HALF-YEAR FINANCIAL REPORT

2017 Edition

SANOFI

HALF-YEAR FINANCIAL REPORT 2017

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The condensed half-year consolidated financial statements are unaudited but have been subject to a review by the statutory auditors in accordance with professional standards applicable in France.

1 CONDENSED HALF-YEAR CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED BALANCE SHEETS — ASSETS

(€ million)	Note	June 30, 2017	December 31, 2016
Property, plant and equipment	**B.2.**	9,633	10,019
Goodwill	**B.3.**	40,964	40,287
Other intangible assets	**B.3.**	13,849	10,879
Investments in associates and joint ventures	**B.5.**	2,841	2,890
Other non-current assets	**B.6.**	2,928	2,820
Deferred tax assets		4,556	4,669
Non-current assets		**74,771**	**71,564**
Inventories		7,246	6,892
Accounts receivable	**B.7.**	6,857	7,311
Other current assets		2,091	2,211
Cash and cash equivalents	**B.9.**	10,877	10,273
Current assets		**27,071**	**26,687**
Assets held for sale or exchange	**B.21.**	28	6,421
TOTAL ASSETS		**101,870**	**104,672**

The accompanying notes on pages 10 to 37 are an integral part of the condensed half-year consolidated financial statements.

CONSOLIDATED BALANCE SHEETS — LIABILITIES AND EQUITY

(€ million)	Note	June 30, 2017	December 31, 2016
Equity attributable to equity holders of Sanofi		57,631	57,554
Equity attributable to non-controlling interests		161	170
Total equity	**B.8.**	**57,792**	**57,724**
Long-term debt	**B.9.**	15,186	16,815
Non-current liabilities related to business combinations and to non-controlling interests	**B.11.**	1,287	1,378
Provisions and other non-current liabilities	**B.12.**	8,412	8,834
Deferred tax liabilities		2,128	2,292
Non-current liabilities		**27,013**	**29,319**
Accounts payable		4,303	4,297
Other current liabilities		9,277	10,175
Current liabilities related to business combinations and to non-controlling interests	**B.11.**	234	198
Short-term debt and current portion of long-term debt	**B.9.**	3,241	1,764
Current liabilities		**17,055**	**16,434**
Liabilities related to assets held for sale or exchange	**B.21.**	10	1,195
TOTAL LIABILITIES AND EQUITY		**101,870**	**104,672**

The accompanying notes on pages 10 to 37 are an integral part of the condensed half-year consolidated financial statements.

CONSOLIDATED INCOME STATEMENTS

(€ million)	Note	June 30, 2017 (6 months)[a]	June 30, 2016 (6 months)[a]	December 31, 2016 (12 months)[a]
Net sales	**B.20.4.**	**17,311**	**15,926**	**33,821**
Other revenues		519	310	887
Cost of sales		(5,670)	(4,970)	(10,702)
Gross profit		**12,160**	**11,266**	**24,006**
Research and development expenses		(2,667)	(2,514)	(5,172)
Selling and general expenses		(5,046)	(4,609)	(9,486)
Other operating income	**B.15.**	173	265	355
Other operating expenses	**B.15.**	(71)	(195)	(482)
Amortization of intangible assets	**B.3.**	(990)	(877)	(1,692)
Impairment of intangible assets	**B.4.**	(12)	(52)	(192)
Fair value remeasurement of contingent consideration	**B.6. - B.11.**	(100)	(67)	(135)
Restructuring costs and similar items	**B.16.**	(364)	(627)	(879)
Other gains and losses, and litigation	**B.17.**	(7)	—	211
Operating income		**3,076**	**2,590**	**6,534**
Financial expenses	**B.18.**	(218)	(241)	(924)
Financial income	**B.18.**	95	50	68
Income before tax and associates and joint ventures		**2,953**	**2,399**	**5,678**
Income tax expense	**B.19.**	(610)	(497)	(1,326)
Share of profit/(loss) of associates and joint ventures		38	98	134
Net income excluding the exchanged/held-for-exchange Animal Health business		**2,381**	**2,000**	**4,486**
Net income of the exchanged/held-for-exchange Animal Health business	**B.21.**	4,421	286	314
Net income		**6,802**	**2,286**	**4,800**
Net income attributable to non-controlling interests		64	41	91
Net income attributable to equity holders of Sanofi		**6,738**	**2,245**	**4,709**
Average number of shares outstanding (million)	**B.8.7.**	1,260.3	1,287.6	1,286.6
Average number of shares outstanding after dilution (million)	**B.8.7.**	1,270.6	1,296.6	1,296.0
– Basic earnings per share (in euros)		5.35	1.74	3.66
– Basic earnings per share excluding the exchanged/held-for-exchange Animal Health business (in euros)		1.84	1.52	3.42
– Diluted earnings per share (in euros)		5.30	1.73	3.63
– Diluted earnings per share excluding the exchanged/held-for-exchange Animal Health business (in euros)		1.82	1.51	3.39

(a) The results of the Animal Health business, and the gain on the divestment of that business, are presented separately in accordance with IFRS 5 (Non-Current Assets Held for Sale and Discontinued Operations); see Note B.21.

The accompanying notes on pages 10 to 37 are an integral part of the condensed half-year consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(€ million)	Note	June 30, 2017 (6 months)	June 30, 2016 (6 months)	December 31, 2016 (12 months)
Net income		**6,802**	**2,286**	**4,800**
Attributable to equity holders of Sanofi		*6,738*	*2,245*	*4,709*
Attributable to non-controlling interests		*64*	*41*	*91*
Other comprehensive income:				
. Actuarial gains/(losses)	**B.8.8.**	282	(924)	(106)
. Tax effects	**B.8.8.**	(60)	253	(22)
Sub-total: items not subsequently reclassifiable to profit or loss (a)		**222**	**(671)**	**(128)**
. Available-for-sale financial assets		325	(422)	(105)
. Cash flow hedges		(28)	—	31
. Change in currency translation differences	**B.8.8.**	(2,011)	(37)	1,090
. Tax effects	**B.8.8.**	(51)	83	40
Sub-total: items subsequently reclassifiable to profit or loss (b)		**(1,765)**	**(376)**	**1,056**
Other comprehensive income/(loss) for the period, net of taxes (a+b)		**(1,543)**	**(1,047)**	**928**
Comprehensive income		**5,259**	**1,239**	**5,728**
Attributable to equity holders of Sanofi		*5,203*	*1,203*	*5,634*
Attributable to non-controlling interests		*56*	*36*	*94*

The accompanying notes on pages 10 to 37 are an integral part of the condensed half-year consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(€ million)	Share capital	Additional paid-in capital and retained earnings	Treasury shares	Stock options and other share-based payment	Other comprehensive income [a]	Attributable to equity holders of Sanofi	Attributable to non-controlling interests	Total equity
Balance at January 1, 2016	**2,611**	**52,010**	**(298)**	**2,814**	**912**	**58,049**	**161**	**58,210**
Other comprehensive income for the period	—	(671)	—	—	(371)	(1,042)	(5)	(1,047)
Net income for the period	—	2,245	—	—	—	2,245	41	2,286
Comprehensive income for the period	**—**	**1,574**	**—**	**—**	**(371)**	**1,203**	**36**	**1,239**
Dividend paid out of 2015 earnings (€2.93 per share)	—	(3,759)	—	—	—	(3,759)	—	(3,759)
Payment of dividends to non-controlling interests	—	—	—	—	—	—	(54)	(54)
Share repurchase program [b]	—	—	(1,402)	—	—	(1,402)	—	(1,402)
Reduction in share capital [b]	(45)	(1,655)	1,700	—	—	—	—	—
Share-based payment plans:								
. Exercise of stock options	1	16	—	—	—	17	—	17
. Issuance of restricted shares	7	(7)	—	—	—	—	—	—
. Proceeds from sale of treasury shares on exercise of stock options	—	—	—	—	—	—	—	—
. Value of services obtained from employees	—	—	—	117	—	117	—	117
. Tax effects of the exercise of stock options	—	—	—	(14)	—	(14)	—	(14)
Change in non-controlling interests without loss of control	—	(21)	—	—	—	(21)	14	(7)
Balance at June 30, 2016	**2,574**	**48,158**	**—**	**2,917**	**541**	**54,190**	**157**	**54,347**
Other comprehensive income for the period	—	544	—	—	1,423	1,967	8	1,975
Net income for the period	—	2,464	—	—	—	2,464	50	2,514
Comprehensive income for the period	**—**	**3,008**	**—**	**—**	**1,423**	**4,431**	**58**	**4,489**
Payment of dividends to non-controlling interests	—	—	—	—	—	—	(56)	(56)
Share repurchase program [b]	—	—	(1,503)	—	—	(1,503)	—	(1,503)
Share-based payment plans:								
. Exercise of stock options	6	196	—	—	—	202	—	202
. Employee share ownership	4	96	—	—	—	100	—	100
. Value of services obtained from employees	—	—	—	110	—	110	—	110
. Tax effects of the exercise of stock options	—	—	—	5	—	5	—	5
Change in non-controlling interests without loss of control	—	19	—	—	—	19	13	32
Change in non-controlling interests arising from divestment	—	—	—	—	—	—	(2)	(2)
Balance at December 31, 2016	**2,584**	**51,477**	**(1,503)**	**3,032**	**1,964**	**57,554**	**170**	**57,724**

(€ million)	Share capital	Additional paid-in capital and retained earnings	Treasury shares	Stock options and other share-based payment	Other comprehensive income [a]	Attributable to equity holders of Sanofi	Attributable to non-controlling interests	Total equity
Balance at December 31, 2016	**2,584**	**51,477**	**(1,503)**	**3,032**	**1,964**	**57,554**	**170**	**57,724**
Other comprehensive income for the period	—	222	—	—	(1,757)	(1,535)	(8)	(1,543)
Net income for the period	—	6,738	—	—	—	6,738	64	6,802
Comprehensive income for the period	**—**	**6,960**	**—**	**—**	**(1,757)**	**5,203**	**56**	**5,259**
Dividend paid out of 2016 earnings (€2.96 per share)	—	(3,710)	—	—	—	(3,710)	—	(3,710)
Payment of dividends to non-controlling interests	—	—	—	—	—	—	(55)	(55)
Share repurchase program [b]	—	—	(1,697)	—	—	(1,697)	—	(1,697)
Reduction in share capital [b]	(73)	(2,709)	2,782	—	—	—	—	—
Share-based payment plans:								
. Exercise of stock options	3	96	—	—	—	99	—	99
. Issuance of restricted shares	7	(7)	—	—	—	—	—	—
. Value of services obtained from employees	—	—	—	126	—	126	—	126
. Tax effects of the exercise of stock options	—	—	—	13	—	13	—	13
Other movements related to issuance of restricted shares [c]	—	16	—	—	—	16	—	16
Change in non-controlling interests without loss of control	—	27	—	—	—	27	(5)	22
Change in non-controlling interests generated by divestment	—	—	—	—	—	—	(5)	(5)
Balance at June 30, 2017	**2,521**	**52,150**	**(418)**	**3,171**	**207**	**57,631**	**161**	**57,792**

(a) See Note B.8.8.
(b) See Notes B.8.2. and B.8.3.
(c) Issuance of restricted shares to former employees of the Animal Health business subsequent to the date of divestment.

The accompanying notes on pages 10 to 37 are an integral part of the condensed half-year consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(€ million)	Note	June 30, 2017 (6 months)[a]	June 30, 2016 (6 months)[a]	December 31, 2016 (12 months)[a]
Net income attributable to equity holders of Sanofi		**6,738**	**2,245**	**4,709**
Net (income)/loss of the exchanged/held-for-exchange Animal Health business		(4,421)	(286)	(314)
Non-controlling interests, excluding BMS [b]		21	(3)	5
Share of undistributed earnings of associates and joint ventures		(9)	(57)	(83)
Depreciation, amortization and impairment of property, plant and equipment and intangible assets		1,762	1,572	3,301
Gains and losses on disposals of non-current assets, net of tax [c]		(79)	(27)	(244)
Net change in deferred taxes		(269)	(477)	(542)
Net change in provisions [d]		(204)	(107)	20
Cost of employee benefits (stock options and other share-based payments)		126	111	241
Impact of the workdown of acquired inventories remeasured at fair value		176	—	—
Unrealized (gains)/losses recognized in income		(9)	(122)	(83)
Operating cash flow before changes in working capital and excluding the exchanged/held-for-exchange Animal Health business		**3,832**	**2,849**	**7,010**
(Increase)/decrease in inventories		(502)	(514)	(323)
(Increase)/decrease in accounts receivable		150	103	168
Increase/(decrease) in accounts payable		110	74	447
Net change in other current assets, current financial assets and other current liabilities [e]		(1,034)	27	536
Net cash provided by/(used in) operating activities excluding the exchanged/held-for-exchange Animal Health business [f]		**2,556**	**2,539**	**7,838**
Net cash provided by/(used in) operating activities of the exchanged/held-for-exchange Animal Health business		**—**	**68**	**346**
Acquisitions of property, plant and equipment and intangible assets	**B.2. – B.3.**	(998)	(1,200)	(2,083)
Acquisitions of investments in consolidated undertakings, net of cash acquired [g]/[i]	**B.1.**	(381)	(345)	(426)
Acquisitions of available-for-sale financial assets		(105)	(123)	(208)
Proceeds from disposals of property, plant and equipment, intangible assets and other non-current assets, net of tax [h]		440	264	209
Net change in loans and other financial assets		(18)	(10)	(3)
Net cash provided by/(used in) investing activities excluding the exchanged/held-for-exchange Animal Health business		**(1,062)**	**(1,414)**	**(2,511)**
Net cash provided by/(used in) investing activities of the exchanged/held-for-exchange Animal Health business		**—**	**(56)**	**(126)**
Net cash inflow from the exchange of the Animal Health business for BI's Consumer Healthcare business [j]	**B.1. – B.21.**	**4,349**	**—**	**—**
Issuance of Sanofi shares	**B.8.1.**	99	17	305
Dividends paid:				
. to shareholders of Sanofi		(3,710)	(3,759)	(3,759)
. to non-controlling interests, excluding BMS [b]		(11)	(9)	(21)
Transactions with non-controlling interests, other than dividends		(37)	—	(11)
Additional long-term debt contracted	**B.9.1.**	1	1,787	4,773
Repayments of long-term debt	**B.9.1.**	(7)	(2,582)	(2,576)
Net change in short-term debt		173	1,856	96
Acquisitions of treasury shares	**B.8.2.**	(1,700)	(1,404)	(2,908)
Disposals of treasury shares, net of tax		—	—	—
Net cash provided by/(used in) financing activities excluding the exchanged/held-for-exchange Animal Health business		**(5,192)**	**(4,094)**	**(4,101)**

(€ million)	Note	June 30, 2017 (6 months)[(a)]	June 30, 2016 (6 months)[(a)]	December 31, 2016 (12 months)[(a)]
Net cash provided by/(used in) financing activities of the exchanged/held-for-exchange Animal Health business		**—**	**(9)**	**111**
Impact of exchange rates on cash and cash equivalents		**(47)**	**(103)**	**(101)**
Net change in cash and cash equivalents		**604**	**(3,072)**	**1,125**
Cash and cash equivalents, beginning of period		**10,273**	**9,148**	**9,148**
Cash and cash equivalents, end of period	**B.9.**	**10,877**	**6,076**	**10,273**

(a) For 2016, cash flows of the Animal Health business are presented separately in accordance with IFRS 5 (Non-Current Assets Held for Sale and Discontinued Operations). For the six months ended June 30, 2017, the main cash effect of the exchange of the Animal Health business for Boehringer Ingelheim's (BI) Consumer Healthcare business is described below in note (j).
(b) See Note C.2. to the financial statements for the year ended December 31, 2016.
(c) Includes available-for-sale financial assets.
(d) This line item includes contributions paid to pension funds (see Note B.12.).
(e) In the first half of 2017, mainly due to settlement of tax liabilities and social liabilities.
(f) Including:

- Income tax paid (excluding the Animal Health business, see note [(j)])	(1,324)	(1,180)	(2,096)
- Interest paid (excluding cash flows on derivative instruments used to hedge debt)	(114)	(180)	(401)
- Interest received (excluding cash flows on derivative instruments used to hedge debt)	30	28	56
- Dividends received from non-consolidated entities	14	3	9

(g) This line item includes payments made in respect of contingent consideration identified and recognized as a liability in business combinations.
(h) This line item includes proceeds from disposals of investments in consolidated entities and of other non-current financial assets.
(i) The main cash effect of the exchange of the Animal Health business for Boehringer Ingelheim's (BI) Consumer Healthcare business was the receipt by Sanofi of a balancing cash payment of €4,207 million. Consequently, all of the cash flows arising from that exchange transaction during the first half of 2017 are presented in a separate line item, ***Net cash inflow from the exchange of the Animal Health business for BI's Consumer Healthcare business***.
(j) For the six months ended June 30, 2017, this line item comprises (i) the receipt by Sanofi of a balancing cash payment of €4,207 million; (ii) reimbursements of intragroup accounts with Merial entities totaling €967 million; (iii) a partial payment of €934 million of the tax on the gain arising on the divestment; and (iv) the cash held by the BI subsidiaries acquired by Sanofi. The total consideration for the sale of the Animal Health business to BI was €10,320 million (see Note B.21.), and the consideration for the acquisition of BI's Consumer Healthcare business was €6,271 million (see Note B.1.).

The accompanying notes on pages 10 to 37 are an integral part of the condensed half-year consolidated financial statements.

NOTES TO THE CONDENSED HALF-YEAR CONSOLIDATED FINANCIAL STATEMENTS AS OF JUNE 30, 2017

INTRODUCTION

Sanofi, together with its subsidiaries (collectively "Sanofi" or "The Company"), is a global healthcare leader engaged in the research, development and marketing of therapeutic solutions focused on patient needs.

Sanofi is listed in Paris (Euronext: SAN) and New York (NYSE: SNY).

The condensed consolidated financial statements for the six months ended June 30, 2017 were reviewed by the Sanofi Board of Directors at the Board meeting on July 28, 2017.

A/ Basis of preparation of the half-year financial statements and accounting policies

A.1. INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)

The half-year consolidated financial statements have been prepared and presented in condensed format in accordance with IAS 34 (Interim Financial Reporting). The accompanying notes therefore relate to significant events and transactions of the period, and should be read in conjunction with the consolidated financial statements for the year ended December 31, 2016.

The accounting policies used in the preparation of the consolidated financial statements as of June 30, 2017 comply with international financial reporting standards (IFRS) as endorsed by the European Union and as issued by the International Accounting Standards Board (IASB). The accounting policies applied as of June 30, 2017 are identical to those described in the notes to the published consolidated financial statements as of December 31, 2016.

IFRS as endorsed by the European Union as of June 30, 2017 are available via the following web link:

http://ec.europa.eu/finance/company-reporting/standards-interpretations/index_en.htm

A.2. USE OF ESTIMATES

The preparation of financial statements requires management to make reasonable estimates and assumptions based on information available during the review and finalization of the financial statements. Those estimates and assumptions may affect the reported amounts of assets, liabilities, revenues and expenses in the financial statements, and disclosures of contingent assets and contingent liabilities as at the date of the review of the financial statements. Examples of estimates and assumptions include:

- amounts deducted from sales for projected sales returns, chargeback incentives, rebates and price reductions;
- impairment of property, plant and equipment, intangible assets, and investments in associates and joint ventures;
- the valuation of goodwill and the valuation and useful life of acquired intangible assets;
- the measurement of contingent consideration receivable in connection with asset divestments;
- the amount of post-employment benefit obligations;
- the amount of provisions for restructuring, litigation, tax risks and environmental risks;
- the amount of deferred tax assets resulting from tax losses available for carry-forward and deductible temporary differences;
- the measurement of contingent consideration liabilities; and
- which exchange rate to use at the end of the reporting period for the translation of accounts denominated in foreign currencies, and of financial statements of foreign subsidiaries, in cases where more than one exchange rate exists for a given currency.

Actual results could differ from these estimates.

Management is also required to exercise judgment in assessing whether the criteria specified in IFRS 5 (Non-Current Assets Held for Sale and Discontinued Operations) are met, and hence whether a non-current asset or asset group should be classified as “held for sale or exchange” and whether a discontinued operation should be reported separately. Such assessments are reviewed at each reporting date based on the facts and circumstances.

For half-year financial reporting purposes, and as allowed under IAS 34, Sanofi has determined income tax expense on the basis of an estimate of the effective tax rate for the full financial year. This rate is applied to business operating income plus financial income and minus financial expenses, and before (i) the share of profit/loss of associates and joint ventures and (ii) net income attributable to non-controlling interests. The estimated full-year effective tax rate is based on the tax rates that will be applicable to projected pre-tax profits or losses arising in the various tax jurisdictions in which Sanofi operates.

A.3. SEASONAL TRENDS

Sanofi’s activities are not subject to significant seasonal fluctuations.

A.4. FAIR VALUE OF FINANCIAL INSTRUMENTS

Under IFRS 13 (Fair Value Measurement) and IFRS 7 (Financial Instruments: Disclosures), fair value measurements must be classified using a hierarchy based on the inputs used to measure the fair value of the instrument. This hierarchy has three levels:

- level 1: quoted prices in active markets for identical assets or liabilities (without modification or repackaging);
- level 2: quoted prices in active markets for similar assets and liabilities, or valuation techniques in which all important inputs are derived from observable market data;
- level 3: valuation techniques in which not all important inputs are derived from observable market data.

The table below sets forth the principles used to measure the fair value of the principal financial assets and liabilities recognized by Sanofi in its balance sheet:

Note	Type of financial instrument	Measurement model	Level in fair value hierarchy	Valuation technique	Method used to determine fair value			
						Market data		
					Valuation model	Exchange rate	Interest rate	Volatility
B.6.	Available-for-sale financial assets (quoted equity securities)	Fair value	1	Market value	Quoted market price	N/A		
B.6.	Available-for-sale financial assets (quoted debt securities)	Fair value	2	Income approach	Quoted market price	N/A		
B.6.	Available-for-sale financial assets (contingent consideration receivable)	Fair value	3	Income approach	Under IAS 39, contingent consideration receivable on a divestment is a financial asset. The fair value of such assets is determined by adjusting the contingent consideration at the end of the reporting period using the method described in Note D.7. to the consolidated financial statements for the year ended December 31, 2016.			
B.6.	Long-term loans and advances and other non-current receivables	Amortized cost	N/A	N/A	The amortized cost of long-term loans and advances and other non-current receivables at the end of the reporting period is not materially different from their fair value.			
B.6.	Financial assets recognized under the fair value option [(a)]	Fair value	1	Market value	Net asset value	N/A		
B.10.	Forward currency contracts	Fair value	2	Income approach	Present value of future cash flows	Mid Market Spot	< 1 year: Mid Money Market > 1 year: Mid Zero Coupon	N/A
B.10.	Interest rate swaps	Fair value	2		Present value of future cash flows	Mid Market Spot	< 1 year: Mid Money Market and LIFFE interest rate futures > 1 year: Mid Zero Coupon	N/A
B.10.	Cross-currency swaps	Fair value	2		Present value of future cash flows	Mid Market Spot	< 1 year: Mid Money Market and LIFFE interest rate futures > 1 year: Mid Zero Coupon	N/A
B.9.	Investments in mutual funds	Fair value	1	Market value	Net asset value	N/A		
B.9.	Negotiable debt instruments, commercial paper, instant access deposits and term deposits	Amortized cost	N/A	N/A	Because these instruments have a maturity of less than three months, amortized cost is regarded as an acceptable approximation of fair value as disclosed in the notes to the consolidated financial statements.			
B.9.	Debt	Amortized cost [(b)]	N/A	N/A	In the case of debt with a maturity of less than three months, amortized cost is regarded as an acceptable approximation of fair value as reported in the notes to the consolidated financial statements. For debt with a maturity of more than three months, fair value as reported in the notes to the consolidated financial statements is determined either by reference to quoted market prices at the end of the reporting period (quoted instruments) or by discounting the future cash flows based on observable market data at the end of the reporting period (unquoted instruments).			
B.11.	Liabilities related to business combinations and to non-controlling interests (CVRs)	Fair value	1	Market value	Quoted market price		N/A	
B.11.	Liabilities related to business combinations and to non-controlling interests (other than CVRs)	Fair value [(c)]	3	Income approach	Under IAS 32, contingent consideration payable in a business combination is a financial liability. The fair value of such liabilities is determined by adjusting the contingent consideration at the end of the reporting period using the method described in Note B.11.			

(a) These assets are held to fund a deferred compensation plan offered to certain employees.
(b) In the case of debt designated as a hedged item in a fair value hedging relationship, the carrying amount in the consolidated balance sheet includes changes in fair value attributable to the hedged risk(s).
(c) For business combinations completed prior to application of the revised IFRS 3, contingent consideration is recognized when payment becomes probable. See Note B.3.1. to the financial statements for the year ended December 31, 2016.

A.5. CONSOLIDATION AND FOREIGN CURRENCY TRANSLATION OF THE FINANCIAL STATEMENTS OF VENEZUELAN SUBSIDIARIES

In 2017, Sanofi continues to account for subsidiaries based in Venezuela using the full consolidation method, on the basis that the criteria for control as specified in IFRS 10 (Consolidated Financial Statements) are still met.

Since the reforms of February 2016, the Venezuelan foreign exchange system has consisted of two categories:

- a first category for essential goods to which is applied the “DIPRO” rate, set at a fixed exchange rate of 10 bolivars per US dollar;
- a second category to which is applied the “DICOM” rate, which is a floating exchange rate against the US dollar that initially stood at 206 bolivars per US dollar and was approximately 2,640 bolivars per US dollar as of June 30, 2017.

Given these changes to the foreign exchange system, recent economic and political developments and the scarcity of US dollar cash in Venezuela, Sanofi recorded a foreign exchange loss of €102 million in the first half of 2016.

A.6. NEW PRONOUNCEMENTS ISSUED BY THE IASB AND APPLICABLE FROM 2018 OR LATER

During the first half of 2017, Sanofi continued to assess the impact of the first-time application in 2018 of IFRS 9 (Financial Instruments) and IFRS 15 (Revenue from Contracts with Customers). That assessment confirmed that the new standards are expected to have only a minor impact.

An analysis of the new disclosures that may be required to comply with the new standards is ongoing. As regards IFRS 9, Sanofi has yet to decide whether or not to publish restated comparatives. If the comparatives were to be restated, some impairment losses taken against equity investments might be reclassified from prior period profit or loss to ***Other comprehensive income***.

During the first half of 2017 the IASB issued IFRS 17 (Insurance Contracts), which applies to entities that issue insurance and reinsurance contracts and hence does not apply to Sanofi.

In June 2017, the IASB issued IFRIC 23 (Uncertainty over Income Tax Treatments), which clarifies how to apply the recognition and measurement requirements of IAS 12 (Income Taxes) when there is uncertainty over an income tax treatment. IFRIC 23 is mandatorily applicable to annual accounting periods beginning on or after January 1, 2019, subject to endorsement by the European Union. Sanofi has not early adopted IFRIC 23.

B/ Significant information for the first half of 2017

B.1. IMPACT OF CHANGES IN THE SCOPE OF CONSOLIDATION

Finalization of the exchange of Sanofi's Animal Health business for Boehringer Ingelheim's Consumer Healthcare business

On January 1, 2017, Sanofi finalized the exchange of its Animal Health business (Merial) for Boehringer Ingelheim's Consumer Healthcare business.

After taking account of preliminary enterprise value adjustments, the exchange values of the two businesses as effectively transferred during the first half of 2017 were determined at €10,320 million for Sanofi's Animal Health business and €6,271 million for Boehringer Ingelheim's Consumer Healthcare business. Finalization of the divestment of Merial de Mexico SA de CV is expected in the second half of 2017.

Divestment of the Animal Health business

Sanofi has recognized a pre-tax gain of €6,137 million within the line item ***Net income of the exchanged/ held-for-exchange Animal Health business***, and an after-tax gain of €4,421 million. This amount may be subject to change to reflect any impact from the price adjustments specified in the exchange agreement.

Acquisition of Boehringer Ingelheim's Consumer Healthcare business

The provisional purchase price allocation for the acquisition of Boehringer Ingelheim's Consumer Healthcare (CHC) business is as follows (in € million):

(€ million)	Fair value at acquisition date
Property, plant and equipment	72
Other intangible assets	3,985
Inventories	287
Other assets and liabilities	(27)
Held-for-sale assets	78
Deferred taxes	(247)
Net assets of Boehringer Ingelheim's CHC business as of January 1, 2017	**4,148**
Goodwill	2,123
Purchase price	**6,271**

Goodwill represents (i) the capacity to draw on a specialized structure to refresh the existing product portfolio; (ii) the competencies of the staff transferred to Sanofi; (iii) the benefits derived from the creation of new growth platforms; and (iv) the expected future synergies and other benefits from combining the CHC operations of Boehringer Ingelheim and Sanofi.

The tax-deductible portion of goodwill has not been determined at this stage, because the purchase price allocations for each acquiring entity have not yet been finalized.

The costs incurred in connection with the acquisition of Boehringer Ingelheim's CHC business amount to €10 million.

With effect from January 1, 2017, the performance of the acquired portfolio – which generated net sales of €674 million in the first half of 2017 – is recognized in consolidated net sales within the Pharmaceuticals segment.

Acquisitions and investments in joint ventures

During the first half of 2017, Sanofi acquired further shares in the biopharmaceutical company Regeneron Pharmaceuticals, Inc. at a cost of €87 million. Sanofi's investment in Regeneron had a carrying amount of €2,480 million as of June 30, 2017 (see Note B.5.). This represents an equity interest of 22.1% as of that date, the same as at December 31, 2016.

Other divestments

No other divestments were made by Sanofi in the first half of 2017 that materially affected the scope of consolidation.

B.2. PROPERTY, PLANT AND EQUIPMENT

Acquisitions of property, plant and equipment during the first half of 2017 amounted to €535 million. These included €393 million of investments in the Pharmaceuticals segment, primarily in industrial facilities (€290 million). The Vaccines segment accounted for €142 million of investments during the period.

Impairment losses of €129 million were charged against property, plant and equipment in the first half of 2017, primarily in the Pharmaceuticals segment.

Firm orders for property, plant and equipment stood at €561 million as of June 30, 2017.

B.3. GOODWILL AND OTHER INTANGIBLE ASSETS

Movements in intangible assets other than goodwill during the first half of 2017 were as follows:

(€ million)	Acquired R&D	Products, trademarks and other rights	Software	Total other intangible assets
Gross value at January 1, 2017	**3,649**	**53,107**	**1,326**	**58,082**
Changes in scope of consolidation	—	3,985	—	3,985
Acquisitions and other increases	221	188	74	483
Disposals and other decreases	(10)	(16)	(4)	(30)
Currency translation differences	(127)	(2,688)	(35)	(2,850)
Transfers [(a)]	(44)	(6)	30	(20)
Gross value at June 30, 2017	**3,689**	**54,570**	**1,391**	**59,650**
Accumulated amortization & impairment at January 1, 2017	**(2,290)**	**(43,997)**	**(916)**	**(47,203)**
Amortization expense	—	(1,000)	(54)	(1,054)
Impairment losses, net of reversals [(b)]	(1)	(27)	—	(28)
Disposals and other decreases	10	15	4	29
Currency translation differences	88	2,309	26	2,423
Transfers	(16)	48	—	32
Accumulated amortization & impairment at June 30, 2017	**(2,209)**	**(42,652)**	**(940)**	**(45,801)**
Carrying amount at December 31, 2016	1,359	9,110	410	10,879
Carrying amount at June 30, 2017	**1,480**	**11,918**	**451**	**13,849**

(a) The "Transfers" line mainly relates to acquired R&D that came into commercial use during the period and is being amortized from the date of marketing approval.
(b) See Note B.4.

Acquisitions of other intangible assets (excluding software) in the first half of 2017 totaled €4,394 million. This mainly comprises the assets recognized on the acquisition of Boehringer Ingelheim's Consumer Healthcare business (€3,985 million), plus upfront and milestone payments in Vaccines, Diabetes and Consumer Healthcare. The item "Products, trademarks and other rights" mainly comprises:

- marketed products, with a carrying amount of €11.4 billion as of June 30, 2017 (€8.4 billion as of December 31, 2016) and a weighted average amortization period of approximately 10 years;
- trademarks, with a carrying amount of €0.2 billion as of June 30, 2017 (€0.2 billion as of December 31, 2016) and a weighted average amortization period of approximately 13 years.

The table below provides information about the principal marketed products, which represented 88% of the carrying amount of that item as of June 30, 2017:

(€ million)	Gross value	Accumulated amortization & impairment	Carrying amount June 30, 2017	Amortization period (years) [(a)]	Residual amortization period (years) [(b)]	Carrying amount December 31, 2016
Boehringer Ingelheim Consumer Healthcare	3,985	133	3,852	15	15	—
Genzyme	10,584	6,238	4,346	10	6	5,009
Aventis	33,271	32,441	830	9	4	1,095
Chattem	1,305	473	832	22	16	930
Zentiva	938	830	108	9	4	128
Total: principal marketed products	**50,083**	**40,115**	**9,968**			**7,162**

(a) Weighted averages. The amortization periods for these products vary between 1 and 25 years.
(b) Weighted averages.

Goodwill amounted to €40,964 million as of June 30, 2017, versus €40,287 million as of December 31, 2016. The change during the first half of 2017 was due to the goodwill recognized on the acquisition of Boehringer Ingelheim's Consumer Healthcare business (see Note B.1.) and to currency translation differences.

B.4. IMPAIRMENT OF INTANGIBLE ASSETS

The results of impairment tests conducted in accordance with IAS 36 (Impairment of Assets) as of June 30, 2017 led to the recognition of a net impairment loss of €28 million, of which €16 million included in ***Gross profit***.

B.5. INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

Investments in associates and joint ventures are accounted for by the equity method. For definitions of the terms "associate" and "joint venture", refer to Note B.1. to the consolidated financial statements for the year ended December 31, 2016.

Investments in associates and joint ventures comprise:

(€ million)	% interest	June 30, 2017	December 31, 2016
Regeneron Pharmaceuticals, Inc.	22.1	2,480	2,548
Onduo LLC	50.0	158	181
Infraserv GmbH & Co. Höchst KG [(a)]	31.2	64	79
Entities and companies managed by Bristol-Myers Squibb [(b)]	49.9	40	44
Other investments	—	99	38
Total		**2,841**	**2,890**

(a) Joint ventures.
(b) Under the terms of the agreements with BMS (see Note C.2. to the consolidated financial statements for the year ended December 31, 2016), Sanofi's share of the net assets of entities majority-owned by BMS is recorded in ***Investments in associates and joint ventures***.

As of June 30, 2017, the market value of Sanofi's investment in Regeneron was €10,171 million (based on a quoted stock market price of $491.14 per share as of that date), versus €8,159 million as of December 31, 2016 (based on a quoted stock market price of $367.09 per share as of that date).

The financial statements include commercial transactions between Sanofi and some associates and joint ventures that are classified as related parties. The principal transactions and balances with related parties are summarized below:

(€ million)	June 30, 2017	June 30, 2016	December 31, 2016
Sales [(a)]	18	28	39
Royalties and other revenue [(a)]	37	67	156
Accounts receivable and other receivables	29	63	101
Purchases and other expenses (including research expenses) [(a)]	410	392	708
Accounts payable	206	179	161
Other liabilities	9	66	65

(a) For the six months ended June 30, 2016 and the year ended December 31, 2016, these items include transactions between Sanofi and Sanofi Pasteur MSD during the period from January 1, 2016 through March 8, 2016 (the date of the announcement that the joint venture was to be dismantled; see Notes B.1. and D.1.2. to the consolidated financial statements for the year ended December 31, 2016).

B.6. OTHER NON-CURRENT ASSETS

Other non-current assets comprise:

(€ million)	June 30, 2017	December 31, 2016
Available-for-sale financial assets	1,837	1,583
Pre-funded pension obligations	30	30
Long-term loans and advances and other non-current receivables	644	776
Financial assets recognized under the fair value option	325	329
Derivative financial instruments	92	102
Total	**2,928**	**2,820**

The ***Available-for-sale financial assets*** line includes the market value of Sanofi's equity investment in Alnylam: €737 million as of June 30, 2017 and €364 million as of December 31, 2016.

This line also includes contingent consideration receivable by Sanofi Pasteur following the dismantling of the Sanofi Pasteur MSD joint venture, as described in Note D.7. to the consolidated financial statements for the year ended December 31, 2016. Changes in the fair value of this asset are reported within the income statement line item ***Fair value remeasurement of contingent consideration***.

The amount of the receivable was €396 million as of June 30, 2017 and €458 million as of December 31, 2016. The movement during the first half of 2017 was mainly due to the reclassification of amounts receivable within less than one year to ***Other current assets***.

B.7. ACCOUNTS RECEIVABLE

Accounts receivable break down as follows:

(€ million)	June 30, 2017	December 31, 2016
Gross value	7,051	7,506
Allowances	(194)	(195)
Carrying amount	**6,857**	**7,311**

The impact of allowances against accounts receivable in the first half of 2017 was a net expense of €18 million (versus €22 million for the first half of 2016).

The table below shows the aging profile of overdue accounts receivable, based on gross value:

(€ million)	Overdue accounts gross value	Overdue <1 month	Overdue 1 to 3 months	Overdue 3 to 6 months	Overdue 6 to 12 months	Overdue > 12 months
June 30, 2017	720	183	184	143	38	172
December 31, 2016	597	133	103	121	42	198

Amounts overdue by more than one month relate mainly to public-sector customers.

Some Sanofi subsidiaries have assigned receivables to factoring companies or banks without recourse. The amount of receivables that met the conditions described in Note B.8.7. to the consolidated financial statements for the year ended December 31, 2016 and hence were derecognized was €724 million as of June 30, 2017 (versus €428 million as of December 31, 2016). The residual guarantees relating to those transfers were immaterial as of June 30, 2017.

B.8. CONSOLIDATED SHAREHOLDERS' EQUITY

B.8.1. Share capital

As of June 30, 2017, the share capital was €2,521,508,052 and consisted of 1,260,754,026 shares (the total number of shares outstanding) with a par value of €2.

Treasury shares held by Sanofi are as follows:

	Number of shares (million)	% of share capital for the period
June 30, 2017	5.0	0.40%
December 31, 2016	20.0	1.55%
June 30, 2016	0.1	0.01%
January 1, 2016	4.0	0.30%

A total of 1,722,879 shares were issued in the first half of 2017 as a result of the exercise of Sanofi stock subscription options.

In addition, a total of 3,389,221 shares vested and were issued in the first half of 2017 under restricted share plans.

B.8.2. Repurchase of Sanofi shares

On May 10, 2017, the Annual General Meeting of Sanofi shareholders approved a share repurchase program for a period of 18 months. Under that program (and that program alone), Sanofi repurchased 2,813,722 of its own shares during the first half of 2017 for a total amount of €241 million.

On May 4, 2016, the Annual General Meeting of Sanofi shareholders approved a share repurchase program for a period of 18 months. Under that program (and that program alone), Sanofi repurchased 18,426,601 of its own shares during the first half of 2017 for a total amount of €1,454 million.

In addition, transactions carried out under the liquidity contract in the first half of 2017 reduced equity by €2 million.

B.8.3. Reductions in share capital

On April 27, 2017, the Board of Directors approved the cancellation of 36,380,198 treasury shares (€2,782 million including additional paid-in capital), representing 2.89% of the share capital as of June 30, 2017.

Those cancellations have no net impact on shareholders' equity.

B.8.4. Restricted share plans

Restricted share plans are accounted for in accordance with the policies described in Note B.24.3. to the consolidated financial statements for the year ended December 31, 2016. The principal features of the plan awarded in 2017 are set forth below:

Type of plan	2017 Performance share plan
Date of Board meeting approving the plan	May 10, 2017
Total number of shares subject to a 3-year service period	3,587,465
Fair value per share awarded [(a)]	81.50
Fair value of plan at the date of grant (€ million)	**292**

(a) Quoted market price per share at the date of grant, adjusted for dividends expected during the vesting period.

The total expense recognized for all restricted and performance share plans in the six months ended June 30, 2017 was €103 million, versus €97 million in the comparable period of 2016.

The number of shares not yet fully vested as of June 30, 2017 was 13,376,134, comprising 3,585,804 under the 2017 plans; 3,965,610 under the 2016 plans; 3,573,870 under the 2015 plans; and 2,250,850 under the 2014 plans.

On March 5, 2014, the Board of Directors approved a performance share unit (PSU) plan, vesting at the end of a three-year service period and subject to performance conditions. This plan expired on March 5, 2017, resulting in a cash payment of €27 million based on the performance attainment of the conditions. The related expense was recognized on a straight line basis over the vesting period as described in Note B.24. to the consolidated financial statements for the year ended December 31, 2016.

B.8.5. Capital increases

On March 2, 2017, the Sanofi Board of Directors approved an employee share ownership plan in the form of a capital increase reserved for employees. Employees were offered the opportunity to subscribe to the capital increase at a price of €70.01 per share, representing 80% of the average of the quoted market prices of Sanofi shares during the 20 trading days preceding June 14, 2017.

The subscription period was open from June 19 through June 30, 2017. For each tranche of five shares applied for, the applicant received one additional new share by way of employer's contribution; and for each application for 20 or more shares, the applicant received an additional four new shares by way of employer's contribution. The plan resulted in a total of 1,528,982 shares being subscribed for, and the issuance of a further 92,116 shares as an employer's contribution under the terms of the plan.

An expense of €21 million was recognized for this plan in the six months ended June 30, 2017.

The shares will be issued, and the capital increase recognized in shareholders' equity, on July 31, 2017.

On March 3, 2016, the Sanofi Board of Directors approved an employee share ownership plan in the form of a capital increase reserved for employees. Employees were offered the opportunity to subscribe to the capital increase at a price of €57.25 per share, representing 80% of the average of the quoted market prices of Sanofi shares during the 20 trading days preceding June 8, 2016.

The subscription period was open from June 13 through June 24, 2016. The plan resulted in a total of 1,756,972 shares being subscribed for, and the issuance of a further 47,014 shares as an employer's contribution under the terms of the plan.

An expense of €16 million (excluding the Animal Health business) was recognized for this plan in the year ended December 31, 2016.

B.8.6. Stock subscription option plans

On May 10, 2017, the Board of Directors granted 378,040 stock subscription options at an exercise price of €88.97 per share. The vesting period is four years, and the plan expires on May 10, 2021.

Sanofi used the following assumptions in determining the fair value of the plan:

- dividend yield: 3.56%;
- plan maturity: 7 years;
- volatility of Sanofi shares, computed on a historical basis: 23.74%;
- risk-free interest rate: 0.270%.

On that basis, the fair value of one option is €12.21, and the fair value of the stock subscription option plan awarded in June 2017 is €5 million. That amount is recognized as an expense over the vesting period, with the opposite entry recognized directly in equity.

The total expense recognized for all stock options in the six months ended June 30, 2017 was €2 million, versus €3 million in the comparable period of 2016.

The table below provides summary information about options outstanding and exercisable as of June 30, 2017:

	Outstanding			Exercisable	
Range of exercise prices per share	Number of options	Average residual life (years)	Weighted average exercise price per share (€)	Number of options	Weighted average exercise price per share (€)
From €30.00 to €40.00 per share	122,061	1.75	38.08	122,061	38.08
From €40.00 to €50.00 per share	1,799,333	1.67	45.09	1,799,333	45.09
From €50.00 to €60.00 per share	3,711,300	3.05	54.18	3,711,300	54.18
From €60.00 to €70.00 per share	2,350,202	0.45	62.33	2,350,202	62.33
From €70.00 to €80.00 per share	1,862,650	6.85	73.62	559,085	72.19
From €80.00 to €90.00 per share	811,540	8.86	89.19	—	—
Total	**10,657,086**			**8,541,981**	

B.8.7. Number of shares used to compute diluted earnings per share

Diluted earnings per share is computed using the number of shares outstanding plus stock options with dilutive effect and restricted shares.

(million)	June 30, 2017	June 30, 2016	December 31, 2016
Average number of shares outstanding	1,260.3	1,287.6	1,286.6
Adjustment for stock options with dilutive effect	3.2	2.8	2.6
Adjustment for restricted shares	7.1	6.2	6.8
Average number of shares outstanding used to compute diluted earnings per share	**1,270.6**	**1,296.6**	**1,296.0**

As of June 30, 2017, 0.8 million stock options were not taken into account in computing diluted earnings per share because they had no dilutive effect, compared with 2.4 million as of December 31, 2016 and 2.4 million as of June 30, 2016.

B.8.8. Other comprehensive income

Movements within other comprehensive income are shown below:

(€ million)	June 30, 2017 (6 months)	June 30, 2016 (6 months)	December 31, 2016
Balance, beginning of period	**973**	**45**	**45**
Attributable to equity holders of Sanofi	*992*	*67*	*67*
Attributable to non-controlling interests	*(19)*	*(22)*	*(22)*
Actuarial gains/(losses):			
· Actuarial gains/(losses) excluding associates and joint ventures	282	(924)	(104)
· Actuarial gains/(losses) of associates and joint ventures, net of taxes	—	—	(2)
· Tax effects	(60)	253	(22)
Items not subsequently reclassifiable to profit or loss [(a)]	**222**	**(671)**	**(128)**
Available-for-sale financial assets:			
· Change in fair value (excluding associates and joint ventures) [(b)]	324	(421)	(104)
· Change in fair value (associates and joint ventures, net of taxes)	1	(1)	(1)
· Tax effects	(60)	83	50
Cash flow hedges:			
· Change in fair value (excluding associates and joint ventures) [(c)]	(28)	—	30
· Change in fair value (associates and joint ventures, net of taxes)	—	—	1
· Tax effects	9	—	(10)
Change in currency translation differences:			
· Currency translation differences on foreign subsidiaries (excluding associates and joint ventures) [(c)(d)]	(1,835)	26	1,033
· Currency translation differences (associates and joint ventures)	(176)	(63)	57
· Hedges of net investments in foreign operations	—	—	—
· Tax effects	—	—	—
Items subsequently reclassifiable to profit or loss	**(1,765)**	**(376)**	**1,056**
Balance, end of period	**(570)**	**(1,002)**	**973**
Attributable to equity holders of Sanofi	*(543)*	*(975)*	*992*
Attributable to non-controlling interests	*(27)*	*(27)*	*(19)*

(a) Items not subsequently reclassifiable to profit or loss and attributable to the Animal Health business divested January 1, 2017: zero in the six months ended June 30, 2016, and €(3) million in the year ended December 31, 2016.
(b) Of which reclassified to profit or loss: immaterial amount in the six months ended June 30, 2017, €(8) million in the six months ended June 30, 2016 and €447 million in the year ended December 31, 2016.
(c) Includes reclassifications to profit or loss (excluding items related to the Animal Health business): €(23) million in the six months ended June 30, 2017. Amounts reclassified to profit or loss were immaterial in the six months ended June 30, 2016, and €2 million in the year ended December 31, 2016.
(d) Items subsequently reclassifiable to profit or loss and attributable to the Animal Health business divested January 1, 2017: €(149) million of currency translation difference reclassified on the divestment of the Animal Health business on January 1, 2017 in the six months ended June 30, 2017, €4 million in the six months ended June 30, 2016 and €(51) million in the year ended December 31, 2016.

B.9. DEBT, CASH AND CASH EQUIVALENTS

Changes in financial position during the period were as follows:

(€ million)	June 30, 2017	December 31, 2016
Long-term debt	15,186	16,815
Short-term debt and current portion of long-term debt	3,241	1,764
Interest rate and currency derivatives used to hedge debt	(87)	(100)
Total debt	**18,340**	**18,479**
Cash and cash equivalents	(10,877)	(10,273)
Interest rate and currency derivatives used to hedge cash and cash equivalents	—	—
Debt, net of cash and cash equivalents	**7,463**	**8,206**

"Debt, net of cash and cash equivalents" is a financial indicator used by management and investors to measure Sanofi's overall net indebtedness.

B.9.1. Debt at value on redemption

A reconciliation of the carrying amount of debt to value on redemption as of June 30, 2017 is shown below:

				Value on redemption	
(€ million)	Carrying amount at June 30, 2017	Amortized cost	Adjustment to debt measured at fair value	June 30, 2017	December 31, 2016
Long-term debt	15,186	71	(104)	15,153	16,765
Short-term debt and current portion of long-term debt	3,241	2	—	3,243	1,764
Interest rate and currency derivatives used to hedge debt	(87)	—	67	(20)	(10)
Total debt	**18,340**	**73**	**(37)**	**18,376**	**18,519**
Cash and cash equivalents	(10,877)	—	—	(10,877)	(10,273)
Interest rate and currency derivatives used to hedge cash and cash equivalents	—	—	—	—	—
Debt, net of cash and cash equivalents	**7,463**	**73**	**(37)**	**7,499**	**8,246**

The table below shows an analysis of debt, net of cash and cash equivalents by type, at value on redemption:

(€ million)	June 30, 2017 non-current	June 30, 2017 current	June 30, 2017 Total	December 31, 2016 non-current	December 31, 2016 current	December 31, 2016 Total
Bond issues	15,050	2,187	17,237	16,657	823	17,480
Other bank borrowings	67	824	891	61	715	776
Finance lease obligations	23	18	41	34	19	53
Other borrowings	13	4	17	13	4	17
Bank credit balances	—	210	210	—	203	203
Interest rate and currency derivatives used to hedge debt	(21)	1	(20)	(9)	(1)	(10)
Total debt	**15,132**	**3,244**	**18,376**	**16,756**	**1,763**	**18,519**
Cash and cash equivalents	—	(10,877)	(10,877)	—	(10,273)	(10,273)
Interest rate and currency derivatives used to hedge cash and cash equivalents	—	—	—	—	—	—
Debt, net of cash and cash equivalents	**15,132**	**(7,633)**	**7,499**	**16,756**	**(8,510)**	**8,246**

Principal financing and debt reduction transactions during the period

Sanofi carried out no bond redemptions or issues during the first half of 2017.

Sanofi had the following arrangements in place as of June 30, 2017 to manage its liquidity in connection with current operations:

- a syndicated credit facility of €4 billion, drawable in euros and in US dollars, now due to expire on December 17, 2020 following the exercise of a second extension option in November 2015; and
- a syndicated credit facility of €4 billion, drawable in euros and in US dollars, now due to expire on December 3, 2021 following the exercise of a second extension option in November 2016.

Sanofi has no further extension options for those credit facilities. As of June 30, 2017, there were no drawdowns under either of those facilities.

Sanofi also has two commercial paper programs, of €6 billion in France and $10 billion in the United States. During the first half of 2017, only the US program was used, with an average drawdown of $847 million. Neither of the programs was in use as of June 30, 2017.

The financing in place as of June 30, 2017 at the level of the holding company (which manages most of Sanofi's financing needs centrally) is not subject to any financial covenants, and contains no clauses linking credit spreads or fees to the credit rating.

B.9.2. Market value of debt

The market value of debt, net of cash and cash equivalents and of derivatives and excluding accrued interest, amounted to €7,838 million as of June 30, 2017 (versus €8,663 million as of December 31, 2016). This compares with a value on redemption of €7,499 million (versus €8,246 million as of December 31, 2016).

B.10. DERIVATIVE FINANCIAL INSTRUMENTS

B.10.1. Currency derivatives used to manage operating risk exposures

The table below shows operating currency hedging instruments in place as of June 30, 2017. The notional amount is translated into euros at the relevant closing exchange rate.

			Of which derivatives designated as cash flow hedges			Of which derivatives not eligible for hedge accounting	
June 30, 2017 (€ million)	Notional amount	Fair value	Notional amount	Fair value	Of which recognized in equity	Notional amount	Fair value
Forward currency sales	**3,331**	**53**	**—**	**—**	**—**	**3,331**	**53**
of which US dollar	*1,175*	*21*	*—*	*—*	*—*	*1,175*	*21*
of which Chinese yuan renminbi	*596*	*13*	*—*	*—*	*—*	*596*	*13*
of which Japanese yen	*311*	*9*	*—*	*—*	*—*	*311*	*9*
of which Singapore dollar	*208*	*—*	*—*	*—*	*—*	*208*	*—*
of which Saudi riyal	*129*	*1*	*—*	*—*	*—*	*129*	*1*
Forward currency purchases	**1,218**	**(11)**	**—**	**—**	**—**	**1,218**	**(11)**
of which Singapore dollar	*435*	*(8)*	*—*	*—*	*—*	*435*	*(8)*
of which Chinese yuan renminbi	*153*	*—*	*—*	*—*	*—*	*153*	*—*
of which US dollar	*142*	*(1)*	*—*	*—*	*—*	*142*	*(1)*
of which Saudi riyal	*112*	*(1)*	*—*	*—*	*—*	*112*	*(1)*
of which Hungarian forint	*70*	*—*	*—*	*—*	*—*	*70*	*—*
Total	**4,549**	**42**	**—**	**—**	**—**	**4,549**	**42**

The above positions mainly hedge material foreign-currency cash flows arising after the end of the reporting period in relation to transactions carried out during the six months ended June 30, 2017 and recognized in the balance sheet at that date. Gains and losses on hedging instruments (forward contracts) are calculated and recognized in parallel with the recognition of gains and losses on the hedged items. Due to this hedging relationship, the commercial foreign exchange difference on those items (hedging instruments and hedged transactions) will be immaterial in the second half of 2017.

B.10.2. Currency and interest rate derivatives used to manage financial exposure

The cash pooling arrangements for foreign subsidiaries outside the euro zone, and some of Sanofi's financing activities, expose certain Sanofi entities to financial foreign exchange risk (i.e., the risk of changes in the value of loans and borrowings denominated in a currency other than the functional currency of the lender or borrower).

That foreign exchange exposure is hedged by Sanofi using firm financial instruments (usually currency swaps or forward contracts) contracted with banking counterparties.

The table below shows financial currency hedging instruments in place as of June 30, 2017. The notional amount is translated into euros at the relevant closing exchange rate.

	June 30, 2017		
(€ million)	Notional amount	Fair value	Maximum expiry date
Forward currency sales	**3,755**	**66**	
of which US dollar	*2,161*	*35*	*2018*
of which Japanese yen	*678*	*25*	*2018*
of which Australian dollar	*269*	*2*	*2018*
Forward currency purchases	**2,843**	**(33)**	
of which Singapore dollar	*1,473*	*(26)*	*2018*
of which US dollar	*408*	*(5)*	*2018*
of which Czech koruna	*384*	*1*	*2018*
Total	**6,598**	**33**	

To limit risk and optimize the cost of its short-term and medium-term net debt, Sanofi uses derivative instruments that alter the interest rate and/or currency structure of its debt and cash.

The table below shows instruments of this type in place as of June 30, 2017:

	Notional amounts by expiry date as of June 30, 2017								Of which designated as fair value hedges		Of which designated as cash flow hedges		
(€ million)	2017	2018	2019	2020	2021	2022	Total	Fair value	Notional amount	Fair value	Notional amount	Fair value	Of which recognized in equity
Interest rate swaps													
pay capitalized Eonia / receive 1.58%	—	—	1,550	—	—	—	1,550	83	1,550	83	—	—	—
pay 3-month Euribor / receive 1.15%	428	—	—	—	—	—	428	—	428	—	—	—	—
pay 3-month US dollar Libor / receive 2.22%	—	—	—	438	—		438	9	438	9	—	—	—
pay 1.22% / receive 3-month US dollar Libor	438	—	—	—	—	—	438	(1)	—	—	438	(1)	—
pay capitalized Eonia / receive 0.03%	—	—	—	—	—	1,000	1,000	(4)	1,000	(4)	—	—	—
Total	**866**	**—**	**1,550**	**438**	**—**	**1,000**	**3,854**	**87**	**3,416**	**88**	**438**	**(1)**	**—**

B.11. LIABILITIES RELATED TO BUSINESS COMBINATIONS AND TO NON-CONTROLLING INTERESTS

For a description of the nature of the liabilities reported in the line item ***Liabilities related to business combinations and to non-controlling interests***, refer to Note B.8.5. to the consolidated financial statements for the year ended December 31, 2016.

The liabilities related to business combinations and to non-controlling interests shown in the table below are level 3 instruments under the IFRS 7 fair value hierarchy (see Note A.4.), except for the CVRs issued in connection with the acquisition of Genzyme, which are level 1 instruments.

Movements in liabilities related to business combinations and to non-controlling interests during the first half of 2017 are shown below:

(€ million)	Liabilities related to non-controlling interests [(a)] and other	CVRs issued in connection with the acquisition of Genzyme[(b)]	Bayer contingent consideration arising from the acquisition of Genzyme	MSD contingent consideration (European vaccines business)	Other	Total [(c)]
Balance at January 1, 2017	**123**	**85**	**1,013**	**354**	**1**	**1,576**
Payments made	—	—	(85)	—	(17)	(102)
Fair value remeasurements through profit or loss: (gain)/loss (including unwinding of discount) [(d)]	—	—	84	15	—	99
Other movements	(21)	—	—	—	58	37
Currency translation differences	(2)	(6)	(77)	(4)	—	(89)
Balance at June 30, 2017	**100**	**79**	**935**	**365**	**42**	**1,521**
Of which:						
· Current portion						234
· Non-current portion						1,287

(a) Put options granted to non-controlling interests and commitment to future buyout of non-controlling interests held by BMS.
(b) Based on the quoted market price per CVR of $0.38 as of June 30, 2017 and December 31, 2016.
(c) As of January 1, 2017, this comprised a non-current portion of €1,378 million and a current portion of €198 million.
(d) Amounts reported within the income statement line item ***Fair value remeasurement of contingent consideration.***

As of June 30, 2017, ***Liabilities related to business combinations and to non-controlling interests*** mainly comprised the following items:

- The Bayer contingent consideration liability arising from the acquisition of Genzyme in 2011. As of June 30, 2017, Bayer was still entitled to receive the following potential payments:
  - a percentage of sales of alemtuzumab up to a maximum of $1,250 million or over a maximum period of ten years, whichever is achieved first;
  - milestone payments based on specified levels of worldwide sales of alemtuzumab beginning in 2021, unless Genzyme exercises its right to buy out those milestone payments by making a one-time payment not exceeding $900 million. The fair value of this liability was measured at €935 million as of June 30, 2017, versus €1,013 million as of December 31, 2016. The fair value of the Bayer liability is determined by applying the above contractual terms to sales projections which have been weighted to reflect the probability of success, and discounted. If the discount rate were to fall by 1 percentage point, the fair value of the Bayer liability would increase by approximately 4%.
- The MSD contingent consideration liability, originally of €354 million, arising from the 2016 acquisition of the Sanofi Pasteur activities carried on within the former Sanofi Pasteur MSD joint venture (see Note D.18. to the consolidated financial statements for the year ended December 31, 2016). The fair value of this liability was measured at €365 million as of June 30, 2017. The fair value of the contingent consideration was determined by applying the royalty percentage stipulated in the contract to discounted sales projections.

B.12. PROVISIONS AND OTHER NON-CURRENT LIABILITIES

Provisions and other non-current liabilities break down as follows:

(€ million)	Provisions for pensions & other post-employment benefits	Provisions for other long-term benefits	Restructuring provisions	Other provisions	Other non-current liabilities	Total
Balance at January 1, 2017	**4,377**	**720**	**744**	**2,777**	**216**	**8,834**
Changes in scope of consolidation	70	3	—	7	1	81
Increases in provisions and other liabilities	118[a]	83	83	332 [b]	114	730
Provisions utilized	(358)[a]	(67)	(4)	(79)	—	(508)
Reversals of unutilized provisions	4	(5)	(16)	(96) [b]	—	(113)
Transfers	1	—	(161) [c]	(25)	(12) [c]	(197)
Net interest related to employee benefits, and unwinding of discount	45	2	1	13	2	63
Currency translation differences	(94)	(25)	(2)	(67)	(8)	(196)
Actuarial gains and losses on defined-benefit plans	(282)	—	—	—	—	(282)
Balance at June 30, 2017	**3,881**	**711**	**645**	**2,862**	**313**	**8,412**

(a) In the case of "Provisions for pensions and other post-employment benefits", the "Increases in provisions" line corresponds to rights vesting in employees during the period and past service cost, and the "Provisions utilized" line corresponds to contributions paid into pension funds and to plan settlements.
(b) Amounts charged and reversed during the first half of 2017 were largely due to reassessments of tax risks and the resolution of various procedures under way with the tax authorities of several countries.
(c) Includes transfers between current and non-current.

Provisions for pensions and other post-employment benefits

For an analysis of the sensitivity of obligations in respect of pensions and other employee benefits, and the assumptions used as of December 31, 2016, see Note D.19.1. to the consolidated financial statements for the year ended December 31, 2016.

The principal assumptions used (in particular, changes in discount and inflation rates and in the market value of plan assets) for the euro zone, the United States and the United Kingdom were reviewed as of June 30, 2017 to take into account changes during the first half of the year.

Actuarial gains and losses arising on pensions and other post-employment benefits and recognized directly in equity are as follows (amounts reported before tax):

(€ million)	June 30, 2017 (6 months)	June 30, 2016 (6 months)	December 31, 2016 (12 months)
Actuarial gains/(losses) on plan assets	235	485	681
Actuarial gains/(losses) on benefit obligations	47 [a]	(1,409) [b]	(790)

(a) The movement during the first half of 2017 includes the effect of the change in discount rates (in a range between -0.25% and +0.25%).
(b) The movement during the first half of 2016 includes the effect of the fall in discount rates (in a range between -0.50% and -1.00%).

B.13. OFF BALANCE SHEET COMMITMENTS

Off balance sheet commitments to third parties arise under collaboration agreements entered into by Sanofi (see Note D.21.1. to the consolidated financial statements for the year ended December 31, 2016).

Agreements signed during the first half of 2017 gave rise to the following new commitments:

- Payments associated with projects in the research phase: €0.4 billion.
- Payments contingent on the attainment of specified sales targets once a product reaches the market: €0.5 billion.
- Potential milestone payments relating to development projects under collaboration agreements: €0.1 billion.

The principal commitments entered into, amended or discontinued during the period are described below:

On January 9, 2017, Sanofi and Immunext announced an agreement to develop a novel antibody to treat auto-immune diseases such as multiple sclerosis and lupus. Under the agreement, Sanofi acquired an exclusive worldwide license to INX-021, a monoclonal CD40L antibody currently in preclinical development. A second parallel agreement was signed to support clinical trials.

On February 27, 2017, Sanofi and Lonza announced a strategic partnership in the form of a joint venture to build and operate a large-scale mammalian cell culture facility for monoclonal antibody production in Visp, Switzerland. An initial investment of approximately €0.3 billion to finance construction of the facility will be made 50/50 by the two partners. In addition, Sanofi could pay Lonza in the region of €0.8 billion over the next fifteen years, partly as its share of operating expenses and of the cost of producing future batches, and partly to reserve capacity in the new facility.

On March 3, 2017, Sanofi Pasteur and MedImmune (a division of AstraZeneca) announced an agreement to develop and commercialize a monoclonal antibody (MEDI8897) for the prevention of Respiratory Syncytial Virus (RSV) associated illness in newborns and infants.

On May 30, 2017, ImmunoGen and Sanofi agreed an amendment to the license and collaboration agreement signed in 2003. ImmunoGen has granted Sanofi a fully paid and exclusive license to develop, manufacture and commercialize the full series of compounds developed by Sanofi using ImmunoGen technology.

In March 2017, Sanofi and Vivus Inc. discontinued their agreement to develop, manufacture and commercialize avanafil.

B.14. LEGAL AND ARBITRAL PROCEEDINGS

Sanofi and its affiliates are involved in litigation, arbitration and other legal proceedings. These proceedings typically are related to product liability claims, intellectual property rights (particularly claims against generic companies seeking to limit the patent protection of Sanofi products), competition law and trade practices, commercial claims, employment and wrongful discharge claims, tax assessment claims, waste disposal and pollution claims, and claims under warranties or indemnification arrangements relating to business divestitures.

The matters discussed below constitute the most significant developments since publication of the disclosures concerning legal proceedings in the Company's financial statements for the year ended December 31, 2016.

B.14.1. Products

Depakine® Product Litigation in France

As of June 30, 2017, 44 claims are outstanding in France. In May 2017, the class action was filed against the French affiliate by an association representing the families whose children allegedly sustained personal injuries in connection with the exposure to the use of Depakine®, a sodium valproate antiepileptic treatment, by the mothers during pregnancy.

The French government is finalizing the indemnification mechanism to be operated by the Public Fund through the publication of decrees and orders.

B.14.2. Patents

Praluent® (alirocumab)-related Amgen Patent Litigation in the US

In February 2017, the US Court of Appeals for the Federal Circuit ("Federal Circuit") stayed (suspended) the permanent injunction for Praluent® (alirocumab) injection during Sanofi's and Regeneron's appeal. Sanofi and Regeneron have appealed the validity judgment and injunction ruling in the Federal Circuit. In June 2017, oral argument took place in the Court of Appeals for the Federal Circuit.

In April 2017, the District of Delaware granted Amgen's motion to amend the judgment on an accounting of supplemental damages and enhancement of such damages if deemed appropriate. This order is deferred until the Federal Circuit appeal is complete.

Praluent® (alirocumab)-related Amgen Patent Litigation in Europe

In February 2017, the UK action was stayed (suspended) on terms agreed by the parties. In April 2017, in France, Sanofi and Regeneron filed a response to the complaint (filed by Amgen in September 2016 alleging infringement by alirocumab of its '124 (FR) patent) and a separate nullity action.

Praluent® (alirocumab)-related Amgen Opposition and Patent Litigation in Japan

In May 2017, Amgen filed a lawsuit in the Tokyo District Court, against Sanofi K.K. for patent infringement of two of its Japanese Patents, JP5705288 and JP5906333. Amgen seeks injunctive relief to prevent the infringing manufacture, use and sale of alirocumab, as well as destruction of Praluent and alirocumab, and attorneys' fees. The validity of these two Japanese patents was challenged by Sanofi in the Japanese Patent Office by filing invalidation actions in 2016. The JPO issued a Preliminary Notice of Trial Decision in March 2017, indicating their intent to maintain some claims of each patent, and invalidate others. Amgen filed corrected claims in the JPO on May 16, 2017, canceling the claims the JPO indicated were invalid.

Dupixent® (dupilumab)-related Amgen Patent Opposition and Revocation in Europe

Immunex Corporation, an Amgen affiliate, is the registered proprietor of European Patent number EP2292665. The claims of this patent relate to, among other things, human monoclonal antibodies that are capable of inhibiting IL-4 induced biological activity and which compete with one of four reference antibodies for binding to a cell that expresses human IL-4R. In April 2016, Sanofi and Regeneron each filed an opposition in the European Patent Office against EP2292665, seeking its revocation on the basis that, inter alia, the claims are overly broad. In September 2016, Sanofi also filed a civil action in the U.K. High Court (Chancery Division/Patents Court) seeking revocation of the U.K. designation of EP2292665 on similar grounds. In January 2017, at the joint request of Sanofi and Immunex, the U.K. High Court ordered that the revocation action be stayed pending the final determination of the pending European Patent Office opposition proceedings.

Dupixent® (dupilumab)-related Amgen Inter Partes Review Petition and Patent Litigation in the US

In March 2017, Sanofi and Regeneron filed a petition for *Inter Partes* Review (IPR) for U.S. patent 8,679,487 with the United States Patent Office Patent Trial and Appeal Board (PTAB). In this petition, Sanofi and Regeneron attack the validity of all the claims of this patent.

In April 2017, Immunex filed a complaint against Sanofi and Regeneron for patent infringement and declaratory judgment of patent infringement of US patent 8,679,487 with respect to Dupixent® in the United States District Court for the Central District of California.

B.15. OTHER OPERATING INCOME AND EXPENSES

Other operating income for the first half of 2017 was €173 million (versus €265 million in the first half of 2016), while ***Other operating expenses*** totaled €71 million (versus €195 million in the first half of 2016).

In the first half of 2017, the main component of ***Other operating income*** was gains on asset disposals, which amounted to €57 million.

B.16. RESTRUCTURING COSTS AND SIMILAR ITEMS

Restructuring costs and similar items comprise the following:

(€ million)	June 30, 2017 (6 months) [a]	June 30, 2016 (6 months)[a]	December 31, 2016 (12 months)[a]
Employee-related expenses	124	536	650
Expenses related to property, plant and equipment	154	46	139
Compensation for early termination of contracts (other than contracts of employment)	42	3	31
Decontamination costs	1	3	3
Other restructuring costs and similar items	43	39	56
Total	**364**	**627**	**879**

(a) The results of the Animal Health business are presented separately in accordance with IFRS 5 (Non-Current Assets Held for Sale and Discontinued Operations); see Note B.21.

In the first half of 2017, restructuring costs mainly comprised write-downs of industrial assets in Europe and North America, and employee-related expenses arising from headcount adjustment plans in Europe.

B.17. OTHER GAINS AND LOSSES, AND LITIGATION

In 2017, the line item ***Other gains and losses, and litigation*** represents separation costs associated with the process of disinvesting from the Generics business in Europe, before any tax effects.

On December 30, 2016 Sanofi transferred to MSD its interest in the Sanofi Pasteur MSD joint venture, generating a pre-tax gain on disposal of €211 million (see Note D.1.2. to the consolidated financial statements for the year ended December 31, 2016).

B.18. FINANCIAL EXPENSES AND INCOME

Financial income and expenses comprise the following items:

(€ million)	June 30, 2017 (6 months)[a]	June 30, 2016 (6 months)[a]	December 31, 2016 (12 months)[a]
Cost of debt [b]	(140)	(146)	(274)
Interest income [c]	30	28	56
Cost of debt, net of cash and cash equivalents	**(110)**	**(118)**	**(218)**
Non-operating foreign exchange gains/(losses)	1	—	(21)
Unwinding of discounting of provisions [d)]	(17)	(17)	(33)
Net interest cost related to employee benefits	(47)	(58)	(114)
Gains/(losses) on disposals of financial assets	52	19	36
Impairment losses on financial assets, net of reversals	(6)	(12)	(487)
Other	4	(5)	(19)
Net financial income/(expenses)	**(123)**	**(191)**	**(856)**
comprising: Financial expenses	**(218)**	**(241)**	**(924)**
Financial income	**95**	**50**	**68**

(a) The results of the Animal Health business are presented separately in accordance with IFRS 5 (Non-Current Assets Held for Sale and Discontinued Operations); see Note B.21.
(b) Includes net gain on interest and currency derivatives used to hedge debt: €27 million for the six months ended June 30, 2017, versus €44 million for the six months ended June 30, 2016 and €86 million for the year ended December 31, 2016.
(c) Includes net loss on interest and currency derivatives used to hedge cash and cash equivalents: €(6) million for the six months ended June 30, 2017, versus zero for the six months ended June 30, 2016 and the year ended December 31, 2016.
(d) Primarily on provisions for environmental risks, restructuring provisions, and provisions for product-related risks (see Note B.12.).

In 2017 and 2016, the impact of the ineffective portion of hedging relationships was immaterial.

B.19. INCOME TAX EXPENSE

Sanofi has elected for tax consolidations in a number of countries, principally France, Germany, the United Kingdom and the United States.

The table below shows the split of income tax expense between current and deferred taxes:

(€ million)	June 30, 2017 (6 months)[a]	June 30, 2016 (6 months)[a]	December 31, 2016 (12 months)[a]
Current taxes	(879)	(978)	(1,869)
Deferred taxes	269	481	543
Total	**(610)**	**(497)**	**(1,326)**
Income before tax and associates and joint ventures	**2,953**	**2,399**	**5,678**

(a) The results of the Animal Health business are presented separately in accordance with IFRS 5 (Non-Current Assets Held for Sale and Discontinued Operations); see Note B.21.

The difference between the effective tax rate (on income before taxes and before associates and joint ventures) and the standard corporate income tax rate applicable in France is explained as follows:

(as a percentage)	June 30, 2017 (6 months)[a][b]	June 30, 2016 (6 months)[a][b]	December 31, 2016 (12 months)[a]
Standard tax rate applicable in France	34.4	34.4	34.4
Difference between the standard French tax rate and the rates applicable to Sanofi [c]	(18.2)	(13.3)	(10.1)
Tax rate differential on intragroup margin in inventory [d]	(0.5)	(1.8)	(0.6)
Tax effects of the share of profits reverting to BMS	(0.5)	(0.6)	(0.5)
Contribution on distributed income (3%) [e]	3.8	4.7	2.0
CVAE tax in France [f]	1.4	1.3	1.1
Revisions to tax exposures and settlements of tax disputes	3.2	(9.3)	(4.8)
Fair value remeasurement of contingent consideration	0.2	0.4	0.4
Other	(3.1)	4.9	1.5
Effective tax rate	**20.7**	**20.7**	**23.4**

(a) The results of the Animal Health business are presented separately in accordance with IFRS 5 (Non-Current Assets Held for Sale and Discontinued Operations); see Note B.21.
(b) Rate calculated on the basis of the estimated effective tax rate for the full financial year (see Note A.2.).
(c) The difference between the French tax rate and tax rates applicable to foreign subsidiaries reflects the fact that Sanofi has operations in many countries, most of which have lower tax rates than France.
(d) When internal margin included in inventory is eliminated, a deferred tax asset is recognized on the basis of the tax rate applicable to the subsidiary that holds the inventory, which may differ from the tax rate of the subsidiary that generated the eliminated intragroup margin.
(e) Entities liable to corporate income tax in France are also liable to pay an additional tax contribution in respect of amounts distributed by the entity.
(f) Net impact on the effective tax rate (current taxes, impact of the tax deduction, and deferred taxes).

B.20. SEGMENT INFORMATION

As indicated in Note B.26. to the consolidated financial statements for the year ended December 31, 2016, Sanofi now has two operating segments: Pharmaceuticals and Human Vaccines (Vaccines).

The Pharmaceuticals segment comprises the commercial operations of the following franchises: Specialty Care (Rare Diseases, Multiple Sclerosis, Oncology), Diabetes & Cardiovascular, Established Prescription Products, Consumer Healthcare, and Generics, and dedicated research and development, production and marketing activities for all of Sanofi's pharmaceuticals operations. The Sanofi pharmaceuticals portfolio consists of flagship products, plus a broad range of prescription medicines, generic medicines, and consumer health products. This segment also includes all associates whose activities are related to pharmaceuticals, in particular Regeneron, Onduo, and the entities majority owned by BMS.

The Vaccines segment is wholly dedicated to vaccines and includes the commercial operations of Sanofi Pasteur and dedicated research and development, production and marketing activities for Sanofi's vaccines operations. This segment also included the Sanofi Pasteur MSD joint venture until December 30, 2016, the date on which the joint venture ended.

Each segment includes global support function costs as allocated for internal reporting purposes within Sanofi.

The "Other" segment includes all activities that do not qualify as reportable segments under IFRS 8.This segment includes the effects of retained commitments in respect of divested activities.

Inter-segment transactions are not material.

B.20.1. Segment results

Sanofi reports segment results on the basis of "Business operating income". This indicator is compliant with IFRS 8 and is used internally to measure the performance of operating segments and to allocate resources.

Business operating income is derived from ***Operating income***, adjusted as follows:

- the amounts reported in the line items ***Restructuring costs and similar items***, ***Fair value remeasurement of contingent consideration*** and ***Other gains and losses, and litigation*** are eliminated;
- amortization and impairment losses charged against intangible assets (other than software and other rights) are eliminated;
- the share of profits/losses of associates and joint ventures is added;
- net income attributable to non-controlling interests is deducted;
- other acquisition-related effects (primarily the workdown of acquired inventories remeasured at fair value at the acquisition date, and the impact of acquisitions on investments in associates and joint ventures) are eliminated;
- restructuring costs relating to associates and joint ventures are eliminated.

Segment results are shown in the table below:

(€ million)	June 30, 2017 (6 months)			
	Pharmaceuticals	Vaccines	Other	Total
Net sales	**15,511**	**1,800**	**—**	**17,311**
Other revenues	149	370	—	519
Cost of sales	(4,363)	(1,131)	—	(5,494)
Research and development expenses	(2,373)	(294)	—	(2,667)
Selling and general expenses	(4,609)	(437)	—	(5,046)
Other operating income and expenses	122	2	(22)	102
Share of profit/(loss) of associates and joint ventures	82	(1)	—	81
Net income attributable to non-controlling interests	(65)	—	—	(65)
Business operating income	**4,454**	**309**	**(22)**	**4,741**

(€ million)	June 30, 2016 (6 months)			
	Pharmaceuticals	Vaccines	Other	Total
Net sales	**14,504**	**1,422**	**—**	**15,926**
Other revenues	122	188	—	310
Cost of sales	(4,143)	(827)	—	(4,970)
Research and development expenses	(2,246)	(268)	—	(2,514)
Selling and general expenses	(4,261)	(348)	—	(4,609)
Other operating income and expenses	110	(1)	(39)	70
Share of profit/(loss) of associates and joint ventures	44	9	—	53
Net income attributable to non-controlling interests	(50)	—	—	(50)
Business operating income	**4,080**	**175**	**(39)**	**4,216**

(€ million)	December 31, 2016 (12 months)			
	Pharmaceuticals	Vaccines	Other	Total
Net sales	**29,244**	**4,577**	**—**	**33,821**
Other revenues	274	613	—	887
Cost of sales	(8,349)	(2,353)	—	(10,702)
Research and development expenses	(4,618)	(554)	—	(5,172)
Selling and general expenses	(8,743)	(743)	—	(9,486)
Other operating income and expenses	(1)	(14)	(112)	(127)
Share of profit/(loss) of associates and joint ventures	129	48	—	177
Net income attributable to non-controlling interests	(112)	(1)	—	(113)
Business operating income	**7,824**	**1,573**	**(112)**	**9,285**

The table below, presented in compliance with IFRS 8, shows a reconciliation between "Business operating income" and ***Income before tax and associates and joint ventures***:

(€ million)	June 30, 2017 (6 months)	June 30, 2016 (6 months)	December 31, 2016 (12 months)
Business operating income [(a)]	**4,741**	**4,216**	**9,285**
Share of profit/(loss) of associates and joint ventures [(b)]	(81)	(53)	(177)
Net income attributable to non-controlling interests [(c)]	65	50	113
Amortization of intangible assets	(990)	(877)	(1,692)
Impairment of intangible assets	(12)	(52)	(192)
Fair value remeasurement of contingent consideration	(100)	(67)	(135)
Expenses arising from the impact of acquisitions on inventories	(176)	—	—
Restructuring costs and similar items	(364)	(627)	(879)
Other gains and losses, and litigation [(d)]	(7)	—	211
Operating income	**3,076**	**2,590**	**6,534**
Financial expenses [(e)]	(218)	(241)	(924)
Financial income	95	50	68
Income before tax and associates and joint ventures	**2,953**	**2,399**	**5,678**

(a) The results of the Animal Health business for 2016, and the gain arising on the divestment of that business in 2017, are presented separately in accordance with IFRS 5 (Non-Current Assets Held for Sale and Discontinued Operations).
(b) Excluding restructuring costs of associates and joint ventures and expenses arising from the impact of acquisitions on associates and joint ventures, and after elimination of Sanofi's share of the business net income of Sanofi Pasteur MSD from the date when Sanofi and MSD announced their intention to end their joint venture (€52 million in 2016).
(c) Excluding (i) restructuring costs and (ii) other adjustments attributable to non-controlling interests.
(d) For 2017, this line item consists of separation costs associated with the process of disinvesting from the Generics business in Europe, before any tax effects.
For 2016, this line item consists of the pre-tax gain on divestment of Sanofi's interest in the Sanofi Pasteur MSD joint venture.
(e) For the year ended December 31, 2016, this line item includes an impairment loss of €457 million taken against Sanofi's equity investment in Alnylam Pharmaceuticals, Inc. (see Note D.29. to the consolidated financial statements for the year ended December 31, 2016).

B.20.2. Other segment information

The tables below show the split by operating segment of (i) the carrying amount of investments in associates and joint ventures, (ii) acquisitions of property, plant and equipment, and (iii) acquisitions of intangible assets.

The principal associates and joint ventures are for the Pharmaceuticals segment, Regeneron Pharmaceuticals, Inc. (see Note C.1. to the consolidated financial statements for the year ended December 31, 2016), the entities majority owned by BMS (see Note C.2. to the consolidated financial statements for the year ended December 31, 2016), Onduo LLC, and Infraserv GmbH & Co. Höchst KG; and for the Vaccines segment, Sanofi Pasteur MSD until March 8, 2016 (see Notes B.1. and D.1.2. to the consolidated financial statements for the year ended December 31, 2016).

Acquisitions of intangible assets and property, plant and equipment correspond to acquisitions paid for during the period.

	June 30, 2017		
(€ million)	Pharmaceuticals	Vaccines	Total
Investments in associates and joint ventures	2,831	10	2,841
Acquisitions of property, plant and equipment	465	173	638
Acquisitions of other intangible assets	188	172	360

(€ million)	June 30, 2016 Pharmaceuticals	Vaccines	Total
Investments in associates and joint ventures	2,724	259	2,983
Acquisitions of property, plant and equipment	439	149	588
Acquisitions of other intangible assets	580	32	612

(€ million)	December 31, 2016 Pharmaceuticals	Vaccines	Total
Investments in associates and joint ventures	2,886	4	2,890
Acquisitions of property, plant and equipment	904	315	1,219
Acquisitions of other intangible assets	807	57	864

B.20.3. Information by geographical region

The geographical information on net sales provided below is based on the geographical location of the customer.

In accordance with IFRS 8, the non-current assets reported below exclude financial instruments, deferred tax assets, and pre-funded pension obligations.

(€ million)	June 30, 2017 Total	Europe	of which France	North America	of which United States	Other countries
Net sales	**17,311**	**4,761**	**1,166**	**5,861**	**5,562**	**6,689**
Non-current assets:						
· property, plant and equipment	9,633	5,895	3,243	2,599	2,204	1,139
· goodwill	40,964	—		—		—
· other intangible assets	13,849	3,522		4,853		5,474

(€ million)	June 30, 2016 Total	Europe	of which France	North America	of which United States	Other countries
Net sales	**15,926**	**4,412**	**1,153**	**5,629**	**5,356**	**5,885**
Non-current assets:						
· property, plant and equipment	9,819	5,954	3,423	2,782	2,385	1,083
· goodwill	39,420	—		—		—
· other intangible assets	11,094	3,514		5,440		2,140

(€ million)	December 31, 2016 Total	Europe	of which France	North America	of which United States	Other countries
Net sales	**33,821**	**8,679**	**2,206**	**12,963**	**12,391**	**12,179**
Non-current assets:						
· property, plant and equipment	10,019	6,068	3,413	2,850	2,447	1,101
· goodwill	40,287	—		—		—
· other intangible assets	10,879	3,612		5,430		1,837

As stated in Notes B.6.1. and D.5. to the consolidated financial statements for the year ended December 31, 2016, goodwill is not allocated by geographical region.

B.20.4. Net sales and credit risk

Sanofi's three largest customers respectively accounted for approximately 10%, 6% and 5% of consolidated net sales in the first half of 2017, mostly in the Pharmaceuticals segment (versus approximately 11%, 8% and 3% in the first half of 2016).

Net sales

Sanofi's net sales comprise net sales generated by the Pharmaceuticals segment and the Vaccines segment (see section C.3.1.1. of the half-year management report).

B.21. ASSETS HELD FOR SALE OR EXCHANGE AND LIABILITIES RELATED TO ASSETS HELD FOR SALE OR EXCHANGE

Assets held for sale or exchange, and liabilities related to assets held for sale or exchange, comprise:

(€ million)	June 30, 2017	December 31, 2016
Animal Health business [(a)]	26	6,376
Other	2	45
Assets held for sale or exchange	**28**	**6,421**
Animal Health business [(a)]	10	1,165
Other	—	30
Liabilities related to assets held for sale or exchange	**10**	**1,195**

(a) The Animal Health business was divested on January 1, 2017, (see Note B.1.) except for Merial de Mexico SA de CV, the divestment of which is expected to be finalized in the second half of 2017.

In accordance with IFRS 5, the net income/loss of the Animal Health business is presented in a separate line item within the income statement (see Notes B.1. and D.2. to the consolidated financial statements for the year ended December 31, 2016). The table below provides an analysis of the main items included in the line item ***Net income/(loss) of the exchanged/held-for-exchange Animal Health business***:

(€ million)	June 30, 2017	June 30, 2016	December 31, 2016
Net sales	**—**	**1,485**	**2,708**
Gross profit	—	1,030	1,850
Operating income	—	452	678
Income before tax and associates and joint ventures [(a)]	6,137	449	672
Income tax expense [(b)]	(1,716)	(163)	(359)
Net income/(loss) of the exchanged/held-for-exchange Animal Health business	**4,421**	**286**	**314**

(a) In 2017, this line shows the gain arising on the divestment of the Animal Health business in exchange for Boehringer Ingelheim's Consumer Healthcare business, based on a total consideration of €10,320 million.
(b) Income tax expense on the gain on divestment of the Animal Health business.

The table below presents basic and diluted earnings per share for the exchanged/held-for-exchange Animal Health business, in accordance with IAS 33 (Earnings Per Share):

(€ million)	June 30, 2017	June 30, 2016	December 31, 2016
Net income/(loss) of the exchanged/held-for-exchange Animal Health business	4,421	286	314
Average number of shares outstanding (million)	1,260.3	1,287.6	1,286.6
Average number of shares outstanding after dilution (million)	1,270.6	1,296.6	1,296.0
– Basic earnings per share (in euros)	3.51	0.22	0.24
– Diluted earnings per share (in euros)	3.48	0.22	0.24

C/ Events subsequent to June 30, 2017

On July 11, 2017, Sanofi announced that it will acquire Protein Sciences, a privately held biotechnology company based in Meriden, Connecticut in the United States. Under the terms of the agreement between the two companies, Sanofi will make an upfront payment of $650 million and could pay up to a further $100 million upon attainment of certain milestones.

The acquisition is expected to close in the third quarter of 2017, subject to customary regulatory approvals.

On July 14, 2017, Emergent BioSolutions Inc. announced that it is to acquire ACAM2000®, the smallpox vaccine developed by Sanofi Pasteur. Under the terms of the agreement Emergent BioSolutions will make an upfront payment of $97.5 million, and could pay up to a further $27.5 million upon attainment of certain milestones.

On July 20, 2017, Sanofi and Ablynx announced a partnership to expand treatments for inflammatory and auto-immune diseases. Under the terms of the agreement, Sanofi could pay Ablynx up to €2.4 billion.

On July 31, 2017, 1,621,098 shares (representing approximately 0.13% of the share capital) were issued in connection with the “Action 2017” Sanofi worldwide employee share ownership plan, intended to give employees a greater stake in the Company’s future development and results.

2 HALF-YEAR MANAGEMENT REPORT

A/ Significant events of the first half of 2017

A.1. PHARMACEUTICALS

On January 1, 2017, Sanofi and Boehringer Ingelheim (BI) finalized the strategic transaction agreed in June 2016, involving the exchange of Sanofi's Animal Health business (Merial) for BI's Consumer Healthcare business in most countries. After taking account of preliminary enterprise value adjustments, the exchange values of the two businesses as effectively transferred during the first half of 2017 were determined at €10,320 million for Sanofi's Animal Health business and €6,271 million for BI's Consumer Healthcare business. Finalization of the divestment of Merial in Mexico is expected in the second half of 2017. The divestment of the Animal Health business has generated an after-tax gain of €4.4 billion in 2017, excluding the effect of price adjustments and delayed business transfers (see Note B.1. to the condensed half-year consolidated financial statements).

A.1.1. Acquisitions and alliances

On February 27, 2017, Sanofi and Lonza announced a strategic partnership to build and operate a large-scale mammalian cell culture facility for monoclonal antibody production in Visp, Switzerland. An initial investment of approximately €0.3 billion to finance construction of the facility will be made 50/50 by the two partners. In addition, Sanofi could pay Lonza in the region of €0.8 billion over the next fifteen years, partly as its share of operating expenses and of the cost of producing future batches, and partly to reserve capacity in the new facility.

A.1.2. Filings for marketing authorization for new products

- On January 4, 2017, **Soliqua®** 100/33 (once-daily fixed-dose injectable combination of insulin glargine 100 units/ml and lixisenatide 33 mcg/ml) became available in US pharmacies on medical prescription. Soliqua® 100/33 is indicated for the treatment of adults with type 2 diabetes inadequately controlled on basal insulin (less than 60 units daily) or lixisenatide alone. On January 18, 2017, the European Commission granted marketing authorization in Europe for **Suliqua®** (the brand name for the same product in Europe) for the treatment of adults with type 2 diabetes. Suliqua® is authorized for use in combination with metformin to improve control over blood sugar levels when this has not been provided by metformin alone or metformin combined with another oral glucose-lowering medicinal product or with basal insulin.
- At the start of February 2017, the US Food and Drug Administration (FDA) approved **Xyzal® Allergy 24HR** as an over-the-counter (OTC) treatment for the relief of symptoms associated with seasonal and year-round allergies. Two formulations of Xyzal® are now approved for OTC use: 5 mg tablets for ages 6 years and older, and 0.5 mg/mL oral solution for ages 2 years and older. Xyzal® is an oral antihistamine with a proven 24-hour effect.
- On March 28, 2017, Sanofi and Regeneron Pharmaceuticals, Inc. announced that the FDA had approved **Dupixent®** (dupilumab) injectable solution, the first and only biologic medicine approved for the treatment of adults with moderate-to-severe atopic dermatitis whose disease is not adequately controlled with topical prescription therapies, or when those therapies are not advisable.
- On May 19, 2017, Sanofi announced that the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) had adopted a positive opinion for the marketing authorization of **Insulin lispro Sanofi®** (insulin lispro 100 units/ml). The CHMP recommended the use of Insulin lispro Sanofi® to treat adults and children who have diabetes and need insulin to control their blood sugar level, including those patients whose diabetes has just been diagnosed. Approval for the product was obtained from the European Commission on July 19, 2017.
- On May 22, 2017, Sanofi and Regeneron Pharmaceuticals, Inc. announced that the FDA had approved **Kevzara®** (sarilumab) for the treatment of adult patients with moderately to severely active rheumatoid arthritis who have had an inadequate response or intolerance to one or more disease modifying

antirheumatic drugs (DMARDs), such as methotrexate[1]. Kevzara® was also approved in the European Union on June 27, 2017 for the same indication. The product may be used as monotherapy in the event of intolerance or contra-indication of methotrexate. The first country to approve the product was Canada, on February 1, 2017.

A.1.3. Research and development

For an update on our research and development (R&D) pipeline, refer to the appendix in Section G of this half-year management report.

The principal R&D announcements during the first half of 2017 were as follows:

Phase IV:

- On June 11, 2017, positive results were announced from two Phase IIIb/IV trials (ODYSSEY-DM) evaluating **Praluent®** in patients with diabetes and hypercholesterolemia. In the studies, Praluent®, when administered on top of maximally tolerated doses of statins, significantly reduced low-density lipoprotein cholesterol (LDL-C) (ODYSSEY DM-INSULIN study) and non-high-density lipoprotein cholesterol (non-HDL-C) (ODYSSEY DM-DYSLIPIDEMIA study). Both studies also found that a majority of patients reached their lipid goals with Praluent® 75 mg every two weeks, with an overall safety profile comparable to the ODYSSEY Phase III program.

Phase III:

- On March 4, 2017, Sanofi and Regeneron Pharmaceuticals, Inc. presented detailed results from the one-year Phase III CHRONOS study, which showed that patients receiving the investigational drug **Dupixent® (dupilumab)** with topical corticosteroids (TCS) achieved significantly improved measures of overall disease severity compared to TCS alone in adults with uncontrolled moderate-to-severe atopic dermatitis.
- Results from the CAFÉ study evaluating **dupilumab** in the treatment of cyclosporine-resistant adults with moderate-to-severe atopic dermatitis were positive, and showed a satisfactory safety profile.
- Two phase III studies with **dupilumab** were initiated during the first half of 2017, one in the treatment of persistent asthma in children aged 6 to 11 years and the other in the treatment of atopic dermatitis in adolescents aged 12 to 17 years.
- **SAR439684 (PD-1 inhibitor)**, developed in collaboration with Regeneron, entered Phase III in the treatment of non small cell lung cancer.

Phase II:

- **SP0232/MEDI8897** (collaboration with MedImmune), a monoclonal antibody for the prevention of Respiratory Syncytial Virus (RSV) associated illness in newborns and infants, entered the pipeline in Phase II.
- **SAR566658**, a maytansine-loaded anti-CA6 monoclonal antibody, entered Phase II in the treatment of triple negative breast cancer.
- **GZ402671/venglustat**, a glucosylceramide synthase inhibitor, entered Phase IIb for the treatment of Gaucher disease type 3. The product also entered Phase IIa in the treatment of Fabry disease.
- Two Phase II studies have begun to evaluate **isatuximab** in acute lymphoblastic leukemia and latent multiple myeloma.
- A Phase II study has begun evaluating **SAR439684 (PD-1)**, developed in collaboration with Regeneron, in the treatment of basocellular carcinoma.

Phase I:

- **SAR440181/MYK491** (collaboration with MyoKardia) entered Phase I in the treatment of dilated cardiomyopathy (DCM1 myosin activation).
- **SAR439459** (TGFb inhibitor, monoclonal antibody) entered Phase I as monotherapy and in combination with SAR439684 in the treatment of metastatic melanoma.

[1] Prescribing Information Kevzara® (sarilumab). May 2017

A.2. HUMAN VACCINES (VACCINES)

At the end of December 2016, Sanofi Pasteur and MSD (known as Merck in the United States and Canada) ended their European joint venture Sanofi Pasteur MSD (SPMSD). This transaction was treated as a divestment of our share in the joint venture, and the acquisition of the vaccines portfolio reverting to Sanofi. With effect from January 1, 2017, the additional net sales generated by this transaction are reflected in our 2017 first-half consolidated net sales. The amount of those additional net sales for the first half of 2016 is estimated at €97 million.

A.2.1. Partnerships and collaborations

On March 3, 2017, Sanofi and its vaccines global business unit Sanofi Pasteur announced an agreement with **MedImmune**, the global biologics research and development arm of AstraZeneca, to develop and commercialize a monoclonal antibody called MEDI8897 for the prevention of Respiratory Syncytial Virus (RSV) associated illness in newborns and infants. According to the US Centers for Disease Control and Prevention, RSV is the most common cause of lower respiratory tract infections in children aged under 1 in the United States and worldwide.

A.2.2. Research and development

- Volunteers are being recruited to a Phase III clinical trial evaluating the efficacy of the vaccine against *Clostridium difficile* symptomatic infections.
- A Phase III trial of the high-dose quadrivalent inactivated influenza vaccine **Fluzone® QIV HD** in patients aged over 65 years is currently in preparation.
- Phase III clinical trials are ongoing for the second-generation meningococcal ACYW conjugate vaccine **Men Quad TT**, indicated for a broader population (from children to seniors).

A.3. OTHER SIGNIFICANT EVENTS OF THE FIRST HALF OF 2017

A.3.1. Corporate governance

The Annual General Meeting of Sanofi shareholders was held in Paris on May 10, 2017. All of the resolutions submitted to the vote were adopted. The meeting approved a cash dividend of €2.96 per share, payable on May 18, 2017. The meeting also approved the appointment of Melanie Lee and Bernard Charlès as independent directors, and the reappointment of Fabienne Lecorvaisier as a director, to serve for a four-year term expiring at the Annual General Meeting called to approve the 2020 financial statements. In addition, the meeting voted to amend the Articles of Association to allow for the appointment of two employee directors. Further to that amendment, Marion Palme (a German citizen) and Christian Senectaire (a French citizen) were designated as employee directors in June 2017. The new Board of Directors has 16 members, 7 of them women. A substantial majority of the directors are independent.

A.3.2. Legal and arbitration proceedings

For a description of the most significant developments in legal and arbitration proceedings since publication of the financial statements for the year ended December 31, 2016, refer to Note B.14. to the condensed half-year consolidated financial statements.

The following events have occurred in respect of litigation, arbitration and other legal proceedings in which Sanofi and its affiliates are involved:

Patents

- **Lantus® Mylan *Inter Partes* Review Petition in the US**

In June 2017, Mylan Pharmaceuticals, Inc. filed petitions for *Inter Partes* Review (IPR) for US Patent Nos. 7,476,652 and 7,713,930 regarding Lantus® with the United States Patent Office Patent Trial and Appeal Board (PTAB). In these petitions, Mylan attacks the validity of all claims of these patents.

- **Lantus® Merck Patent Litigation in the US**

In the patent litigation against Merck on Lantus®, the claim construction hearing has been rescheduled for September 20, 2017 and briefing on Summary Judgment Motions on certain issues pertaining to some of the patents-in-suit is now scheduled to begin on November 17, 2017.

- **Multaq® Patent Litigation in the US**

In April 2017, Sanofi and Lupin settled the ongoing patent litigation on Multaq® and Sanofi went to trial on the '900 patent against Sandoz and Watson.

Government Investigations and Related Litigation

In March 2017, the Washington State Attorney General's office issued a civil investigative demand calling for the production of documents and information relating to pricing and trade practices for Lantus®, Toujeo®, Apidra® and Soliqua®, from January 1, 2005 through present. Sanofi US is cooperating with this investigation.

In March and April 2017, two additional actions were filed against Sanofi in New Jersey court on behalf of putative class of diabetes patients alleging violations of the Racketeer Influenced and Corrupt Organizations Act, in connection with the pricing of Lantus®.

B/ Events subsequent to June 30, 2017

- On July 10, 2017, Sanofi Genzyme and Alnylam Pharmaceuticals, Inc., the leading RNAi therapeutics company, announced new positive results from the ongoing phase II open-label extension study with **fitusiran** in patients with hemophilia A and B, with or without inhibitors. Based on those results, Sanofi and Alnylam have announced the launch of a Phase III program (ATLAS) on fitusiran in patients with hemophilia A and B, with or without inhibitors.
- On July 11, 2017, Sanofi announced that it will acquire **Protein Sciences**, a privately held biotechnology company based in Meriden, Connecticut in the United States. Under the terms of the agreement between the two companies, Sanofi will make an upfront payment of $650 million and could pay up to a further $100 million upon attainment of certain milestones. In October 2016, Protein Sciences obtained FDA approval for its Flublok® quadrivalent influenza vaccine. Flublok® is the only recombinant protein-based influenza vaccine approved by the FDA. The acquisition is expected to close in the third quarter of 2017, subject to customary regulatory approvals.
- On July 21, 2017, the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) adopted a positive opinion on the market authorization application for **Dupixent®** (dupilumab) for the treatment of adults with moderate-to-severe atopic dermatitis.
- On July 31, 2017, 1,621,098 shares (approximately 0.13% of the share capital) were issued in connection with **Action 2017**, a global employee share ownership plan intended to give Sanofi employees a greater stake in the company's results and future development. A total of 25,758 employees signed up to the plan between June 19 and June 30, 2017, subscribing for Sanofi shares at a price of €70.01 per share. For each tranche of five shares applied for, the applicant received one additional new share by way of employer's contribution; and for each application for 20 or more shares, the applicant received an additional four new shares by way of employer's contribution.

C/ Consolidated financial statements for the first half of 2017

For definitions of financial indicators, refer to the appendix in Section F of this report. Unless otherwise indicated, all financial data in this report are presented in accordance with international financial reporting standards (IFRS), including international accounting standards and interpretations (see Note A.1 to the condensed half-year consolidated financial statements).

C.1. CONSOLIDATED RESULTS FOR THE FIRST HALF OF 2017

Consolidated income statements for the six months ended June 30, 2016 and June 30, 2017

(€ million)	June 30, 2017 (6 months)[(a)]	as % of net sales	June 30, 2016 (6 months)[(a)]	as % of net sales
Net sales	**17,311**	**100.0%**	**15,926**	**100.0%**
Other revenues	519	3.0%	310	1.9%
Cost of sales	(5,670)	(32.8%)	(4,970)	(31.2%)
Gross profit	**12,160**	**70.2%**	**11,266**	**70.7%**
Research and development expenses	(2,667)	(15.4%)	(2,514)	(15.8%)
Selling and general expenses	(5,046)	(29.1%)	(4,609)	(28.9%)
Other operating income	173		265	
Other operating expenses	(71)		(195)	
Amortization of intangible assets	(990)		(877)	
Impairment of intangible assets	(12)		(52)	
Fair value remeasurement of contingent consideration	(100)		(67)	
Restructuring costs and similar items	(364)		(627)	
Other gains and losses, and litigation	(7)		—	
Operating income	**3,076**	**17.8%**	**2,590**	**16.3%**
Financial expenses	(218)		(241)	
Financial income	95		50	
Income before tax and associates and joint ventures	**2,953**	**17.1%**	**2,399**	**15.1%**
Income tax expense	(610)		(497)	
Share of profit/(loss) of associates and joint ventures	38		98	
Net income excluding the exchanged/held-for-exchange Animal Health business	**2,381**	**13.8%**	**2,000**	**12.6%**
Net income/(loss) of the exchanged/held-for-exchange Animal Health business	4,421		286	
Net income	**6,802**		**2,286**	
Net income attributable to non-controlling interests	64		41	
Net income Attributable to equity holders of Sanofi	**6,738**	**38.9%**	**2,245**	**14.1%**
Average number of shares outstanding (million)	1,260.3		1,287.6	
Average number of shares outstanding after dilution (million)	1,270.6		1,296.6	
– Basic earnings per share (in euros)	5.35		1.74	
– Basic earnings per share excluding the exchanged/held-for-exchange Animal Health business (in euros)	1.84		1.52	
– Diluted earnings per share (in euros)	5.30		1.73	
– Diluted earnings per share excluding the exchanged/held-for-exchange Animal Health business (in euros)	1.82		1.51	

(a) The results of the Animal Health business for 2016, and the gain on the divestment of that business in 2017, are presented separately in accordance with IFRS 5 (Non-Current Assets Held for Sale and Discontinued Operations); see Note B.21.

C.2. SEGMENT INFORMATION

C.2.1. Operating segments

In accordance with IFRS 8 (Operating Segments), the segment information reported by Sanofi is prepared on the basis of internal management data provided to the Chief Executive Officer, who is the chief operating decision maker. The performance of those segments is monitored individually using internal reports and common indicators. The operating segment disclosures required under IFRS 8 are provided in Note B.20. to the condensed half-year consolidated financial statements.

Sanofi has two operating segments: Pharmaceuticals and Human Vaccines (Vaccines).

The Pharmaceuticals segment comprises the commercial operations of the following franchises: Specialty Care (Rare Diseases, Multiple Sclerosis, Oncology), Diabetes & Cardiovascular, Established Prescription Products, Consumer Healthcare, and Generics, and dedicated research and development, production and marketing activities for all of Sanofi's pharmaceuticals operations. This segment also includes all associates whose activities are related to pharmaceuticals, in particular Regeneron, Onduo and the entities majority owned by Bristol Myers Squibb (BMS).

The Vaccines segment is wholly dedicated to vaccines and includes the commercial operations of Sanofi Pasteur and dedicated research and development, production and marketing activities for Sanofi's vaccines operations. This segment included the Sanofi Pasteur MSD joint venture until December 30, 2016, the date on which the joint venture ended.

Each segment includes global support function costs as allocated for internal reporting purposes within Sanofi.

The "Other" segment includes all activities that do not qualify as reportable segments under IFRS 8. This segment includes the effects of retained commitments in respect of divested activities.

Inter-segment transactions are not material.

C.2.2. Business operating income

We report segment results on the basis of "business operating income". This indicator is used internally by the chief operating decision maker to measure the performance of each operating segment and to allocate resources. For a definition of "business operating income", and a reconciliation between that indicator and ***Income before tax and associates and joint ventures***, refer to Note B.20.1 to our condensed half-year consolidated financial statements.

C.2.3. Business net income

We believe that understanding of our operational performance by our management and our investors is enhanced by reporting "business net income". This non-GAAP financial measure[1] represents business operating income, less net financial expenses and the relevant income tax effects. For the six months ended June 30, 2016 and the year ended December 31, 2016, "Business net income" consists of (i) "Business net income excluding Animal Health", determined as described above, and (ii) "Animal Health business net income", determined on a similar and comparable basis.

[1] Refer to the appendix in section F for a definition.

The table below reconciles our business operating income to our business net income:

(€ million)	June 30, 2017 (6 months)	June 30, 2016 (6 months)	December 31, 2016 (12 months)
Business operating income	**4,741**	**4,216**	**9,285**
Financial income and expenses [(a)]	(123)	(191)	(399)
Income tax expense	(1,127)	(922)	(2,054)
Business net income excluding Animal Health	**3,491**	**3,103**	**6,832**
Animal Health business net income	—	299	476
Business net income	**3,491**	**3,402**	**7,308**

(a) For 2016, this line does not include the €457 million impairment loss charged against Sanofi's equity investment in Alnylam.

The table below reconciles our business net income to ***Net income attributable to equity holders of Sanofi***:

(€ million)	June 30,[(a)] 2017 (6 months)	June 30,[(a)] 2016 (6 months)	December 31,[(a)] 2016 (12 months)
Net income attributable to equity holders of Sanofi	**6,738**	**2,245**	**4,709**
Amortization of intangible assets [(b)]	990	877	1,692
Impairment of intangible assets	12	52	192
Fair value remeasurement of contingent consideration	100	67	135
Expenses arising from the impact of acquisitions on inventories	176	—	—
Restructuring costs and similar items	364	627	879
Impairment loss charged against the equity investment in Alnylam	—	—	457
Other gains and losses, and litigation [(c)]	7	—	(211)
Tax effects of the items listed above [(d)]:	(628)	(548)	(841)
amortization of intangible assets	(345)	(307)	(647)
impairment of intangible assets	(4)	(16)	(47)
fair value remeasurement of contingent consideration	(31)	(15)	(24)
expenses arising from the impact of acquisitions on inventories	(56)	—	—
restructuring costs and similar expenses	(126)	(210)	(95)
other tax effects	(66)	—	(28)
Other tax items	111	113	113
Share of items listed above attributable to non-controlling interests	(1)	(9)	(22)
Associates and joint ventures: restructuring costs and expenses arising from the impact of acquisitions	43	(54)	(9)
Items relating to the Animal Health business [(e)]	(4,421)	13	162
Other Sanofi Pasteur MSD items [(f)]	—	19	52
Business net income	**3,491**	**3,402**	**7,308**

(a) The results of the Animal Health business for 2016, and the gain arising on the divestment of that business in 2017, are presented separately in accordance with IFRS 5 (Non-Current Assets Held for Sale and Discontinued Operations).
(b) Includes amortization expense generated by the remeasurement of intangible assets in connection with business combinations: €919 million in the first half of 2017 and €809 million in the first half of 2016.
(c) This line comprises (i) for the first half of 2017, the separation costs associated with the process of disinvesting from the Generics business in Europe, before tax effects and (ii) for 2016, the pre-tax gain on the divestment of Sanofi's interest in the Sanofi Pasteur MSD joint venture.
(d) For the year ended December 31, 2016, this line includes the impact on deferred tax assets and liabilities arising from the reconciling items (in particular amortization and impairment of intangible assets, and restructuring costs) as a result of changes in tax rates, mainly in France (28% standard rate effective as of January 1, 2020) and in Japan.
(e) For 2017, this line shows the gains arising on the divestment of the Animal Health business. For 2016, this line shows the elimination of (i) the impact of the discontinuation of depreciation and impairment of property, plant & equipment with effect from the start date of IFRS 5 application; (ii) the impact of the amortization and impairment of intangible assets until the start date of IFRS 5 application; (iii) costs directly incurred as a result of the divestment; and (iv) tax effects of those items.
(f) For 2016, this line shows the elimination of Sanofi's share of the business net income of Sanofi Pasteur MSD from the date when Sanofi and MSD announced their intention to end their joint venture.

C.3. ANALYSIS OF CONSOLIDATED RESULTS FOR THE FIRST HALF OF 2017

C.3.1. Net sales

Consolidated net sales for the first half of 2017 amounted to €17,311 million, 8.7% higher than in the first half of 2016. Exchange rate fluctuations had a positive effect of 1.7 percentage points overall; the favorable trends in the euro rate against the US dollar and Brazilian real outweighed unfavorable trends in the Egyptian pound, the Turkish lira and the pound sterling. At constant exchange rates (CER)[1], net sales were up 7.0%, reflecting the acquisition of BI's Consumer Healthcare business and the first-time consolidation of Sanofi's European Vaccines business. At constant exchange rates and on a constant structure basis[1], net sales rose by 2.0%.

Analysis of impact on net sales of changes in structure

(€ million)	June 30, 2016 (6 months)
BI Consumer Healthcare net sales [(a)]	689
Net sales effect of first-time consolidation of European vaccines business (SPMSD)[(a)]	97
Total impact of BI and SPMSD	**786**
Other items	(8)
Total impact on net sales of changes in structure	**778**

(a) Based on an unaudited sales estimate.

Reconciliation of net sales to net sales at constant exchange rates and on a constant structure basis:

(€ million)	June 30, 2017 (6 months)	June 30, 2016 (6 months)	Change
Net sales	**17,311**	**15,926**	**+8.7%**
Effect of exchange rates	(270)		
Net sales at constant exchange rates	**17,041**	**15,926**	**+7.0%**
Impact of changes in structure		778	
Net sales at constant exchange rates and on a constant structure basis	**17,041**	**16,704**	**+2.0%**

[1] Refer to the appendix in section F for a definition.

C.3.1.1. Net sales by business segment

Our net sales comprise the net sales generated by our Pharmaceuticals and Human Vaccines (Vaccines) segments.

(€ million)	June 30, 2017 (6 months)	June 30, 2016 (6 months)	Change
Pharmaceuticals	15,511	14,504	+6.9%
Vaccines	1,800	1,422	+26.6%
Net sales	**17,311**	**15,926**	**+8.7%**

C.3.1.2. Net Sales by Global Business Unit (GBU)

The table below presents net sales for our Global Business Units (GBUs), reflecting the new structure intended to streamline our organization, sharpen our focus and concentrate our efforts on growth drivers. Within that structure, Emerging Markets sales of Diabetes & Cardiovascular and Specialty Care products are included in the General Medicines & Emerging Markets GBU. Following the creation of the Consumer Healthcare GBU, sales of that GBU's products (previously included in the General Medicines & Emerging Markets GBU) are presented on a separate line for information purposes.

(€ million)	June 30, 2017 (6 months)	June 30, 2016 (6 months)	Change on a reported basis	Change at constant exchange rates
Sanofi Genzyme GBU[(a)] (Specialty Care)[(b)]	2,818	2,414	+16.7%	+14.9%
Diabetes & Cardiovascular GBU[(a)]	2,805	3,102	-9.6%	-11.4%
General Medicines & Emerging Markets GBU[(c)(d)]	7,384	7,283	+1.4%	+0.5%
Consumer Healthcare GBU	2,504	1,705	+46.9%	+42.6%
Total Pharmaceuticals	**15,511**	**14,504**	**+6.9%**	**+5.3%**
Sanofi Pasteur (Vaccines) GBU	**1,800**	**1,422**	**+26.6%**	**+24.5%**
Total	**17,311**	**15,926**	**+8.7%**	**+7.0%**

(a) Does not include Emerging Markets net sales.
(b) Rare Diseases, Multiple Sclerosis, Oncology and Immunology.
(c) Includes net sales in Emerging Markets of Specialty Care and Diabetes & Cardiovascular products.
(d) Emerging Markets: World excluding United States, Canada, Western and Eastern Europe (apart from Russia, Ukraine, Georgia, Belarus, Armenia and Turkey), Japan, South Korea, Australia, New Zealand and Puerto Rico.

C.3.1.3. Net Sales by Franchise

The table below sets forth our 2017 first-half net sales by franchise in order to facilitate direct comparisons with our peers. For a detailed reconciliation of net sales by franchise and net sales by GBU for our Pharmaceuticals segment, refer to the table later in this report showing Pharmaceuticals segment net sales by geographical region.

(€ million)	June 30, 2017 (6 months)	June 30, 2016 (6 months)	Change on a reported basis	Change at constant exchange rates
Rare Diseases	1,464	1,353	+8.2%	+6.7%
Multiple Sclerosis	1,045	790	+32.3%	+30.0%
Oncology	795	721	+10.3%	+8.6%
Immunology	27	–	–	–
Total Specialty Care	**3,331**	**2,864**	***+16.3%***	***+14.5%***
of which Developed Markets (Sanofi Genzyme GBU)	***2,818***	***2,414***	***+16.7%***	***+14.9%***
of which Emerging Markets [(a)(b)]	***513***	***450***	***+14.0%***	***+12.7%***
Diabetes	3,310	3,591	-7.8%	-9.2%
Cardiovascular	257	203	+26.6%	+23.2%
Total Diabetes & Cardiovascular	**3,567**	**3,794**	**-6.0%**	**-7.5%**
of which Developed Markets (Diabetes & Cardiovascular GBU)	***2,805***	***3,102***	***-9.6%***	***-11.4%***
of which Emerging Markets [(a)(b)]	***762***	***692***	***+10.1%***	***+10.4%***
Established Prescription Products [(a)]	**5,199**	**5,208**	**-0.2%**	**-0.9%**
Generics[(a)]	**910**	**933**	**-2.5%**	**-5.0%**
Consumer Healthcare (Consumer Healthcare GBU)	**2,504**	**1,705**	**+46.9%**	**+42.6%**
Total Pharmaceuticals	**15,511**	**14,504**	**+6.9%**	**+5.3%**
Vaccines (Sanofi Pasteur GBU)	**1,800**	**1,422**	**+26.6%**	**+24.5%**
Total	**17,311**	**15,926**	**+8.7%**	**+7.0%**

(a) These items are aggregated to form the General Medicines and Emerging Markets GBU.
(b) Emerging Markets: World excluding United States, Canada, Western and Eastern Europe (apart from Russia, Ukraine, Georgia, Belarus, Armenia and Turkey), Japan, South Korea, Australia, New Zealand and Puerto Rico.

C.3.1.4. Pharmaceuticals segment

Net sales of the **Pharmaceuticals** segment were €15,511 million in the first half of 2017, up 6.9% on a reported basis and 5.3% at constant exchange rates. At constant exchange rates and on a constant structure basis, net sales growth was 0.6%.

The year-on-year increase of €1,007 million mainly reflects the impact of the acquisition of BI's Consumer Healthcare business (€689 million) and positive exchange rate effects of €240 million, along with the following effects at constant exchange rates and on a constant structure basis:

- higher net sales for the Multiple Sclerosis franchise (+€237 million), the Rare Diseases franchise (+€92 million) and the Oncology franchise (+€62 million), and for Consumer Healthcare (+€57 million);
- lower net sales for the Diabetes franchise (-€330 million) and for Established Prescription Products (-€61 million).

Net sales by product and franchise

(€ million)	Indication	June 30, 2017 (6 months)	June 30, 2016 (6 months)	Change on a reported basis	Change at constant exchange rates
Cerezyme®	Gaucher disease	369	381	-3.1%	-3.4%
Cerdelga®	Gaucher disease	62	49	+26.5%	+24.5%
Myozyme®/Lumizyme®	Pompe disease	393	348	+12.9%	+11.5%
Fabrazyme®	Fabry disease	367	316	+16.1%	+13.6%
Aldurazyme®	Mucopolysaccharidosis	109	98	+11.2%	+10.2%
Other		164	161	+1.9%	-0.6%
Total Rare Diseases		**1,464**	**1,353**	**+8.2%**	**+6.7%**
Aubagio®	Multiple sclerosis	796	594	+34.0%	+31.3%
Lemtrada®	Multiple sclerosis	249	196	+27.0%	+26.0%
Sub-total: Multiple sclerosis		**1,045**	**790**	**+32.3%**	**+30.0%**
Jevtana®	Prostate cancer	197	178	+10.7%	+9.0%
Thymoglobulin®	Organ rejection	148	134	+10.4%	+8.2%
Taxotere®	Breast, lung, prostate, stomach, and head & neck cancers	91	92	-1.1%	-2.2%
Eloxatin®	Colorectal cancer	90	86	+4.7%	+3.5%
Mozobil®	Hematologic malignancies	80	72	+11.1%	+9.7%
Zaltrap®	Colorectal cancer	34	34	0.0%	0.0%
Other		155	125	+24.0%	+21.6%
Total Oncology		**795**	**721**	**+10.3%**	**+8.6%**
Dupixent®	Atopic dermatitis	26	_	_	_
Kevzara®	Rheumatoid arthritis	1	_	_	_
Total Immunology		**27**	_	_	_
Total Specialty Care		**3,331**	**2,864**	**+16.3%**	**+14.5%**
Lantus®	Diabetes	2,423	2,860	-15.3%	-16.7%
Toujeo®	Diabetes	402	244	+64.8%	+59.8%
Apidra®	Diabetes	191	178	+7.3%	+5.6%
Amaryl®	Diabetes	174	181	-3.9%	0.0%
Insuman®	Diabetes	55	66	-16.7%	-15.2%
Blood glucose meters	Diabetes	33	34	-2.9%	-2.9%
Lyxumia®	Diabetes	14	17	-17.6%	-17.6%
Soliqua®	Diabetes	9	_	_	_
Tofogliflozin	Diabetes	9	7	+28.6%	+28.6%
Other	Diabetes	_	4	N/A	N/A
Total Diabetes		**3,310**	**3,591**	**-7.8%**	**-9.2%**
Multaq®	Atrial fibrillation	181	170	+6.5%	+3.5%
Praluent®	Hypercholesterolemia	76	33	+130.3%	+124.2%
Total Cardiovascular		**257**	**203**	**+26.6%**	**+23.2%**
Total Diabetes & Cardiovascular		**3,567**	**3,794**	**-6.0%**	**-7.5%**
Lovenox®	Thrombosis	817	818	-0.1%	-0.1%
Plavix®	Atherothrombosis	765	780	-1.9%	-1.0%
Renagel®/Renvela®	Hyperphosphatemia	494	442	+11.8%	+9.0%
Aprovel® / Avapro®	Hypertension	383	344	+11.3%	+11.0%
Depakine®	Epilepsy	221	206	+7.3%	+8.3%
Synvisc® / Synvisc-One®	Arthritis	206	197	+4.6%	+2.0%
Allegra®	Allergic rhinitis, urticaria	102	114	-10.5%	-13.2%
Stilnox®/Ambien®/Myslee®	Sleep disorders	137	148	-7.4%	-10.8%
Tritace®	Hypertension	124	125	-0.8%	+0.8%
Targocid®	Bacterial infections	72	75	-4.0%	-4.0%
Lasix®	Edema, hypertension	71	77	-7.8%	-7.8%
Other		1,807	1,882	-4.0%	-5.1%
Total: established prescription products		**5,199**	**5,208**	**-0.2%**	**-0.9%**
Generics		**910**	**933**	**-2.5%**	**-5.0%**
Consumer Healthcare		**2,504**	**1,705**	**+46.9%**	**+42.6%**
Total Pharmaceuticals		**15,511**	**14,504**	**+6.9%**	**+5.3%**

Rare Diseases franchise

Net sales for the **Rare Diseases** franchise reached €1,464 million in the first half of 2017, up 8.2% on a reported basis and 6.7% at constant exchange rates, reflecting an increase in the number of patients treated worldwide.

In Gaucher disease, net sales of **Cerezyme®** fell by 3.4% at constant exchange rates (CER) to €369 million, as sales decreased in Emerging Markets[1] (-7.1% CER, at €116 million), the Rest of the World region[2] (-12.5% CER, at €22 million) and in Europe[3] (-1.4% CER, at €139 million) following the launch of Cerdelga®. **Cerdelga®** reported net sales of €62 million (+24.5% CER), of which €48 million (+20.5% CER) were generated in the United States. In Europe, net sales rose by 37.5% CER to €11 million, while in the Rest of the World region (where Cerdelga® is now available in Japan) net sales of the product were up 50.0% CER at €3 million.

Net sales of **Myozyme®/Lumizyme®** rose by 11.5% CER to €393 million, driven by sales in the United States (+15.9% CER, at €135 million) and Europe (+5.5% CER, at €169 million). In Emerging Markets, sales were up 23.9% CER at €60 million. This growth reflects the rising number of patients diagnosed with, and treated for, Pompe disease.

Fabrazyme® posted net sales growth of 13.6% CER to €367 million. Sales are advancing in many countries due to the rising number of patients diagnosed with, and treated for, Fabry disease. The product saw sales growth in the United States (+11.6% CER, at €189 million), Emerging Markets (+48.1% CER, at €43 million), the Rest of the World region (+12.5% CER, at €54 million) and in Europe (+6.5% CER, at €81 million).

Multiple Sclerosis franchise

Net sales for the **Multiple Sclerosis** franchise reached €1,045 million in the first half of 2017, up 32.3% on a reported basis and 30.0% at constant exchange rates, on strong performances by **Aubagio®** and **Lemtrada®** in the United States and Europe.

Aubagio® posted net sales of €796 million in the first half of 2017, up 31.3% CER, driven by the United States (+30.7% CER, at €544 million) and Europe (+33.1% CER, at €205 million). The product accounted for 9.0% of total prescriptions in the United States in the first quarter of 2017, rising to 9.3% in the second quarter (source: IMS NPA TRX – Q1 & Q2 2017).

Net sales of **Lemtrada®** totaled €249 million (+26.0% CER) in the first half of 2017, including €130 million in the United States (+23.5% CER) and €92 million in Europe (+26.7% CER).

Oncology franchise

The **Oncology** franchise generated net sales of €795 million, up 10.3% on a reported basis and 8.6% at constant exchange rates, thanks largely to public-sector orders for Leukine® in the United States, a good performance for the franchise in Emerging Markets, and overall growth in sales of Jevtana® and Thymoglobulin®.

Jevtana® achieved net sales of €197 million in the first half of 2017, up 9.0% CER, reflecting sales growth in Japan (+21.1% CER, at €23 million), Europe (+5.6% CER, at €75 million), the United States (+4.0% CER, at €81 million) and Emerging Markets (+27.3% CER, at €15 million).

Net sales of **Thymoglobulin®** rose by 8.2% CER to €148 million, on good performances in the United States (+7.9% CER, at €85 million) and in Emerging Markets (+18.5% CER, at €32 million).

Taxotere® saw net sales fall by 2.2% CER to €91 million, mainly on the impact of competition from generics in Japan (-46.7% CER, at €8 million), though the effect was partly offset by stronger sales in Emerging Markets (+10.9% CER, at €70 million) and especially in China (+17.2% CER, at €33 million).

Net sales of **Eloxatin®** rose by 3.5% CER to €90 million. This reflects stronger sales in Emerging Markets (+12.1% CER, at €73 million), especially in China (+10.6% CER, at €51 million), which more than offset a slump in Canadian sales due to competition from generics.

[1] World excluding United States, Canada, Western and Eastern Europe (apart from Russia, Ukraine, Georgia, Belarus, Armenia and Turkey), Japan, South Korea, Australia, New Zealand and Puerto Rico.
[2] Japan, South Korea, Canada, Australia, New Zealand and Puerto Rico.
[3] Western Europe and Eastern Europe excluding Eurasia (Russia, Ukraine, Georgia, Belarus, Armenia and Turkey).

Immunology franchise

Dupixent® (dupilumab, developed in collaboration with Regeneron), a major scientific breakthrough in the treatment of adults with moderate to severe atopic dermatitis, was approved by the US Food and Drug Administration on March 28, 2017 and made available in the US market. In just a few months, the product achieved net sales of €26 million, driven by significant unmet medical need and rapid access to the market. In Europe, Dupixent® received a positive opinion from the CHMP of the EMA on July 21, 2017.

Kevzara® (sarilumab, developed in collaboration with Regeneron), a treatment for rheumatoid arthritis, was approved by the FDA on May 22, 2017 and made available in the US market, where it has already generated €1 million of net sales.

Diabetes franchise

Net sales for the **Diabetes** franchise amounted to €3,310 million in the first half of 2017, down 7.8% on a reported basis and 9.2% at constant exchange rates. The main factor was a fall in sales of Lantus® in the United States, where Diabetes franchise sales were down 19.1% CER at €1,653 million. We expect the decline in Diabetes franchise sales in the United States to accelerate over the remainder of the year, mainly due to exclusion from the commercial formularies of two of the country's leading healthcare providers: United Healthcare (from April 1, 2017) and CVS. Outside the United States, Diabetes franchise net sales also fell in Europe (-3.0% CER, at €651 million), but advanced in Emerging Markets (+10.2% CER, at €756 million).

Net sales of **insulin glargines** (Lantus® and Toujeo®) fell by 10.7% CER to €2,825 million.

Net sales of **Lantus®** fell by 16.7% CER in the first half to €2,423 million. In the United States, sales were down 24.6% CER at €1,350 million, due mainly to a lower average net price, the switching of patients to Toujeo®, and the effect of exclusions from commercial formularies as described above. Net sales in Europe fell by 14.4% CER to €393 million, due largely to the launch of a biosimilar of Lantus® and the switching of patients to Toujeo®. In Emerging Markets, sales were up 7.5% CER at €515 million.

Toujeo®, a new-generation basal insulin, posted net sales of €402 million in the first half of 2017, including €237 million in the United States and €100 million in Europe.

Net sales of **Amaryl®** were stable CER at €174 million, reflecting growth in Emerging Markets (+2.8% CER, at €142 million) but also a weaker performance in Europe (-31.3% CER, at €11 million).

First-half net sales of **Apidra®** rose by 5.6% to €191 million. Lower sales in the United States (-1.8% CER, at €56 million) were compensated for by sales growth in Europe (+6.3% CER, at €67 million) and Emerging Markets (+17.5% CER, at €47 million).

Soliqua® 100/33 (injectable insulin glargine 100 units/ml and lixisenatide 33 mcg/ml combination[1]) has been available in the United States since January 2017. Net sales of Soliqua® 100/33 reached €9 million in the first half of 2017.

Cardiovascular franchise

In the first half of 2017, net sales of **Praluent®** (alirocumab, developed in collaboration with Regeneron) reached €76 million, of which €53 million was generated in the United States and €19 million in Europe. The relatively limited rise in sales during the period reflects significant restrictions by US payers and restricted access to the European market (for further information about ongoing Praluent® litigation, see Note B.14. to the condensed half-year consolidated financial statements).

Net sales of **Multaq®** reached €181 million (+3.5% CER), of which €154 million was generated in the United States (+4.2% CER).

[1] Lixisenatide was in-licensed from Zealand Pharma A/S.

Established Prescription Products

Net sales of **Established Prescription Products** in the first half of 2017 amounted to €5,199 million, down 0.2% on a reported basis and 0.9% at constant exchange rates. This reflects a solid performance in Emerging Markets (+5.8% CER, at €1,973 million), but weaker sales in Europe (-4.2% CER, at €1,788 million) and reduced sales of Plavix® in Japan. In the United States, Established Prescription Products net sales were down 1.9% CER at €750 million.

Net sales of **Lovenox®** in the first half of 2017 were stable at €817 million. Stronger sales in Emerging Markets (+11.9% CER, at €243 million) offset a drop in sales in Europe (-4.4% CER, at €500 million) reflecting competition from biosimilars containing enoxaparin sodium. Net sales of Lovenox® also fell in the Rest of the World region (-6.4% CER, at €45 million) and in the United States (-3.4% CER, at €29 million).

Net sales of **Plavix®** in the first half of 2017 were €765 million, a drop of 1.0% CER, reflecting competition from generics in Japan (-32.4% CER, at €128 million) and Europe (-8.2% CER, at €78 million), although the effect was partly offset by another strong performance in Emerging Markets (+11.8% CER, at €528 million), especially China (+13.8%, at €390 million). Sales of Plavix® in the United States and Puerto Rico are handled by BMS under the terms of the Sanofi-BMS alliance[1].

First-half 2017 net sales of **Renvela®/Renagel®** were up 9.0% CER at €494 million. The main growth driver was the sales performance in the United States (+11.0% CER, at €416 million), where the first generics of the product were authorized in powder form in June 2017 and in tablet form in July 2017. Generics of this product are now being sold in some European countries, as a result of which net sales of Renvela®/Renagel® in Europe slipped by 14.0% to €37 million.

First-half 2017 net sales of **Aprovel®/Avapro®** reached €383 million, up 11.0% CER, largely on sales growth in the Rest of the World region (+45.9% CER, at €91 million) and Emerging Markets (+7.6% CER, at €226 million). In Europe, sales of Aprovel®/Avapro® were down 9.1% at €60 million.

Generics

Net sales of **Generics** for the first half of 2017 totaled €910 million, down 2.5% on a reported basis and 5.0% at constant exchange rates.

Emerging Markets generated net sales of €389 million, down 3.7% CER, due mainly to the divestment of a distribution business in China and the timing of sales in Latin America. Sales of generics also fell in Europe (-5.3% CER, at €388 million) and the United States (-28.7% CER, at €69 million). These negative effects were partly offset by stronger sales in the Rest of the World region (+34.8% CER, at €64 million).

In line with our “Strategic Roadmap 2020”, we have been examining all options for our Generics business in Europe, and have committed to a phased withdrawal from this business that we expect to be complete by the end of 2018. We have however reiterated our commitment to our Generics business in other parts of the world, and will sharpen our focus on Emerging Markets.

[1] See Note C.2 to our consolidated financial statements for the year ended December 31, 2016, on page F-32 of our Annual Report on Form 20-F; this document is available on our corporate website, *www.sanofi.com*.

Consumer Healthcare

Net sales of **Consumer Healthcare** products reached €2,504 million in the first half of 2017, up 46.9% on a reported basis and 42.6% at constant exchange rates, reflecting the acquisition of BI's Consumer Healthcare business on January 1, 2017. On a constant structure basis and at constant exchange rates, Consumer Healthcare net sales rose by 2.4%.

(€ million)	June 30, 2017 (6 months)	June 30, 2016 (6 months)	Change on a reported basis	Change at constant exchange rates
Allegra®	251	237	+5.9%	+2.1%
Mucosolvan®	53	—	—	—
Other	365	193	+89.1%	+86.5%
Allergy, cough and cold	**669**	**430**	**+55.6%**	**+52.1%**
Doliprane®	156	154	+1.3%	+1.9%
Buscopan®	80	—	—	—
Other	385	275	+40.0%	+33.5%
Pain relief	**621**	**429**	**+44.8%**	**+40.8%**
Dulcolax®	103	—	—	—
Enterogermina®	89	85	+4.7%	+3.5%
Essentiale®	75	71	+5.6%	-2.8%
Zantac®	57	—	—	—
Other	144	112	+28.6%	+25.0%
Digestive Health	**468**	**268**	**+74.6%**	**+69.4%**
Pharmaton®	48	—	—	—
Other	286	220	+30.0%	+23.2%
Food supplements	**334**	**220**	**+51.8%**	**+45.0%**
Gold Bond®	100	94	+6.4%	+3.2%
Other	312	264	+18.2%	+14.8%
Other products	**412**	**358**	**+15.1%**	**+11.7%**
Total Consumer Healthcare	**2,504**	**1,705**	**+46.9%**	**+42.6%**

In Emerging Markets, net sales for the Consumer Health Care business rose by 27.2% at constant exchange rates in the first half of 2017 to €805 million. On a constant structure basis and at constant exchange rates (CS/CER), net sales rose by 3.0%, driven by growth for Allergy, Cough and Cold (+8.5% CS/CER, at €170 million) and Pain Relief (+3.0% CS/CER, at €219 million), though the effect was mitigated by lower sales in Digestive Health (-1.7% CS/CER, at €185 million).

In Europe, net sales rose by 57.1% CER to €714 million. On a constant structure basis and at constant exchange rates, net sales were up 1.6%, propelled by growth for Allergy, Cough and Cold (+5.7% CS/CER, at €166 million) and Pain Relief (+2.4% CS/CER, at €252 million), which more than offset lower sales in Digestive Health (-1.2% CS/CER, at €161 million) and Food Supplements (-4.5% CS/CER, at €63 million).

In the United States, net sales advanced by 21.1% CER to €641 million. On a constant structure basis and at constant exchange rates, net sales rose by 2.5%, largely as a result of the launch of Xyzal® Allergy 24HR (net sales of €51 million), which was authorized for OTC sale in February 2017. Higher sales for Allergy, Cough and Cold (+13.0% CS/CER, at €242 million) and Pain Relief (+13.0% CS/CER, at €90 million) more than offset lower sales in Digestive Health (-14.2% CS/CER, at €94 million).

In the Rest of the World region, first-half Consumer Healthcare net sales were €344 million, up 142.3% CER. On a constant structure basis and at constant exchange rates, net sales rose by 2.8%, driven by Digestive Health (+21.7% CS/CER, at €28 million) and Pain Relief (+3.6% CS/CER, at €60 million).

2017 first-half Pharmaceuticals net sales by geographical region

(€ million)	Total GBUs	Europe[a]	Change at CER	United States	Change at CER	Rest of the world[b]	Change at CER	Emerging Markets[c]	Change at CER	Total Franchise	Change at CER
Cerezyme®	253	139	-1.4%	92	+1.1%	22	-12.5%	116	-7.1%	369	-3.4%
Cerdelga®	62	11	+37.5%	48	+20.5%	3	+50.0%	—	—	62	+24.5%
Myozyme®/Lumizyme®	333	169	+5.5%	135	+15.9%	29	+7.7%	60	+23.9%	393	+11.5%
Fabrazyme®	324	81	+6.5%	189	+11.6%	54	+12.5%	43	+48.1%	367	+13.6%
Aldurazyme®	72	38	—	22	—	12	—	37	+37.0%	109	+10.2%
Other	143	35	-2.8%	61	—	47	-2.2%	21	+5.3%	164	-0.6%
Total Rare Diseases	**1,187**	**473**	**+3.0%**	**547**	**+9.5%**	**167**	**+3.2%**	**277**	**+10.6%**	**1,464**	**+6.7%**
Aubagio®	777	205	+33.1%	544	+30.7%	28	+35.0%	19	+25.0%	796	+31.3%
Lemtrada®	238	92	+26.7%	130	+23.5%	16	+45.5%	11	+25.0%	249	+26.0%
Sub-total: Multiple Sclerosis	**1,015**	**297**	**+31.0%**	**674**	**+29.2%**	**44**	**+38.7%**	**30**	**+25.0%**	**1,045**	**+30.0%**
Jevtana®	182	75	+5.6%	81	+4.0%	26	+28.6%	15	+27.3%	197	+9.0%
Thymoglobulin®	116	20	—	85	+7.9%	11	—	32	+18.5%	148	+8.2%
Taxotere®	21	2	—	1	-50.0%	18	-33.3%	70	+10.9%	91	-2.2%
Eloxatin®	17	2	—	—	—	15	-27.8%	73	+12.1%	90	+3.5%
Mozobil®	77	22	+4.8%	49	+6.8%	6	+133.3%	3	-25.0%	80	+9.7%
Zaltrap®	30	26	+8.3%	4	-42.9%	—	-100.0%	4	+100.0%	34	—
Other	146	27	+7.7%	109	+30.9%	10	-9.1%	9	+14.3%	155	+21.6%
Total Oncology	**589**	**174**	**+5.4%**	**329**	**+11.6%**	**86**	**-5.6%**	**206**	**+13.8%**	**795**	**+8.6%**
Dupixent®	26	—	—	26	—	—	—	—	—	26	—
Kevzara®	1	—	—	1	—	—	—	—	—	1	—
Total Immunology	27	—	—	27	—	—	—	—	—	27	—
Sanofi Genzyme (Specialty Care)	**2,818**	**944**	**+10.9%**	**1,577**	**+19.8%**	**297**	**+4.3%**	**513**	**+12.7%**	**3,331**	**+14.5%**
Lantus®	1,908	393	-14.4%	1,350	-24.6%	165	-11.2%	515	+7.5%	2,423	-16.7%
Toujeo®	367	100	+117.4%	237	+25.0%	30	+123.1%	35	+3000.0%	402	+59.8%
Apidra®	144	67	+6.3%	56	-1.8%	21	—	47	+17.5%	191	+5.6%
Amaryl®	32	11	-31.3%	1	—	20	+5.3%	142	+2.8%	174	—
Insuman®	41	40	-7.0%	1	—	—	—	14	-31.8%	55	-15.2%
Blood glucose meters	32	32	-3.0%	—	—	—	-100.0%	1	—	33	-2.9%
Lyxumia®	13	8	-18.2%	—	—	5	—	1	-50.0%	14	-17.6%
Soliqua®	9	—	—	9	—	—	—	—	—	9	—
Tofogliflozin	9	—	—	—	—	9	+28.6%	—	—	9	+28.6%
Other	-1	—	—	-1	-133.3%	—	—	1	—	—	—
Total Diabetes	**2,554**	**651**	**-3.0%**	**1,653**	**-19.1%**	**250**	**-0.8%**	**756**	**+10.2%**	**3,310**	**-9.2%**
Multaq®	177	22	-4.3%	154	+4.2%	1	+100.0%	4	—	181	+3.5%
Praluent®	74	19	+216.7%	53	+92.6%	2	—	2	—	76	+124.2%
Total Cardiovascular	**251**	41	+41.4%	207	+18.2%	3	+200.0%	6	+66.7%	257	+23.2%
Total Diabetes & Cardiovascular	**2,805**	**692**	**-1.1%**	**1,860**	**-16.1%**	**253**	**—**	**762**	**+10.4%**	**3,567**	**-7.5%**
Lovenox®	817	500	-4.4%	29	-3.4%	45	-6.4%	243	+11.9%	817	-0.1%
Plavix®	765	78	-8.2%	—	-100.0%	159	-27.0%	528	+11.8%	765	-1.0%
Renagel®/Renvela®	494	37	-14.0%	416	+11.0%	19	+26.7%	22	+10.0%	494	+9.0%
Aprovel®/CoAprovel®	383	60	-9.1%	6	—	91	+45.9%	226	+7.6%	383	+11.0%
Depakine®	221	81	+1.2%	—	—	6	—	134	+13.6%	221	+8.3%
Synvisc® / Synvisc-One®	206	17	—	158	+2.0%	8	+14.3%	23	—	206	+2.0%
Allegra®	102	6	+20.0%	—	—	96	-14.7%	—	—	102	-13.2%
Stilnox®/Ambien®/ Myslee®	137	20	-9.1%	28	-30.8%	57	-8.3%	32	+11.1%	137	-10.8%
Tritace®	124	78	-2.5%	—	—	2	+50.0%	44	+4.5%	124	+0.8%
Targocid®	72	35	-10.3%	—	—	3	—	34	+3.0%	72	-4.0%
Lasix®	71	37	-2.6%	—	—	6	-58.3%	28	+7.4%	71	-7.8%
Other	1,807	839	-3.4%	113	-27.9%	196	-3.7%	659	-2.4%	1,807	-5.1%
Total Established Prescription Products	**5,199**	**1,788**	**-4.2%**	**750**	**-1.9%**	**688**	**-8.4%**	**1,973**	**+5.8%**	**5,199**	**-0.9%**
Generics	**910**	**388**	**-5.3%**	**69**	**-28.7%**	**64**	**+34.8%**	**389**	**-3.7%**	**910**	**-5.0%**
Total Emerging Markets - Specialty Care	513							513	+12.7%		
Total Emerging Markets - Diabetes & Cardiovascular	762							762	+10.4%		
General Medicines & Emerging Markets	**7,384**	**2,176**	**-4.4%**	**819**	**-4.9%**	**752**	**-5.8%**	**3,637**	**+6.6%**		
Allergy, cough and cold	669	166	+163.5%	242	+13.0%	91	+166.7%	170	+30.7%	669	+52.1%
Pain relief	621	252	+33.9%	90	+13.0%	60	+625.0%	219	+32.9%	621	+40.8%
Digestive health	468	161	+62.6%	94	+550.0%	28	+1300.0%	185	+13.7%	468	+69.4%
Food supplements	334	63	+23.5%	2	—	129	+65.3%	140	+41.3%	334	+45.0%
Consumer Healthcare	**2,504**	**714**	**+57.1%**	**641**	**+21.1%**	**344**	**+142.3%**	**805**	**+27.2%**	**2,504**	**+42.6%**
Total Pharmaceuticals	**15,511**	**4,526**	**+5.7%**	**4,897**	**-0.6%**	**1,646**	**+11.3%**	**4,442**	**+9.7%**	**15,511**	**+5.3%**

(a) Western Europe and Eastern Europe excluding Eurasia (Russia, Ukraine, Georgia, Belarus, Armenia and Turkey).
(b) Japan, South Korea, Canada, Australia, New Zealand and Puerto Rico.
(c) World excluding United States, Canada, Western and Eastern Europe (apart from Eurasia), Japan, South Korea, Australia, New Zealand and Puerto Rico.

C.3.1.5. Human Vaccines (Vaccines) Segment

In the first half of 2017, net sales for the **Vaccines** segment were €1,800 million, up 26.6% on a reported basis and 24.5% at constant exchange rates, reflecting the ending of the Sanofi Pasteur MSD (SPMSD) joint venture in Europe. On a constant structure basis and at constant exchange rates, Vaccines net sales rose by 16.5%, driven mainly by the performance of the Polio/Pertussis/Hib franchise across all geographical regions. In the United States, Vaccines net sales increased by 13.0% CER to €665 million. Net sales for the Vaccines segment in Emerging Markets were up 17.3% CER at €730 million. In Europe, Vaccines net sales reached €235 million (+126.7% CER, reflecting the ending of the SPMSD joint venture). On a constant structure basis and at constant exchange rates, Vaccines net sales in Europe advanced by 18.4%.

(€ million)	June 30, 2017 (6 months)	June 30, 2016 (6 months)	Change on a reported basis	Change at constant exchange rates
Polio/Pertussis/Hib Vaccines (including Pentacel®, Pentaxim® & Imovax®)	901	627	+43.7%	+41.3%
Meningitis/Pneumonia Vaccines (including Menactra®)	290	261	+11.1%	+8.8%
Travel and Other Endemics Vaccines	219	184	+19.0%	+17.4%
Adult Booster Vaccines (including Adacel®)	194	184	+5.4%	+4.3%
Influenza Vaccines (including Vaxigrip® & Fluzone®)	136	116	+17.2%	+14.7%
Dengvaxia®	18	20	-10.0%	-5.0%
Other vaccines	42	30	+40.0%	+33.3%
Total Vaccines	**1,800**	**1,422**	**+26.6%**	**+24.5%**

Polio/Pertussis/Hib vaccines posted 2017 first-half net sales of €901 million, up 41.3% CER. On a constant structure basis and at constant exchange rates, net sales for this franchise were up 34.4% on the resumption of normal supply levels of Pentacel®, the timing of orders from the US Centers for Disease Control and Prevention (CDC), and increased deliveries of batches of Pentaxim® in China.

Net sales of **Meningitis/Pneumonia vaccines** totaled €290 million, up 8.8% CER, due mainly to trends in orders for **Menactra®** from the CDC in the United States and increased sales in Australia following an outbreak of meningitis.

Travel and Other Endemics vaccines posted a 17.4% rise in net sales to €219 million in the first half of 2017. On a constant structure basis and at constant exchange rates, net sales rose by 3.8%.

First-half 2017 net sales of **Adult Booster vaccines** were €194 million, up 4.3% CER. On a constant structure basis and at constant exchange rates, net sales were down 13.9% due to supply chain issues for Repevax® in Europe.

Net sales of **Influenza vaccines** advanced by 14.7% CER to €136 million, largely on sales growth in Brazil.

Net sales of **Dengvaxia®** for the first half of 2017 were down 5.0% CER at €18 million, reflecting the end of the public vaccination program initiated in the Philippines in early 2016.

2017 first-half Vaccines net sales by geographical region

(€ million)	Europe [a]	Change at CER	United States	Change at CER	Rest of the world [b]	Change at CER	Emerging Markets [c]	Change at CER
Polio/Pertussis/Hib Vaccines (including Pentacel®, Pentaxim® & Imovax®)	140	+143.1%	219	+43.9%	83	+27.0%	459	+26.3%
Meningitis/Pneumonia Vaccines (including Menactra®)	1	-66.7%	219	+5.4%	22	+162.5%	48	+2.2%
Adult Booster Vaccines (including Adacel®)	46	+84.6%	121	-7.1%	13	—	14	-27.8%
Travel and Other Endemics Vaccines	43	+175.0%	71	—	28	+21.7%	77	-1.3%
Influenza Vaccines (including Vaxigrip® & Fluzone®)	—	-100.0%	3	—	19	-5.0%	114	+20.7%
Dengvaxia®	—	—	—	—	—	—	18	-5.0%
Other vaccines	5	+300.0%	32	+33.3%	5	—	—	-50.0%
Total Vaccines	**235**	**+126.7%**	**665**	**+13.0%**	**170**	**+26.2%**	**730**	**+17.3%**

(a) Western Europe and Eastern Europe excluding Eurasia (Russia, Ukraine, Georgia, Belarus, Armenia and Turkey).
(b) Japan, South Korea, Canada, Australia, New Zealand and Puerto Rico.
(c) World excluding United States, Canada, Western and Eastern Europe (apart from Eurasia), Japan, South Korea, Australia, New Zealand and Puerto Rico.

C.3.1.6. Net Sales by Geographical Region

(€ million)	June 30, 2017 (6 months)	June 30, 2016 (6 months)	Change on a reported basis	Change at constant exchange rates
United States	5,562	5,356	+3.8%	+0.9%
Emerging Markets[a]	5,172	4,599	+12.5%	+10.7%
of which Asia (including South Asia[b])	*1,917*	*1,700*	*+12.8%*	*+12.6%*
of which Latin America	*1,405*	*1,146*	*+22.6%*	*+13.9%*
of which Africa and Middle East	*1,172*	*1,170*	*+0.2%*	*+3.2%*
of which Eurasia [c]	*610*	*515*	*+18.4%*	*+16.1%*
Europe [d]	4,761	4,412	+7.9%	+8.6%
Rest of the world [e]	1,816	1,559	+16.5%	+12.6%
of which Japan	*1,001*	*850*	*+17.8%*	*+14.9%*
of which South Korea	*211*	*170*	*+24.1%*	*+17.1%*
Total net sales	**17,311**	**15,926**	**+8.7%**	**+7.0%**

(a) World excluding United States, Canada, Europe, Japan, South Korea, Australia, New Zealand and Puerto Rico.
(b) India, Bangladesh and Sri Lanka. In 2016, South Asia was included in the Africa, Middle East and South Asia region. The presentation of 2016 net sales has been amended accordingly in the interests of comparability.
(c) Russia, Ukraine, Georgia, Belarus, Armenia and Turkey.
(d) Western Europe and Eastern Europe (excluding Eurasia).
(e) Japan, South Korea, Canada, Australia, New Zealand and Puerto Rico.

In the **United States**, 2017 first-half net sales were up slightly year-on-year at €5,562 million (+0.9% CER). Solid performances from the Specialty Care franchise (+19.8% CER at €1,577 million), Vaccines (+13.0% CER, at €665 million) and Consumer Healthcare (+21.1% CER, +2.5% CS/CER, at €641 million) offset a 19.1% drop in net sales for the Diabetes franchise to €1,653 million.

In **Emerging Markets**, net sales reached €5,172 million (+10.7% CER). Good performances from Vaccines (+17.3% CER, at €730 million), the Specialty Care franchise (+12.7% CER, at €513 million), Diabetes (+10.2% CER, at €756 million) and Established Prescription Products (+5.8% CER, at €1,973 million) outweighed lower sales of Generics (-3.7% CER, at €389 million). In Asia, 2017 first-half net sales rose by 12.6% CER to €1,917 million, driven by a good performance in China (+17.1% CS/CER, at €1,147 million). In Latin America, net sales were €1,405 million, up 13.9% CER, with strong growth in Argentina (+38.4% CER) and Brazil (+11.1% CER). The Africa and Middle East region posted 2017 first-half net sales of €1,172 million, up 3.2% CER, as fine performances in Egypt (+39.3% CER) and South Africa (+14.7% CER) more than compensated for lower sales in Saudi Arabia (-31.6% CER) and Morocco (-9.3% CER). Net sales in the Eurasia region advanced by 16.1% CER to €610 million, the strongest performers being Turkey (+17.3% CER) and Russia (+16.7% CER).

In Europe, net sales for the first half of 2017 were €4,761 million, up 8.6% CER and up 0.4% on a constant structure basis. Sales growth for the Specialty Care franchise (+10.9% CER), Vaccines (+126.7% CER, or +18.4% CS/CER) and Consumer Healthcare (+57.1% CER, or +1.6% CS/CER) offset a fall in sales of Established Prescription Products (-4.2% CER), Diabetes (-3.0% CER) and Generics (-5.3% CER).

In the Rest of the World region, net sales rose by 12.6% CER to €1,816 million. In Japan, net sales for the first half of 2017 reached €1,001 million, up 14.9% CER, mainly as a result of the acquisition of BI's Consumer Healthcare business. On a constant structure basis, sales in Japan were down 4.0%, due mainly to competition from generics of Plavix®.

C.3.2. Other revenues

Other revenues advanced by 67.4% to €519 million in the first half of 2017 (versus €310 million in the first half of 2016). This year-on-year increase reflects a higher level of sales of non-Sanofi products by VaxServe, which have been recorded within ***Other revenues*** since 2016.

C.3.3. Gross profit

Gross profit amounted to €12,160 million in the first half of 2017 (70.2% of net sales), versus €11,266 million in the first half of 2016 (70.7% of net sales, a year-on-year decrease of 0.5 of a percentage point). The 2017 first-half figure includes an expense of €176 million arising mainly from the consequences of acquiring the inventories of the BI Consumer Healthcare business.

The Pharmaceuticals segment improved gross margin by 0.5 of a percentage point to 72.8%, thanks largely to the performance of the General Medicines and Emerging Markets GBU (especially in Latin America and China), and more generally to positive sales trends. Gross margin was also boosted by the performance of the Multiple Sclerosis franchise, which partly offset the negative effect of lower sales for the Diabetes franchise in the United States.

The Vaccines segment improved its gross margin by 2.6 percentage points to 57.7%.

C.3.4. Research and development expenses

Research and development (R&D) expenses amounted to €2,667 million in the first half of 2017 (versus €2,514 million in the first half of 2016) and represented 15.4% of net sales (versus 15.8% in the first half of 2016).

Overall, R&D expenses rose by €153 million (+6.1%), comprising €127 million for Pharmaceuticals (+5.7%) and €26 million for Vaccines (+9.7%). The year-on-year increase in R&D expenses was due partly to the integration of BI Consumer Healthcare products and of Sanofi products that were previously in the SPMSD portfolio, and partly to progress on development projects in oncology (isatixumab, PD-1) and for sotagliflozin.

C.3.5. Selling and general expenses

Selling and general expenses were €5,046 million in the first half of 2017 (29.1% of net sales), compared with €4,609 million for the first half of 2016 (28.9% of net sales).

By segment, the year on-year increase was €348 million (+8.2%) for Pharmaceuticals and €89 million (+25.6%) for Vaccines. This rise mainly reflects the launch costs of Dupixent®, Kevzara® and Xyzal®, plus investment in marketing and sales efforts in key emerging markets and in the European vaccines business.

C.3.6. Other operating income and expenses

Other operating income for the first half of 2017 reached €173 million (versus €265 million in the first half of 2016), while other operating expenses totaled €71 million (versus €195 million in the first half of 2016).

In the first half of 2017, the main component of other operating income was gains on asset disposals, which amounted to €57 million.

Overall, other operating income and expenses represented a net gain of €102 million in the first half of 2017, compared with a net gain of €70 million a year earlier, a net year-on-year improvement of €32 million.

C.3.7. Amortization of intangible assets

Amortization charged against intangible assets in the first half of 2017 was €990 million, versus €877 million in the comparable period of 2016. The €113 million year-on-year increase mainly reflects a €133 million rise in amortization expense during the period following the recognition of intangible assets in connection with the exchange transaction with BI finalized on January 1, 2017, based on the provisional purchase price allocation. This increase was partly offset by a reduction in amortization charged against intangible assets recognized on the acquisitions of Genzyme (€458 million in the first half of 2017, versus €431 million in the first half of 2016) and Aventis (€204 million in the first half of 2017, versus €276 million in the first half of 2016) as some assets reached the end of their life cycles.

C.3.8. Impairment of intangible assets

In the first half of 2017, this line item comprises impairment losses of €12 million taken against various Pharmaceuticals segment intangible assets.

For the first half of 2016, this line item showed impairment losses of €52 million comprising (i) impairment losses taken against rights relating to a number of marketed products in the Pharmaceuticals segment (€32 million) and the Vaccines segment (€1 million) and (ii) net impairment losses of €19 million taken against various R&D projects in the Pharmaceuticals and Vaccines segments.

C.3.9. Fair value remeasurement of contingent consideration

Fair value remeasurements of contingent consideration, mainly relating to acquisitions (in accordance with the revised IFRS 3), represented a net expense of €100 million in the first half of 2017 versus a net expense of €67 million in the first half of 2016.

Those remeasurements relate to contingent consideration payable to Bayer as a result of an acquisition made by Genzyme prior to the latter's acquisition by Sanofi (€84 million), and to the contingent consideration arising from the dismantling of the Sanofi Pasteur MSD joint venture (€16 million); see Note B.11. to our condensed half-year consolidated financial statements.

C.3.10. Restructuring costs and similar expenses

Restructuring costs and similar expenses amounted to €364 million in the first half of 2017, compared with €627 million in the first half of 2016. In the first half of 2017, restructuring costs mainly comprised write-downs of industrial assets in Europe and the United States, and employee-related expenses arising from headcount adjustment plans in Europe.

C.3.11. Other gains and losses, and litigation

In the first half of 2017, the line item ***Other gains and losses, and litigation*** represents separation costs associated with the process of disinvesting from the Generics business in Europe, before tax effects.

C.3.12. Operating income

Operating income for the first half of 2017 was €3,076 million, 18.8% higher than the 2016 first-half figure of €2,590 million. This year-on-year change reflects an improvement in gross margin and lower restructuring costs, which outweighed the effects of increases in R&D expenses and in selling and general expenses.

C.3.13. Financial income and expenses

Net financial expense was €123 million for the first half of 2017, an improvement of €68 million relative to the 2016 first-half figure of €191 million.

Financial expenses directly related to our debt, net of cash and cash equivalents (see the definition in section C.5. below) amounted to €110 million, down from €118 million in the first half of 2016.

The year-on-year change in net financial expense was attributable mainly to:

- a higher level of gains on disposals of financial assets (€52 million, versus €19 million for the first half of 2016);
- a reduction in the net interest cost on pension plans (€47 million, versus €58 million for the first half of 2016).

C.3.14. Income before tax and associates and joint ventures

Income before tax and associates and joint ventures for the first half of 2017 was €2,953 million, compared with €2,399 million for the first half of 2016, a rise of 23.1%.

C.3.15. Income tax expense

Income tax expense was €610 million in the first half of 2017, versus €497 million a year earlier, giving an effective tax rate stable year-on-year at 20.7%. The increase in income tax expense was mainly due to the higher level of income before tax and associates and joint ventures.

The level of income tax expense is also significantly impacted by tax effects of amortization and impairment of intangible assets (€349 million in the first half of 2017, versus €323 million in the first half of 2016) and of restructuring costs (€126 million in the first half of 2017, versus €210 million in the first half of 2016).

The effective tax rate on our business net income[1] is a non-GAAP financial measure. It is calculated on the basis of business operating income, minus net financial expenses and before the share of profit/loss of associates and joint ventures and net income attributable to non-controlling interests. We believe the presentation of this measure, used by our management, is also useful for investors as it provides a means to analyze the effective tax cost of our current business activities. It should not be seen as a substitute for the effective tax rate on consolidated net income. The effective tax rate based on business net income was 24.5% for the first half of 2017, versus 22.9% for the first half of 2016 and 23.3% for 2016 as a whole.

C.3.16. Share of profit/(loss) of associates and joint ventures

Associates and joint ventures contributed net income of €38 million in the first half of 2017, versus net income of €98 million in the comparable period of 2016.

This line item includes Sanofi's share of the profits and losses of Regeneron, including the impact of the fair value remeasurement of our share of the acquired intangible assets of Regeneron.

C.3.17. Net income excluding the exchanged/held-for-exchange Animal Health business

Net income excluding the exchanged/held-for-exchange Animal Health business amounted to €2,381 million in the first half of 2017, versus €2,000 million in the first half of 2016.

C.3.18. Net income/(loss) of the exchanged/held-for-exchange Animal Health business

In accordance with IFRS 5, the net income or loss of the Animal Health business is presented within a separate line item, ***Net income/(loss) of the exchanged/held-for-exchange Animal Health business***, for the 2016 comparative periods. On January 2, 2017, Sanofi and Boehringer Ingelheim (BI) confirmed that they had finalized the strategic transaction agreed in June 2016, involving the exchange of Sanofi's Animal Health business (Merial) for BI's Consumer Healthcare business in most countries[2]. Consequently, for the first half of 2017 this line item shows the gain of €4,421 million on the divestment of the Animal Health business, net of taxes and before the impact of price adjustments and delayed business transfers.

C.3.19. Net income

Net income for the first half of 2017 was €6,802 million, versus €2,286 million for the first half of 2016.

[1] Refer to the appendix in section F for a definition.
[2] The transfer of the business in Mexico is due to be finalized during 2017.

C.3.20. Net income attributable to non-controlling interests

Net income attributable to non-controlling interests for the first half of 2017 amounted to €64 million, against €41 million for the first half of 2016. This line item mainly comprises the share of pre-tax profits paid to BMS from territories managed by Sanofi (€43 million, versus €44 million in the first half of 2016); the year-on-year fall was directly related to competition from generics of clopidogrel (the active ingredient of Plavix®) and of irbesartan (the active ingredient of Aprovel®) in Europe.

C.3.21. Net income attributable to equity holders of Sanofi

Net income attributable to equity holders of Sanofi amounted to €6,738 million in the first half of 2017, compared with €2,245 million in the first half of 2016.

Basic earnings per share (EPS) was €5.35, compared with €1.74 for the first half of 2016, based on an average number of shares outstanding of 1,260.3 million for the first half of 2017 and 1,287.6 million for the first half of 2016. Diluted EPS was €5.30, compared with €1.73 for the first half of 2016, based on an average number of shares after dilution of 1,270.6 million for the first half of 2017 and 1,296.6 million for the first half of 2016.

C.3.22. Segment results

1/ Business operating income

Business operating income (as defined in Note B.20.1. to the condensed half-year consolidated financial statements) amounted to €4,741 million in the first half of 2017 versus €4,216 million in the first half of 2016, an increase of 12.5%. It represented 27.4% of net sales, compared with 26.5% in the first half of 2016.

The table below shows business operating income for the six-month periods ended June 30, 2017 and 2016:

(€ million)	June 30, 2017 (6 months)	June 30, 2016 (6 months)	Change
Pharmaceuticals	4,454	4,080	+9.2%
Vaccines	309	175	+76.6%
Other	(22)	(39)	-43.6%
Business operating income	**4,741**	**4,216**	**+12.5%**

The following tables present our segment results for the first half of 2017, the first half of 2016, and the year ended December 31, 2016:

First half of 2017

	June 30, 2017 (6 months)			
(€ million)	Pharmaceuticals	Vaccines	Other	Total
Net sales	**15,511**	**1,800**	**—**	**17,311**
Other revenues	149	370	—	519
Cost of sales	(4,363)	(1,131)	—	(5,494)
Research and development expenses	(2,373)	(294)	—	(2,667)
Selling and general expenses	(4,609)	(437)	—	(5,046)
Other operating income and expenses	122	2	(22)	102
Share of profit/(loss) of associates and joint ventures	82	(1)	—	81
Net income attributable to non-controlling interests	(65)	—	—	(65)
Business operating income	**4,454**	**309**	**(22)**	**4,741**

First half of 2016

(€ million)	June 30, 2016 (6 months)			
	Pharmaceuticals	Vaccines	Other	Total
Net sales	**14,504**	**1,422**	**—**	**15,926**
Other revenues	122	188	—	310
Cost of sales	(4,143)	(827)	—	(4,970)
Research and development expenses	(2,246)	(268)	—	(2,514)
Selling and general expenses	(4,261)	(348)	—	(4,609)
Other operating income and expenses	110	(1)	(39)	70
Share of profit/(loss) of associates and joint ventures	44	9	—	53
Net income attributable to non-controlling interests	(50)	—	—	(50)
Business operating income	**4,080**	**175**	**(39)**	**4,216**

Year ended December 31, 2016

(€ million)	December 31, 2016 (12 months)			
	Pharmaceuticals	Vaccines	Other	Total
Net sales	**29,244**	**4,577**	**—**	**33,821**
Other revenues	274	613	—	887
Cost of sales	(8,349)	(2,353)	—	(10,702)
Research and development expenses	(4,618)	(554)	—	(5,172)
Selling and general expenses	(8,743)	(743)	—	(9,486)
Other operating income and expenses	(1)	(14)	(112)	(127)
Share of profit/(loss) of associates and joint ventures	129	48	—	177
Net income attributable to non-controlling interests	(112)	(1)	—	(113)
Business operating income	**7,824**	**1,573**	**(112)**	**9,285**

The tables below provide an analysis of business operating income for the Pharmaceuticals and Vaccines segments.

Pharmaceuticals segment first-half business operating income, 2017 and 2016

(€ million)	June 30, 2017 (6 months)	as % of net sales	June 30, 2016 (6 months)	as % of net sales	Change
Net sales	**15,511**	**100.0%**	**14,504**	**100.0%**	**+6.9%**
Other revenues	149	1.0%	122	0.8%	+22.1%
Cost of sales	(4,363)	(28.1)%	(4,143)	(28.6)%	+5.3%
Gross profit	**11,297**	**72.8%**	**10,483**	**72.3%**	**+7.8%**
Research and development expenses	(2,373)	(15.3)%	(2,246)	(15.5)%	+5.7%
Selling and general expenses	(4,609)	(29.7)%	(4,261)	(29.4)%	+8.2%
Other operating income and expenses	122		110		
Share of profit/(loss) of associates and joint ventures	82		44		
Net income attributable to non-controlling interests	(65)		(50)		
Business operating income	**4,454**	**28.7%**	**4,080**	**28.1%**	**+9.2%**

Vaccines segment first-half business operating income, 2017 and 2016

(€ million)	June 30, 2017 (6 months)	as % of net sales	June 30, 2016 (6 months)	as % of net sales	Change
Net sales	**1,800**	**100%**	**1,422**	**100.0%**	**+26.6%**
Other revenues	370	20.6%	188	13.2%	+96.8%
Cost of sales	(1,131)	(62.8)%	(827)	(58.2)%	+36.8%
Gross profit	**1,039**	**57.7%**	**783**	**55.1%**	**+32.7%**
Research and development expenses	(294)	(16.3)%	(268)	(18.8)%	+9.7%
Selling and general expenses	(437)	(24.3)%	(348)	(24.5)%	+25.6%
Other operating income and expenses	2		(1)		
Share of profit/(loss) of associates and joint ventures	(1)		9		
Net income attributable to non-controlling interests	—		—		
Business operating income	**309**	**17.2%**	**175**	**12.3%**	**+76.6%**

2/ Business net income

Business net income is a non-GAAP financial measure that we use to evaluate our operational performance. For a definition of "Business net income" and a reconciliation with ***Net income attributable to equity holders of Sanofi,*** see Section "C.2.3. Business net income" and Section "F/ Appendix – Definition of financial indicators".

Business net income for the first half of 2017 was €3,491 million, 2.6% higher than in the first half of 2016 (€3,402 million, including €299 million of Animal Health business net income). Business net income excluding Animal Health amounted to €3,491 million, compared with €3,103 million in the first half of 2016. That represents 20.2% of net sales, compared with 19.5% in the first half of 2016.

3/ Business Earnings Per Share

We also report "business earnings per share", a non-GAAP financial measure which we define as business net income divided by the weighted average number of shares outstanding.

Business earnings per share was €2.77 for the first half of 2017, 4.9% higher than the 2016 first-half figure of €2.64, based on an average number of shares outstanding of 1,260.3 million for the first half of 2017 and 1,287.6 million for the first half of 2016.

C.4. CONSOLIDATED STATEMENTS OF CASH FLOWS

Summarized consolidated statements of cash flows

(€ million)	June 30, 2017 (6 months)	June 30, 2016 (6 months)	December 31, 2016 (12 months)
Net cash provided by/(used in) operating activities	2,556	2,539	7,838
Net cash provided by / (used in) investing activities [(a)]	(1,062)	(1,414)	(2,511)
Net cash inflow from the exchange of the Animal Health business for BI's Consumer Healthcare business	4,349	–	–
Net cash provided by/(used in) financing activities	(5,192)	(4,094)	(4,101)
Impact of exchange rates on cash and cash equivalents	(47)	(103)	(101)
Net change in cash and cash equivalents	**604**	**(3,072)**	**1,125**

(a) The main cash effect of the exchange of the Animal Health business for BI's Consumer Healthcare business was the receipt by Sanofi of a balancing cash payment of €4,207 million. Consequently, all of the cash flows arising from that exchange transaction during the first half of 2017 are presented in a separate line item, "***Net cash inflow from the exchange of the Animal Health business for BI's Consumer Healthcare business***".

Net cash provided by operating activities came to €2,556 million in the first half of 2017, against €2,539 million in the first half of 2016.

Operating cash flow before changes in working capital for the first half of 2017 was €3,832 million, versus €2,849 million in the first half of 2016. Working capital requirements rose by €1,276 million in the first half of 2017, as opposed to an increase of €310 million in the first half of 2016, mainly as a result of movements in other current assets, current financial assets and other current liabilities (€1,034 million).

Net cash used in investing activities totaled €1,062 million in the first half of 2017, compared with €1,414 million in the first half of 2016.

Acquisitions of property, plant and equipment and intangible assets totaled €998 million, versus €1,200 million in the first half of 2016. There were €638 million of acquisitions of property, plant and equipment, most of which (€393 million) were in the Pharmaceuticals segment, primarily in industrial facilities (€290 million). The Vaccines segment accounted for €142 million of acquisitions of property, plant and equipment during the period. Acquisitions of intangible assets (€360 million, versus €612 million in the first half of 2016) mainly comprised contractual payments for intangible rights under license and collaboration agreements.

Acquisitions of investments during the first half of 2017 totaled €486 million, net of cash acquired and after including assumed liabilities and commitments; this compares with €468 million in the first half of 2016. The main items in the first half of 2017 were the acquisition of the SPMSD vaccines portfolio (€152 million), purchases of additional shares in Regeneron (€87 million), contingent consideration paid to Bayer in connection with the acquisition of Genzyme (€84 million), and an equity injection into Onduo (€56 million).

After-tax proceeds from disposals amounted to €440 million in the first half of 2017, and arose mainly from the sale of some Consumer Healthcare products to Ipsen (€83 million) and the divestment of the equity interest in SPMSD (€127 million). After-tax proceeds from disposals in the first half of 2016 amounted to €264 million and arose from the sale of the equity interest in Nichi-Iko Pharmaceutical Co., Inc. and the sale of product rights relating to Oenobiol®.

Net cash inflow from the exchange of the Animal Health business for BI's Consumer Healthcare business comprises the following items for the first half of 2017: (i) the receipt by Sanofi of a balancing cash payment of €4,207 million; (ii) reimbursements of intragroup accounts with Merial entities totaling €967 million; (iii) a partial payment of €934 million of the tax on the gain arising on the divestment; and (iv) the cash held by the BI subsidiaries acquired by Sanofi. The total consideration for the sale of the Animal Health business to BI was €10,320 million (see Note B.21. to the condensed half-year consolidated financial statements), and the consideration for the acquisition of BI's Consumer Healthcare business was €6,271 million (see Note B.1. to the condensed half-year consolidated financial statements).

Net cash used in financing activities amounted to €5,192 million in the first half of 2017, compared with €4,094 million in the first half of 2016. The 2017 first-half figure includes the dividend payout to our shareholders of €3,710 million (versus €3,759 million in the first half of 2016) and the effect of changes in our share capital (repurchases of own shares, net of capital increases), amounting to €1,601 million (versus €1,387 million in the first half of 2016).

The ***net change in cash and cash equivalents*** in the first half of 2017 was an increase of €604 million, compared with a decrease of €3,072 million in the first half of 2016.

C.5. CONSOLIDATED BALANCE SHEET

Total assets were €101,870 million as of June 30, 2017, versus €104,672 million as of December 31, 2016, a decrease of €2,802 million.

Our **debt, net of cash and cash equivalents** was €7,463 million as of June 30, 2017, compared with €8,206 million as of December 31, 2016. We believe the presentation of this non-GAAP financial indicator, which is reviewed by our management, provides useful information to measure our overall liquidity and capital resources. We define "debt, net of cash and cash equivalents" as (i) the sum total of short term debt, long term debt, and interest rate derivatives and currency derivatives used to hedge debt, minus (ii) the sum total of cash and cash equivalents and interest rate derivatives and currency derivatives used to hedge cash and cash equivalents.

To assess our financing risk, we use the "gearing ratio", another non-GAAP financial measure. This ratio (which we define as the ratio of debt, net of cash and cash equivalents, to total equity) fell from 14.2% as of December 31, 2016 to 12.9% as of June 30, 2017. Analyses of our debt as of June 30, 2017 and December 31, 2016 are provided in Note B.9. to the condensed half-year consolidated financial statements.

We expect that the future cash flows generated by our operating activities will be sufficient to repay our debt. The financing arrangements in place as of June 30, 2017 at the Sanofi parent company level are not subject to covenants regarding financial ratios and do not contain any clauses linking credit spreads or fees to Sanofi's credit rating.

Other key movements in the balance sheet are described below.

Total **equity** was €57,792 million as of June 30, 2017, versus €57,724 million as of December 31, 2016. The year-on-year change reflects the following principal factors:

- an increase of €6,738 million representing net income for the first half of 2017;
- decreases: the dividend payout to our shareholders (€3,710 million), currency translation differences (€2,011 million, mainly on the US dollar), and repurchases of our own shares (€1,697 million).

As of June 30, 2017 we held 5.0 million of our own shares, recorded as a deduction from equity and representing 0.40% of our share capital.

Goodwill and ***Other intangible assets*** (€54,813 million in total) rose by €3,647 million year-on-year, the main factors being:

- increases: movements related to the acquisition of BI's Consumer Healthcare business (€2,123 million of goodwill and €3,985 million of other intangible assets); and
- decreases: amortization and impairment charged during the period (€1,082 million) and movements in currency translation differences (€1,884 million, mainly on the US dollar).

Investments in associates and joint ventures (€2,841 million) decreased by €49 million.

Other non-current assets were €108 million higher at €2,928 million. The main movements during the year were a €373 million appreciation in the value of the equity investment in Alnylam.

Net deferred tax assets were €2,428 million as of June 30, 2017 versus €2,377 million as of December 31, 2016, a rise of €51 million.

Provisions and other non-current liabilities (€8,412 million) fell by €422 million, mainly due to the impact of net changes in defined-benefit pension plan obligations (€282 million).

Liabilities related to business combinations and to non-controlling interests decreased by €55 million to €1,521 million. The main reason for changes in this item is the impact of contingent consideration payable to Bayer as a result of an acquisition made by Genzyme prior to the latter's acquisition by Sanofi.

D/ Risk factors and related party transactions

D.1. RISK FACTORS

The risk factors to which Sanofi is exposed are described in our Annual Report on Form 20-F for the year ended December 31, 2016, filed with the US Securities and Exchange Commission on March 3, 2017. The nature of these risks has not significantly changed during the first half of 2017. These risks may materialize during the second half of 2017 or during subsequent periods.

D.2. RELATED PARTY TRANSACTIONS

Our principal related parties are defined in Note D.33. to the consolidated financial statements included at item 18 of our Annual Report on Form 20-F for the year ended December 31, 2016 (page F-96)[1].

Note B.5. to the condensed half-year consolidated financial statements provides a description of the principal transactions and balances for the six months ended June 30, 2017 with associates and joint ventures that qualify as related parties.

The Group did not enter into any transactions with key management personnel during the first half of 2017.

Financial relations with the Group's principal shareholders fall within the ordinary course of business and were immaterial in the first half of 2017.

E/ Outlook

At constant exchange rates, we expect 2017 full-year business earnings per share[2] (EPS) to be broadly stable relative to 2016, barring major unforeseen adverse events. The currency impact on 2017 business EPS is estimated to be approximately +1% at June 2017 average exchange rates. We are therefore raising our previously announced guidance, which was for business EPS to be in a range from -3% to stable relative to 2016.

Full-year business net income[2] for 2016 was €7,308 million, giving business earnings per share of €5.68.

This guidance has been prepared using accounting methods consistent with those used in the preparation of our historical financial information. It draws upon assumptions defined by Sanofi and its subsidiaries, in particular regarding the following factors:

- growth in the national markets in which we operate;
- healthcare reimbursement policies, pricing reforms, and other governmental measures affecting the pharmaceutical industry;
- developments in the competitive environment, in terms of innovative products and the introduction of generics;
- respect by others for our intellectual property rights;
- progress on our research and development programs;
- the impact of our operating cost control policy, and trends in our operating costs;
- trends in exchange rates and interest rates; and
- the average number of shares outstanding.

Some of the information, assumptions and estimates concerned are derived from or based, in whole or in part, on judgments and decisions made by Sanofi management that may be liable to change or adjustment in future.

[1] This report is available on our corporate website: www.sanofi.com.
[2] Refer to the appendix in section F for a definition.

Forward-Looking Statements

This document contains forward-looking statements as defined in the US Private Securities Litigation Reform Act of 1995, as amended. Forward-looking statements are statements that are not historical facts. These statements include projections and estimates and their underlying assumptions, statements regarding plans, objectives, intentions and expectations with respect to future financial results, events, operations, services, product development and potential, and statements regarding future performance. Forward-looking statements are generally identified by the words "expects," "anticipates," "believes," "intends," "estimates," "plans" and similar expressions. Although Sanofi's management believes that the expectations reflected in such forward-looking statements are reasonable, investors are cautioned that forward-looking information and statements are subject to various risks and uncertainties, many of which are difficult to predict and generally beyond the control of Sanofi, that could cause actual results and developments to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements.

These risks and uncertainties include among other things, the uncertainties inherent in research and development, future clinical data and analysis including post marketing, decisions by regulatory authorities such as the FDA or the EMA regarding whether and when to approve any drug, device or biological application that may be filed for any such product candidates as well as their decisions regarding labeling and other matters that could affect the availability or commercial potential of such product candidates, the absence of guarantee that the product candidates if approved will be commercially successful, the future approval and commercial success of therapeutic alternatives, Sanofi's ability to benefit from external growth opportunities and/or obtain regulatory clearances, risks associated with intellectual property and current and future intellectual property litigation and the outcome thereof, trends in exchange rates and prevailing interest rates, the instability of economic conditions, the impact of cost containment initiatives and subsequent changes thereto, and the average number of shares outstanding, as well as those discussed or identified in the public filings with the Securities and Exchange Commission (SEC) and the *Autorité des marchés financiers* (AMF) made by Sanofi, including those listed under "Risk Factors"[1] and "Cautionary Statement Regarding Forward-Looking Statements" in Sanofi's annual report on Form 20-F for the year ended December 31, 2016. For an update on litigation, refer to Note B.14. "Legal and arbitration proceedings" to our condensed half-year consolidated financial statements for the six months ended June 30, 2017, and to section "A.3.2. Legal and arbitration proceedings" and section "D/ Risk factors and related party transactions" on pages 40 and 64 respectively of our half-year management report.

Other than as required by applicable law, Sanofi does not undertake any obligation to update or revise any forward-looking information or statements.

[1] See pages 4 to 18 of our 2016 Annual Report on Form 20-F, available on our corporate website: www.sanofi.com

F/ Appendix – Definition of Financial Indicators

F.1. NET SALES ON A CONSTANT STRUCTURE BASIS AND AT CONSTANT EXCHANGE RATES

When we refer to changes in our net sales **at constant exchange rates (CER)**, that means that we have excluded the effect of exchange rates by recalculating net sales for the relevant period using the exchange rates that were used for the previous period.

When we refer to changes in our net sales **on a constant structure basis**, that means that we eliminate the effect of changes in structure by restating the net sales for the previous period as follows:

- by including sales generated by entities or product rights acquired in the current period for a portion of the previous period equal to the portion of the current period during which we owned them, based on sales information we receive from the party from whom we make the acquisition;
- similarly, by excluding sales for a portion of the previous period when we have sold an entity or rights to a product in the current period; and
- for a change in consolidation method, by recalculating the previous period on the basis of the method used for the current period.

F.2. BUSINESS INCOME

F.2.1. Business operating income

We report segment results on the basis of "Business operating income". This indicator is used internally by our chief operating decision maker to measure the performance of each operating segment and to allocate resources. For a definition of "business operating income", and a reconciliation between that indicator and ***Income before tax and associates and joint ventures***, refer to Note B.20.1 to our condensed half-year consolidated financial statements.

F.2.2. Business net income

We believe that investors' understanding of our operational performance is enhanced by reporting "business net income". This non-GAAP financial measure represents business operating income, less net financial expenses and the relevant income tax effects. For the year ended December 31, 2016 and comparative periods, "Business net income" consists of (i) "Business net income excluding Animal Health", determined as described above and (ii) "Animal Health business net income", determined on a similar and comparable basis.

We also report "business earnings per share", a non-GAAP financial measure which we define as business net income divided by the weighted average number of shares outstanding.

Business net income is defined as ***Net income attributable to equity holders of Sanofi*** determined under IFRS, excluding the following items:

- amortization and impairment losses charged against intangible assets (other than software and other rights of an industrial or operational nature);
- fair value remeasurement of contingent consideration relating to business combinations or to disposals;
- other impacts associated with acquisitions (including impacts of acquisitions on associates and joint ventures);
- restructuring costs and similar expenses[1];
- other gains and losses (including gains and losses on major disposals of non-current assets[2]);
- other costs and provisions related to litigation[2];
- the tax effects of the items listed above;
- the effects of major tax disputes;
- the 3% tax on the distribution of dividends to equity holders of Sanofi;

[1] Presented in the line item ***Restructuring costs and similar expenses*** in the consolidated income statement.
[2] Presented in the line item ***Other gains and losses, and litigation*** in the consolidated income statement.

- those Animal Health items that are not included in business net income[1];
- the portion attributable to non-controlling interests of the items listed above; and
- the impairment loss taken in 2016 against our shares in Alnylam, which reflected a decline in the market value of those shares as of December 31, 2016 relative to their historical cost, most of the decline having occurred when Alnylam decided to discontinue the revusiran development program on October 5, 2016.

Business net income also includes Sanofi's share of the business net income of Sanofi Pasteur MSD from the date when Sanofi and MSD announced their intention to end their joint venture.

The most significant reconciling items between our business net income and ***Net income attributable to equity holders of Sanofi*** relate to the purchase accounting effects of our acquisitions and business combinations, particularly the amortization and impairment of intangible assets (other than software and other rights of an industrial or operational nature). We believe that excluding those non-cash charges enhances an investor's understanding of our underlying economic performance, because we do not consider that the excluded charges reflect the combined entity's ongoing operating performance. Rather, we believe that each of the excluded charges reflects the decision to acquire the businesses concerned.

The principal purchase accounting effects of acquisitions and business combinations on net income are:

- amortization and net impairment losses charged against intangible assets (other than software and other rights of an industrial or operational nature), net of taxes and non-controlling interests; and
- the incremental cost of sales incurred on the workdown of acquired inventories remeasured at fair value, net of taxes.

We believe (subject to the limitations described below) that disclosing our business net income enhances the comparability of our operating performance, for the following reasons:

- the elimination of charges related to the purchase accounting effect of our acquisitions and business combinations (particularly amortization and impairment of finite-lived intangible assets, other than software and other rights of an industrial or operational nature) enhances the comparability of our ongoing operating performance relative to our peers in the pharmaceutical industry that carry those intangible assets (principally patents and trademarks) at low book values either because they are the result of in-house research and development that has already been expensed in prior periods or because they were acquired through business combinations that were accounted for as poolings-of-interest;
- the elimination of selected items such as the incremental cost of sales arising from the workdown of inventories remeasured at fair value, major gains and losses on disposals, and costs and provisions associated with major litigation improves comparability from one period to the next; and
- the elimination of restructuring costs and similar items enhances comparability because those costs are incurred in connection with reorganization and transformation processes intended to optimize our operations.

We remind investors, however, that business net income should not be considered in isolation from, or as a substitute for, ***Net income attributable to equity holders of Sanofi*** reported in accordance with IFRS. In addition, we strongly encourage investors and potential investors not to rely on any single financial measure but to review our financial statements, including the notes thereto, carefully and in their entirety.

We compensate for the material limitations described above by using business net income only to supplement our IFRS financial reporting and by ensuring that our disclosures provide sufficient information for a full understanding of all adjustments included in business net income.

Because our business net income is not a standardized measure, it may not be comparable with the non-GAAP financial measures of other companies using the same or a similar non-GAAP financial measure.

[1] Comprises (i) impact of the discontinuation of depreciation and impairment of property, plant & equipment with effect from the start date of application of IFRS 5 (Discontinued and Held-for-Sale Operations) included in business net income; (ii) impact of the amortization and impairment of intangible assets until the start date of IFRS 5 application; (iii) costs directly incurred as a result of the divestment; and (iv) tax effects of those items.

G/ Appendix – Research and Development Pipeline

N : New Molecular Entity
R : Registration Study

- Immuno-inflammation
- MS, Neuro, Ophthalmology
- Oncology
- Rare Disease
- Diabetes Solutions
- Cardiovascular & metabolism
- Infectious Disease
- Vaccines

Registration

Dupixent® Anti-IL4Rα mAb Atopic dermatitis, EU	**Dengvaxia®(1)** Mild-to-severe dengue fever vaccine
N **SAR342434** insulin lispro Type 1+2 diabetes	**PR5i** DTP-HepB-Polio-Hib Pediatric hexavalent vaccine, U.S.

(1) Approved in 18 countries to date

Phase 3

dupilumab Anti-IL4Rα mAb Asthma, Nasal polyposis	N **sotagliflozin** Oral SGLT-1&2 inhibitor Type 1 & type 2 diabetes
N **isatuximab** Anti-CD38 naked mAb Relapsed refractory multiple myeloma	**Clostridium difficile** Toxoid vaccine
N **SAR439684** PD-1 inhibitor 1st line NSCLC	**VaxiGrip® QIV IM** Quadrivalent inactivated influenza vaccine (6-35 months)
N **patisiran** siRNA inhibitor targeting TTR Hereditary ATTR amyloidosis	**Pediatric pentavalent vaccine** DTP-Polio-Hib Japan
N **GZ402666** neoGAA Pompe disease	**Men Quad TT** 2nd generation meningococcal ACYW conjugate vaccine
N **fitusiran** siRNA targeting Anti-Thrombin Hemophilia	

Phase 2

dupilumab Anti-IL4Rα mAb Eosinophilic oesophagitis	N **efpeglenatide** Long-acting GLP-1 receptor agonist Type 2 diabetes	**Rabies VRVg** Purified vero rabies vaccine
N **SAR156597** IL4/IL13 Bi-specific mAb IPF, Systemic Scleroderma	N **SAR425899** GLP-1R/GCGR dual agonist Type 2 diabetes	**Tuberculosis** Recombinant subunit vaccine
N **GZ389988** TRKA antagonist Osteoarthritis	R **SAR439684** PD-1 inhibitor Advanced CSCC (Skin cancer)	**Fluzone® QIV HD** Quadrivalent inactivated influenza vaccine – High dose
N **SAR100842** LPA1 receptor antagonist Systemic sclerosis	**SAR439684** PD-1 inhibitor Advanced BCC	**Adacel+** Tdap booster
sarilumab Anti-IL6R mAb Uveitis	**isatuximab** Anti-CD38 naked mAb Acute lymphoblastic leukemia	**Shan 6** DTP-HepB-Polio-Hib Pediatric hexavalent vaccine
N **SAR422459** ABCA4 gene therapy Stargardt disease	N **SAR566658** Maytansin-loaded anti-CA6 mAb Solid tumors	**HIV** Viral vector prime & rgp120 boost vaccine
N - R **olipudase alfa** rhASM Deficiency Acid sphingomyelinase deficiency(1)	N **SAR439152** Myosin inhibitor Hypertrophic cardiomyopathy	**SP0232**(2) Respiratory syncytial virus mAb
N **venglustat** Oral GCS inhibitor Gaucher related Parkinson's disease, Gaucher disease type 3, Fabry disease	N - R Combination **ferroquine / OZ439** Antimalarial	

(1) Also known as Niemann Pick type B
(2) Also known as MEDI8897

Phase 1

N **SAR440340** Anti-IL33 mAb Asthma & COPD	N **SAR408701** Maytansin-loaded anti-CEACAM5 mAb Solid tumors	N **SAR440181**(1) DCM1 Myosin activation Cardiovascular indication
N **SAR439794** TLR4 agonist Peanut allergy	N **SAR428926** Maytansin-loaded anti-Lamp1 mAb Cancer	N **SAR247799** S1P1 agonist Cardiovascular indication
N **GZ402668** GLD52 (anti-CD52 mAb) Relapsing multiple sclerosis	N **SAR439459** TGFb inhibition mAb Metastatic melanoma	N **SAR407899** rho kinase Microvascular angina
N **UshStat®** Myosin 7A gene therapy Usher syndrome 1B	N **SAR438335** GLP-1R/GIPR dual agonist Type 2 diabetes	**Herpes Simplex Virus Type 2** HSV-2 vaccine
N **SAR228810** Anti-protofibrillar AB mAb Alzheimer's disease	N **SAR341402** Rapid acting insulin Diabetes	**Zika** Inactivated Zika vaccine
		Respiratory syncytial virus Infants

(1) Also known as MYK491

3 STAUTORY AUDITORS' REPORT

Period from January 1 to June 30, 2017

Statutory auditors' review report on the half-yearly financial information

To the Shareholders,

In compliance with the assignment entrusted to us by your annual general meetings and in accordance with the requirements of article L. 451-1-2 III of the French monetary and financial code (*Code monétaire et financier*), we hereby report to you on:

- the review of the accompanying condensed half-yearly consolidated financial statements of Sanofi, for the period from January 1 to June 30, 2017;
- the verification of the information contained in the half-yearly management report.

These condensed half-yearly consolidated financial statements are the responsibility of the board of directors. Our role is to express a conclusion on these financial statements based on our review.

1. Conclusion on the financial statements

We conducted our review in accordance with professional standards applicable in France. A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with professional standards applicable in France and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Based on our review, nothing has come to our attention that causes us to believe that the accompanying condensed half-yearly consolidated financial statements are not prepared, in all material respects, in accordance with IAS 34 – the standard of IFRSs as adopted by the European Union applicable to interim financial information.

2. Specific verification

We have also verified the information presented in the half-yearly management report on the condensed half-yearly consolidated financial statements subject to our review.

We have no matters to report as to its fair presentation and consistency with the condensed half-yearly consolidated financial statements.

Neuilly-sur-Seine and Paris-La Défense, July 31, 2017

The statutory auditors
French original signed by

PricewaterhouseCoopersAudit — ERNST & YOUNG et Autres

Stéphane Basset — Philippe Vogt — Nicolas Pfeuty

4 RESPONSIBILITY STATEMENT OF THE CERTIFYING OFFICER — HALF-YEAR FINANCIAL REPORT

"I hereby certify that, to the best of my knowledge, the condensed half-year consolidated financial statements have been prepared in accordance with the applicable accounting standards and present fairly the assets and liabilities, the financial position and the income of the Company and the entities included in the scope of consolidation, and that the half-year management report starting on page 38 provides an accurate overview of the significant events of the first six months of the financial year with their impact on the half-year consolidated financial statements, together with the major transactions with related parties and a description of the main risks and uncertainties for the remaining six months of the financial year."

Paris, July 31, 2017

Olivier Brandicourt

Chief Executive Officer

English translation and language consultancy: Stephen Reynolds & Jane Lambert

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