topic 965): (Part I) Fully Benefit-Responsive Investment Contracts, (Part II) Plan Investment Disclosures, (Part III) Measurement Date Practical Expedient (Consensus of the Emerging Issues Task Force). ASU No. 2015-12 designates contract value as the only required measure for fully benefit-responsive investment contracts; eliminates the requirement to disclose (1) individual investments that represent five percent or more of net assets available for benefits and (2) the net appreciation or depreciation for investments by general type for both participant-directed investments and nonparticipant-directed investments; requires investments (both participant-directed and nonparticipant-directed investments) of employee benefit plans be grouped only by general type, eliminating the need to disaggregate the investments in multiple ways; removes the requirement to disclose an investment's strategy for investments measured using the net asset value per share (or its equivalent) practical expedient in Topic 820 and that are in a fund that files a U.S. Department of Labor Form 5500; and permits plans to measure investments and investment-related accounts as of a month-end date that is closest to the plan's fiscal year-end, when the fiscal period does not coincide with a month-end. ASU No. 2015-12 is effective for fiscal years beginning after December 15, 2015, with early application

permitted. The applicable amendments have been applied retrospectively to all periods presented.

-6-

---

MSD Puerto Rico Savings & Security Plan  
Notes to Financial Statements

In February 2017, the FASB issued ASU No. 2017-06, Plan Accounting: Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), Health and Welfare Benefit Plans (Topic 965): Employee Benefit Plan Master Trust Reporting. ASU No. 2017-06 requires the plan's interest in the master trust and the change in that interest to be presented in separate line items in the statement of net assets available for benefits and the statement of changes in net assets available for benefits, respectively; it also requires disclosure of: the total master trust investment amounts by general type and the dollar amount of the plan's interest in each general type of investment, the master trust's other assets and liabilities and the dollar amount of the plan's interest in each balance, and the net appreciation/(depreciation) in the fair value of the investments of the master trust and investment income exclusive of such net appreciation/(depreciation); additionally, it requires a description of the basis used to allocate net assets and total investment income to the plan, including the plan's percentage interest in the master trust as of the date of each statement of net assets available for benefits presented; lastly, it removes investment disclosures about 401(h) account assets to be provided in health and welfare benefit plan financial statements. ASU No. 2017-06 is effective for fiscal years beginning after December 15, 2018, with early application permitted. The Plan Sponsor is currently evaluating the impact on the Plan of adopting ASU No. 2017-06.

#### Risks and Uncertainties

The Plan provides for various investment options in investment securities. Investment securities, in general, are exposed to various risks and may decline in value for a number of reasons, including changes in prevailing interest rates and credit availability, increases in defaults, increases in voluntary prepayments for investments that are subject to prepayment risk under normal market conditions, widening of credit spreads and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the Statements of Net Assets Available for Benefits.

#### 3. Related-Party Transactions

Contributions are transmitted from the Trustee to the Recordkeeper, which invests cash received, interest and dividend income and makes distributions to the participants. The Recordkeeper also administers the collection of interest and principal on the notes receivable from participants. These transactions qualify as permitted party-in-interest transactions.

Certain Plan investments are shares of registered investment companies (mutual funds) and common/collective trusts managed by the Recordkeeper. Fidelity is the Recordkeeper as defined by the Plan and, therefore, these transactions qualify as party-in-interest transactions. The total market value of the Plan's allocated portion of the investments managed by the Recordkeeper was \$8.7 million and \$10.2 million at December 31, 2016 and December 31, 2015, respectively. During 2016, the Plan's allocated portion of interest and dividends, realized losses and unrealized gains from investments managed by the Recordkeeper was \$13,849, (\$82,418) and \$3,848, respectively.

Merck also is a party-in-interest to the Plan under the definition provided in Section 3(14) of ERISA. Therefore, Plan transactions of Merck common stock qualify as party-in-interest transactions. The market value of the Plan's allocated portion of the investments in Merck common stock was \$27.8 million and \$26.0 million at December 31, 2016, and December 31, 2015, respectively. During 2016, the Plan's allocated portion of dividends, realized gains and unrealized gains from Merck common stock was \$891,428, \$277,542 and \$2.7 million, respectively. The Plan's allocated portion of purchases and sales of Merck common stock during 2016 was \$0.8 million and \$2.0 million, respectively.

#### 4. Plan Termination

Although they have not expressed any intent to do so, the Companies have the right under the Plan to discontinue their contributions at any time and to terminate the Plan subject to the provisions of ERISA. Upon termination of the Plan, each participant thereby affected would receive the entire value of his or her account as though he or she had retired as of the date of such termination.



MSD Puerto Rico Savings & Security Plan  
Notes to Financial Statements

#### 5. Tax Status

The Plan is qualified under Section 1081.01 of the 2011 PR Code and with Section 401(a) of the U.S. Code, and has received a favorable determination letter from the Puerto Rico Department of Treasury (the "PR Treasury") and from the U.S. Internal Revenue Service as to its qualified status under the 2011 PR Code and the U.S. Code, respectively. The Trust associated with the Plan is intended to be exempt from Puerto Rico income taxation pursuant to the provisions of Section 1081.01(a) of the 2011 PR Code. The Plan's Master Trust is to be considered as an organization as described in Section 401(a) and exempt under Section 501(a) of the U.S. Code. Accordingly, no provision for income taxes has been made. Finally, the Trust has complied with the requirements established by Section 1022(i)(1) of ERISA.

Accounting principles generally accepted in the United States of America require Plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the Plan has taken an uncertain position that more likely than not would not be sustained upon examination by the PR Treasury pursuant to the provisions of the 2011 PR Code. The Company has analyzed the tax positions taken by the Plan and has concluded that, as of December 31, 2016 and 2015, there are no uncertain tax positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The Plan administrator believes it is no longer subject to income tax examinations for years prior to 2013.

#### 6. Master Trust and Investments

The Plan had a 1.5% and 1.3% interest in the Master Trust at December 31, 2016 and 2015, respectively. The net assets of the Master Trust are as follows:

(in thousands)	December 31,	
	2016	2015
Registered investment companies (mutual funds)	\$1,250,571	\$1,238,958
Common/collective trusts	4,717,867	4,257,789
Fixed income securities	203,933	180,713
Self-directed brokerage accounts	43,922	-
Merck common stock	927,528	888,558
Other common stocks	1,600,136	1,675,838
Accrued interest and dividends	10,196	9,862
Other net assets/(liabilities)	(29,057 )	(16,875 )
	\$8,725,096	\$8,234,843

MSD Puerto Rico Savings & Security Plan  
Notes to Financial Statements

Total investment income of the Master Trust for the year ended December 31, 2016, is as follows:

Year-Ended December 31, 2016

(in thousands)

Investment income, net	
Interest and dividends	\$47,256
Net appreciation	587,922

Total investment income \$635,178

During 2016, the Plan's investments in registered investment companies (mutual funds) held outside of the Master Trust (including gains and losses on investments bought and sold, as well as held during the year) appreciated \$6,549 in value.

#### 7. Fair Value Measurements

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Entities are required to use a fair value hierarchy that maximizes the use of observable inputs and minimizes the use of unobservable inputs when measuring fair value. There are three levels of inputs that may be used to measure fair value:

Level 1 – Quoted prices in active markets for identical assets or liabilities. The Master Trust's Level 1 investments primarily include registered investment companies (mutual funds), self-directed brokerage accounts and common stocks.

Level 2 – Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. The Master Trust's Level 2 investments primarily include investments in certain fixed income investments such as government and agency obligations, corporate obligations and mortgage and asset-backed securities.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are financial instruments whose values are determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant judgment or estimation. The Master Trust did not hold any Level 3 investments at December 31, 2016 and 2015.

If the inputs used to measure the financial assets and liabilities fall within more than one level described above, the categorization is based on the lowest level input that is significant to the fair value measurement of the instrument. There have been no changes in the valuation methodology used at December 31, 2016 and 2015. The policy of the Master Trust and the Plan is to recognize transfers between levels at the end of the reporting period. There were no transfers between Levels 1 and 2.

Within the Plan and Master Trust, investments are recorded at fair value as follows:

#### Registered Investment Companies (Mutual Funds)

Registered investment companies (mutual funds) are valued at their respective net asset values. The net asset values are typically determined by the fund at the close of regular trading. Investments in registered investment companies (mutual funds) generally may be redeemed daily.

MSD Puerto Rico Savings & Security Plan  
Notes to Financial Statements

Common/Collective Trusts

The common/collective trusts are valued at their respective net asset values, as practical expedient. The fair value of investments in the common/collective trusts are determined by their trustee. The Master Trust's investments in common/collective trusts generally may be redeemed daily.

Fixed Income Securities

Fixed income securities, including U.S. government and agency obligations, corporate obligations and mortgage and asset-backed securities, are generally valued on the basis of valuations furnished by a pricing service approved by the Recordkeeper or at fair value as determined in good faith by the Recordkeeper and the Companies. The Recordkeeper has the discretionary authority to hire a pricing service to determine valuations using methods based on current market transactions, prices for comparable securities and various relationships between securities which are generally recognized by institutional traders.

Self-Directed Brokerage Accounts

Self-directed brokerage accounts are comprised of mutual funds which are valued at the closing price reported in the active market in which the securities are traded.

Common Stocks

Common stocks, for which market quotations are readily available, are generally valued at the last reported sales price on their principal exchange on the valuation date, or official close price for certain markets. If no sales are reported for that day, investments are valued at the more recent of (i) the last published sale price or (ii) the mean between the last reported bid and asked prices for long positions, or at fair value as determined in good faith by the Recordkeeper and the Companies.



MSD Puerto Rico Savings & Security Plan  
Notes to Financial Statements

Investments Measured at Fair Value

Investments at fair value is comprised of \$7,713 of cash equivalents and a \$127.6 million interest in the Master Trust. Investments measured at fair value are summarized below:

December 31, 2016

Fair Value Measurements Using

Quoted Prices In Active Markets (thousands)	Significant		Total
	Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Assets			
Cash Equivalents	\$ -	\$ -	\$ 8
Total Assets	\$ -	\$ -	\$ 8
Investments in the Master Trust			
Registered Investment Companies	\$ -	\$ -	\$ 1,250,571
Fixed Income Securities	203,933	-	203,933
Self-directed Brokerage Accounts	43,922	-	43,922
Merck Common Stock	927,528	-	927,528
Other Common Stocks	1,600,136	-	1,600,136
Total Investments measured	\$ 203,933	\$ -	\$ 4,026,090

within  
the  
fair  
value  
hierarchy

Common/Collective  
Trusts  
measured  
at  
NAV  
practical  
expedient  
(1)

\$4,717,867

Investments  
at  
fair  
value

\$8,743,957

(1) Certain investments that were measured at net asset value (NAV) per share or its equivalent have not been classified in the fair value hierarchy. The fair value amounts presented in this table also do not include the Master Trust's accrued interest and dividends or other net liabilities.

MSD Puerto Rico Savings & Security Plan  
Notes to Financial Statements

Investments Measured at Fair Value

Investments at fair value is comprised of registered investment companies of \$10.6 million, \$129,316 of cash equivalents and a \$107.2 million interest in the Master Trust. Investments measured at fair value are summarized below:

December 31, 2015

Fair Value Measurements Using

Quoted Prices In Active Markets (in thousands)	Significant		Total
	Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Assets			
Registered Investment Companies	\$10,584	\$ -	\$ 10,584
Cash Equivalents	129	-	129
Total Assets	\$10,713	\$ -	\$ 10,713
Investments in the Master Trust			
Registered Investment Companies	\$1,238,958	\$ -	\$ 1,238,958
Fixed Income Securities	180,713	-	180,713
Merck Common Stock	888,558	-	888,558
Other Common Stocks	1,675,838	-	1,675,838
	\$3,803,354	\$ 180,713	\$ 3,984,067

Investments  
measured  
within  
the  
fair  
value  
hierarchy

Common/Collective  
Trusts  
measured  
at  
NAV  
practical  
expedient  
(1)

\$4,257,789

Investments  
at  
fair  
value

\$8,241,856

(1) Certain investments that were measured at net asset value (NAV) per share or its equivalent have not been classified in the fair value hierarchy. The fair value amounts presented in this table also do not include the Master Trust's accrued interest and dividends or other net liabilities.

#### 8. Subsequent Events

The Plan has evaluated subsequent events through the date the financial statements were issued and no events were noted which warrant adjustments to, or disclosure in, the financial statements.

MSD Puerto Rico Savings & Security Plan  
 Schedule G, Part III - Nonexempt Transactions  
 Year Ended December 31, 2016

Schedule  
G

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Identity of party involved	Relationship to plan, employer, or party -in-interest	Description of transactions, including maturity rate of interest, collateral, or maturity value	Purchase Price	Selling Price	Lease Rental	Expenses incurred in connection with transaction	Cost of Asset	Current Value of Asset	Net gain or (loss) on each transaction
Wells Capital Management, Inc.	Investment manager	Potential violation of ERISA Section 406(b)(1) involving extension of credit as a result of bond purchase	\$19,492 <sup>(1)</sup>	\$19,817 <sup>(1)</sup>	N/A	N/A	\$19,492 <sup>(1)</sup>	N/A	\$325 <sup>(1)</sup>

<sup>(1)</sup> This amount represents the aggregate amount of transactions in 2016.

MSD Puerto Rico Savings & Security Plan  
 Schedule H, Line 4i - Schedule of Assets (Held at End of Year)  
 December 31, 2016

Schedule H

(a)	(b)	(c)	(d)	(e)
	Identity of Issuer, Borrower, Lessor or Similar Party	Description of Investment Including Maturity Date, Rate of Interest, Collateral, Par or Maturity Value	Cost	Current Value
**	Master Trust	Investment in Master Trust	***	\$127,636,441
*	Banco Popular	Interest bearing cash account	***	\$7,713
*	Notes receivable from participants	Interest rates ranging from 4.25% to 10.0% and with maturities through 2033		\$2,934,340
		Total		\$130,578,494

\* Denotes a party-in-interest to the Plan.

\*\* There are certain investments within the Master Trust that are party-in-interest.

\*\*\* Cost information not required to be presented for participant directed investments.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the Plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

MSD Puerto Rico Savings & Security  
Plan

By: /s/ Mark E. McDonough  
Mark E. McDonough  
Senior Vice President and Treasurer  
June 19, 2017

EXHIBIT INDEX

Exhibit Number	Document	Page
23	Consent of Independent Registered Public Accounting Firm	17