Creditreform Corporate Issuer / Issue Rating

Sanofi S.A.

Creditreform Rating

Rating object	Rating information	
Sanofi S.A. Creditreform ID: 400980982 Incorporation: 1973 Based in: Paris (France) Main (Industry): Pharmaceutical company CEO: Paul Hudson Rating objects: Long-term Corporate Issuer Rating: Sanofi S.A. Long-term Local Currency (LT LC) Senior Unsecured Issues Sanofi S.A.	Corporate Issuer Rating: **A+ / positive**	Type: Update Unsolicited Public rating
	LT LC Senior Unsecured Issues: **A+ / positive**	Other: **n.r.**
	Rating date: 11 November 2022 Monitoring until: withdrawal of the rating Rating methodology: CRA "Corporate Ratings" CRA "Non-Financial Corporate Issue Ratings" CRA "Rating Criteria and Definitions" Rating history: www.creditreform-rating.de	

Content

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Summary

Company

Sanofi S.A. (hereafter referred to as "Sanofi" or "the Company") is a worldwide major multinational pharmaceutical company established originally in 1973 and headquartered in Paris, France. The Company provides therapeutic solutions worldwide and has 79 manufacturing sites in 36 countries. The main activities of Sanofi are the research and development, manufacturing and marketing of pharmaceutical products for the therapeutic areas of cardiovascular, diabetes, oncology, immunology and inflammation, neurology, rare diseases and rare blood disorders with the intention to face diseases with high-unmet medical needs via disruptive methodologies such as mRNA technology. In 2021 Sanofi was the ninth-largest global pharmaceutical company by sales, competing primarily with other global companies, such as Pfizer, Roche, Novartis, Novo Nordisk, Merck and Eli Lilly.

In 2021, the Company – featuring a workforce of more than 95,442 employees – showed improved operating performance, generating a total revenue of EUR 37,761 million (2020: EUR 36,041 million), driven primarily by its flagship product Dupixent, and a net income of EUR 6,279 million (2020: EUR 12,330 million), as the net income of 2020 included a one-off net gain of EUR 7,382 million due to selling Sanofi's stake in Regeneron.

Rating result

The unsolicited corporate issuer rating of Sanofi at A+ attests a high level of creditworthiness, which represents a low default risk. Our rating assessment is based on Sanofi's leading position on the global pharmaceutical market, its low exposure to overall economic fluctuations and its diversified product portfolio, enabling the Company to generate strong and resilient cash flows. Sanofi's portfolio includes solutions for a wide range of diseases in the areas of oncology, immunology, neurology, rare diseases and rare blood disorders, as well as areas with high-unmet needs as a result of established drugs suffering declines in sales and profitability due to high competition. In addition to competitive pressure, further constraining factors are high product requirements and vulnerability to reputational damage, as well as regulatory and legal implications. Sanofi's strategy, however, which is based primarily on growth, margin focus, efficiency and expense reduction coupled with intensive research and development, has proven successful, showing improvement in operative performance in 2021 as well as in the first nine month of 2022, despite the impairment related to product timeline, dampening results. The Company's

very good access to capital markets, in line with a solid financial position, also underpin the rating.

Outlook

We have revised the one-year outlook from stable to positive. We expect further revenue growth as a result of new product launches, or at least development consistent with the financial year 2021, showing sustainably improved financials. We expect the Company to continue to develop positively based on its broad product structures and intensive research and development activities, and supported by the strong USD, enabling operating performance to remain largely unaffected by the current adverse circumstances (inflationary costs and rising interest).

Relevant rating factors

Reference:

The relevant rating factors (key drivers) mentioned in this section, are predominantly based on internal analyses, evaluations of the rating process, the derived valuations of the analysts participating in the rating and, if applicable, other rating committee members. The fundamental external sources used are specified in the sections "Regulatory requirements" and "Rules on the presentation of credit ratings and rating outlooks".

Table 1: Financials I Source: Sanofi S.A. Annual Report 2021, standardized by CRA

Sanofi S.A. Selected key figures of the financial statement analysis Basis: Annual accounts and report of 31.12. (IFRS, etc.)	CRA standardized figures[1]	
	2020[2]	2021
Sales (million EUR)	36,041	37,761
EBITDA (million EUR)	17,405	11,248
EBIT (million EUR)	14,107	8,128
EAT (million EUR)	12,330	6,279
EAT after transfer (million EUR)	12,294	6,223
Total assets (million EUR)	91,411	92,473
Equity ratio (%)	45,97	46,37
Capital lock-up period (days)	53,62	59,74
Short-term capital lock-up (%)	37,05	38,46
Net total debt / EBITDA adj. (Factor)	3,26	3,37
Ratio of interest expenses to total debt (%)	0,77	0,74
Return on investment (%)	13,85	7,15

Excerpts from the financial key figures analysis 2021:

+ Sales growth
+ Improved EBITDA and EBIT excluding one-off net gain in 2020
+ Equity ratio
+ Ratio of interest expenses to total debt

- Net total debt to EBITDA adj.

General rating factors

General rating factors summarize the key issues that – according to the analysts as per the date of the rating – have a significant or long-term impact on the rating, whether positive (+) or negative (-).

+ Global presence
+ Low sensitivity to economic cycles
+ Strong market position in all its strategic business areas
+ Diversified product portfolio with a focus on oncology, immunology and vaccines, as well as on rare diseases, where the Company has relatively strong pricing power
+ Very good access to financial markets
+ Generally stable, significant cash flows from operating activities
+ High entry barriers

[1] For analytical purposes, CRA adjusted the original values in the financial statements in the context of its financial ratio analysis. For example, when calculating the analytical equity ratio, deferred tax assets, goodwill (entirely or partly), and internally generated intangible assets are subtracted from the original equity, whilst deferred tax liabilities are added. Net total debt considers all balance sheet liabilities. Therefore, the key financial figures shown often deviate from the original values of the company.

[2] Influenced by one-off effects.

- Life cycle of patent drugs with decrease of margins after the expiration of patent protection
- High investments in R&D necessary to maintain the leading market position
- High level of regulation in all the relevant markets
- Relatively high disbursements create additional pressure on cash flows
- High concentration on emerging markets

Current rating factors are the key factors which, in addition to the underlying rating factors, have an impact on the current rating.

Current rating factors

+ Improved revenues and operating performance, enabling strong sustainable results in 2021
+ Promising product pipeline, partly based on acquisitions, amplifying high-margin businesses
+ Accelerating efficiency and reaching cost savings by creating standalone business units and cutbacks in less lucrative assets
+ Benefitting from US-Dollar appreciation, recording sales growth as well as significant positive translation differences
+ Strong results in 9M 2022 enabling an improved business outlook for 2022, despite dampening results by negative one-off effects

- Discontinued studies related to two products prioritized in Sanofi's pipeline
- The segment General Medicine suffering declines due to high competition
- High cash requirement in the wake of acquisitions
- Ongoing litigation

Prospective rating factors are factors and possible events which – according to the analysts as of the date of the rating – would most likely have a stabilizing or positive effect (+) or a weakening or negative effect (-) on future ratings, if they occurred. This is not an exhaustive list of possible future events with potential relevance for future ratings. Circumstances can arise that are not included in the list of prospective factors whose effects are impossible to assess at the time of the rating, either because these effects are uncertain or because the underlying events are deemed unlikely to occur.

Prospective rating factors

+ Further product launches and development of the product pipeline
+ Significant cost savings and spin-offs, improving operating performance
+ Successful market launch of the COVID-19 protein-based vaccine
+ In general, an increase in the result of our financial ratio analysis from the sustainable operating business

- Increasing competition putting pressure on margins
- Performance affected by global economic downturn as a result of geopolitical impairments
- Negative outcome of legal proceedings with a high negative effect on results

ESG factors are factors related to environment, social issues and, governance. For more information, please see the "Regulatory requirements". CRA generally takes ESG relevant factors into account, when assessing the rating object and discloses them when they have a significant influence on the creditworthiness of the rating object, leading to a change in the rating result or the outlook.

ESG-factors

CRA generally takes ESG factors (environment, social and governance) into account within its rating decisions. In the case of Sanofi S.A. we have not identified any ESG factors with significant influence.

Nevertheless, ESG factors play a significant role for a large company like Sanofi, especially in terms of future market position and performance.

As a responsible business, Sanofi has embarked upon an ambitious policy to limit the direct and indirect impacts of its operations and products on the environment. Committed to environmental protection since 2010, Sanofi updated its “Planet Mobilization” roadmap to reflect current and future issues, stakeholder concerns, and risks and opportunities.

The „Planet Mobilization“ roadmap sets out the environmental strategy of the Company, centered around five pledges:

- To mitigate climate change and achieve carbon neutrality by 2050 and set Sanofi on a trajectory for limiting global warming to 1.5°C
- To limit Sanofi´s environmental footprint and choose circular solutions that optimize the use and reuse of resources, and reduce the impact of emissions
- To improve the environmental profile of what Sanofi produces by developing eco-innovative products that embody Sanofi´s eco-friendly ambitions, and by favoring sustainable use of medicines
- To mobilize Sanofi’s staff to support sustainable development by promoting an eco-friendly culture in workplace routines and in decision-making
- To engage suppliers in environmental initiatives by practicing sustainable sourcing and leading by example.

We believe that Sanofi, against the background of its good economic situation and financial strength, will be able to implement its ambitious goals and bear the costs in order to maintain its outstanding market position in the future.

Sanofi has also made a commitment to society by creating a non-profit business unit which shall provide 30 essential medicines to 40 of the world’s poorest countries, donate 100,000 vials to patients with rare diseases and offer a Global Access Plan for all new products for two years after they are launched. For the protection of vulnerable groups, the Company has committed to eliminating sleeping sickness by 2030, as well as polio and to develop treatments for childhood cancer, representing an ambitious humanitarian contribution. The pharmaceutical sector bears a very high social responsibility towards its customers, as the use of drugs is intended to save lives; however, they can also endanger patients' lives due to side effects. For this reason, the sector is subject to the highest regulatory requirements as well as tests prior to approval by the responsible health authorities (FDA, EMA). Pharmaceutical companies are routinely subject to product liability claims. Currently, the Company is subject to product liability claims for its pharmaceuticals Zantac and Depakine.

Should the Company be found guilty and ordered to pay significant compensation, there could be an S-factor with a negative creditworthiness effect; however, in the case of breakthrough innovations against the background of the protection of vulnerable groups, there could be an S-factor with a positive creditworthiness effect. Overall, we consider the Company -to be in a balanced positioned in terms of ESG.

A general valid description of Creditreform Rating AG, as well as a valid description of corporate ratings for understanding and assessing ESG factors in the context of the credit rating process, can be found here.

Please note:

The scenarios are based on information available at the time of the rating. Within the forecast horizon, circumstances may occur that could lead to a change of the rating out of the indicated range.

Best-case scenario: AA-

In our best-case scenario for one year, we assume a rating of AA-. This would be the case if the current improvements turn out to be sustainable despite challenging market conditions, maintaining the current level of the Company's financials. However, a deterioration of the rating relevant factor net total debt/EBITDA adj. during this period could prevent an upgrade.

Worst-case scenario: A

In our worst-case scenario for one year, we assume a rating of A. This could be the case if profitability significantly worsened during 2023 as a result of deteriorating economic circumstances, significant impairments in line with product releases or claims e.g. or if the new market launches are not able to sufficiently compensate for competition erosions, resulting in the deterioration of cash flow margins and the net debt / EBITDA ratio with no prospect of improvement in the short term. A significant increase in indebtedness without a compensating EBITDA improvement as result of Sanofi's expansion path could also have a negative impact on the rating assessment. The positive outlook we assigned indicates that we consider this scenario to be less likely.

Business development and outlook

In the financial year 2021, the Company showed highly satisfactory performance, generating sales of EUR 37,761 million, an increase of 4.8% compared to 2020 (EUR 36,041 million). At constant exchange rates, the growth of sales amounted even to 7.1%. With the exception of the General Medicine divison, every segment contributed to growth. The largest growth contribution in sales was recorded by Specialty Care with 16.4%, driven by the strong performance of Sanofi's flagship pharmaceutical Dupixent. Dupixent accounted for 13.9% of total sales, with a contribution of EUR 5,249 million (2020: EUR 3,534 million), thus recording a growth of 48.5% compared to 2020. Other key products, such as Lantus, Lovenox and Plavix, were impacted by the introduction of generic and biosimilar products in Europe, the United States and Japan, showing a cumulative loss of EUR 231 million in sales compared to 2020, albeit less than in the years before. The Company expects ongoing competition erosions for 2022, especially in Europe, as the patent for its flagship product Mozobil expires.

Table 2: The development of business of Sanofi S.A. I Source: Annual Reports 2018-2021, structured by CRA

In million EUR	2018	2019	2020	2021
Sales	34,463	36,126	36,041	37,761
EBITDA	6,833	8,980	17,405	11,248
EBIT	4,663	5,260	14,107	8,128
EBT	4,4891	2,976	14,137	7,837
EAT	4,410	2,837	12,330	6,279

Table 3: Segment sales, selected figures I Source: Sanofi Annual Results 2021

In million EUR	2020	2021	Δ %
General Medicines	14,218	14,720	-4.3%
Specialty Care	10,954	12,752	+16.4%
Vaccines	5,973	6,323	+5.9%
Consumer Healthcare	4,394	4,468	+1.7%
Total sales	36,041	37,761	+4.8%

By geographical region the biggest market in 2021 remained the United States, with sales of EUR 14,385 million (2020: EUR 8,918 million). Europe recorded sales of EUR 9,759 million (2020: EUR 6,797 million), with emerging markets, which include Asia, Latin America, Africa, the Middle East and Eurasia, being of increasing importance for the Group's development.

The Company achieved strong operating income of EUR 8,128 million (2020: EUR 14,107 million) in the face of a decrease of 42.4% compared to 2020. The decrease was due to the fact that the operating income benefitted from an extraordinary gain after the divestment of Regeneron shares in 2020 amounting to EUR 7,382 million. Excluding this non-recurring effect, operating income would have shown an increase of 20.9% compared to 2020 due to lower production costs and expenses in relation to sales. Lower amortization of EUR 3,120 million (2020: EUR 3,298 million), mainly due to products reaching the end of their depreciation period, also contributed to the result. Net income amounted to EUR 6,279 million in 2021, 49.1% under the previous year (EUR 12,330 million), as the result was also mitigated by significantly lower investment income, exceeding improved interest rates and lower tax income. Net income generated by investments accounted using the equity method decreased from EUR 359 million in 2020 to EUR 39 million in 2021 after the sale of its shareholding in Regeneron (with the exception of 400,000 shares). In particular, the operating cash flow before changes in working capital, amounting to EUR 9,113 million (2020: EUR 7,418 million) and with a rise of 22.8%, reflected the favorable performance of Sanofi.

In 2021, Sanofi continued its strategy "Play to Win", which was announced in December 2019, based on four main objectives: focus on growth, innovation, efficiency acceleration and reinventing work processes. The Company aims to grow through market expansion, e.g. into emerging markets, new product launches based on innovation, and differentiated products, focusing in particular on its growth drivers such as its flagship product Dupixent, vaccines and its prioritized products in its pipeline (see also Business Risk). Sanofi has also developed with the help of the integration of the acquired clinical-stage mRNA therapeutics company Translate Bio in September 2021, using mRNA technologies and with six new vaccine candidates which are to enter the clinic by 2025 (see more information in the Business Risk section). With a focus to meet diseases with broader unmet medical needs, and strengthening its position as market leader in solutions for rare disease and in immunology, Sanofi's main acquisitions in 2021 apart from the acquisition of Translate Bio were the takeovers of Kymab and Kadmon. Sanofi acquired all of Translate Bio's shares of for roughly EUR 2.6 billion. The share capital of the biopharmaceutical company Kadmon was acquired for approx. EUR 1.6 billion, and those of the biopharmaceutical company Kymab for an upfront payment of approximately EUR 937 million plus additional milestone-linked payments.

Better cost efficiency will be used to fund further investments, In 2021, the Company realized savings of around EUR 730 million and has set itself the ambitious target of achieving a total of roughly EUR 2.5 billion by the end of 2022 by cutting back spending on less lucrative assets. In

order to accelerate efficiency, Sanofi has discontinued its active pharmaceutical ingredient operations through a carve-out, creating a European subsidiary named EUROAPI, dedicated to the development and production of active pharmaceutical ingredients (API) for third parties and Sanofi itself, and envisioned as a future leading producer of API's. In May 2021, the Company initiated a successful IPO on the Euronext Paris stock exchange. The reference price, at EUR 12 per share, was exceeded already in early trading (+4.6), despite unfavorable market conditions. Sanofi retains a stake of 30.1% in EUROAPI for at least two years in order to maintain significant influence, as well as through via its representatives on EUROAPI's Board of Directors. Twelve percent of the stakes was acquired by the French government agency EPIC BPIFrance for a price of approx. EUR 150 million.

Unaffected by the devastating geopolitical circumstances, rising inflationary costs and interest rates, development in the first nine months of 2022 was marked by further growth and solid results. Sanofi generated sales of EUR 32,272 million (9M 2021: EUR 27,767 million), an increase of 16.2% compared to 9M 2021. The rise was in particular driven by positive currency effects, its blockbuster Dupixent and the Vaccines division. The appreciation of the USD against the euro accounted for 7.6% of the sales growth. Dupixent, contributing EUR 5,891 million to sales, achieved a growth rate on a reported basis of 59.2% and on a constant exchange rate of 44.5% compared to 9M 2021. The course is still set for growth, thanks to good prospects for approvals for other indications. The Vaccines division, contributing EUR 5,513 million, recorded growth of 26.5% on a reported basis and constant exchange rates of 16.5% as result of higher demand for flu vaccines and higher travel volumes. Every segment except General Medicine achieved double-digit growth rates. General Medicines achieved slight growth of 0.6% due to positive currency effects - at constant exchange rates the growth rate was -4.4%, largely due to the deconsolidation of EUROAPI and its blockbuster Lovenox, declines due to competition. The Europe and the Rest of the World sales markets both recorded a growth rate of 5.6% at constant exchange rates. The United States marked a growth rate of 13.5% and also had the largest share of sales, with a contribution of 42.1%. Reported EBITDA was EUR 9,596 million (9M 2021: EUR 7,965), an increase of 20.5%. Expenses decreased in relation to sales, as the EBITDA margin increased slightly from 28.9% to 29.7%, representing a solid margin. EBIT declined by 1.1% from EUR 6,628 million to EUR 6,553 million due to impairments of intangible assets of EUR 1,673 million, nevertheless still showing a strong result. In the third quarter, Sanofi had to write off EUR 1,586 million related to the active ingredient (SAR444245) due to delays in the market launch. In addition, the Company was able to generate an improved net income of EUR 5,316 million, up 3.8% compared to 9M 2021, as the decline was more than offset by a better financial result and a lower tax rate.

Based on the results of the third quarter 2022 and three of Sanofi's priority medicine developments, which has achieved significant regulatory milestones, the Company has raised its forecasts for 2022 for the second time during the year. Sanofi expects for 2022, at constant exchange rates a growth in earnings per share of 16% (H1 2022: 15%). It also expects a higher positive impact of exchange rates on results as in the first half. However, the generally unfavorable development of financial market conditions in connection with the worsening macroeconomic environment could dampen Sanofi's promising development and expansion path in the medium to long term. The current situation, however, benefits Sanofi's financials due to the appreciation of the US dollar against the euro, boosting sales growth and generating significant positive translation differences on its foreign subsidiaries. Despite some setbacks in research, the Company has several prospective products in its pipeline with disruptive potential, which should further support Sanofi's growth path, ensuring the Company's strong financial position.

Structural risk

Sanofi S.A. is a limited company incorporated under French law. The largest individual shareholders as of 31 December 2021 were L'Oréal with 9.43% and BlackRock with 5.68% of shares; 82.90% of the shares are free float. The shares held by L'Oréal account for approx. 16.78% of the voting rights (some representatives subsidiaries of L'Oréal are represented on the board of directors, giving L'Oréal a greater influence on governance and shareholders' approval).

The Group currently comprises numerous companies worldwide. The Company's structure has been transformed through several acquisitions since 2009 and is still in an ongoing transformation process. In 2021, Sanofi's finalized acquisitions included those of two U.S. biotech companies: Kadmon - which discovers, develops, and markets transformative therapies for disease areas of unmet medical need - and the clinical-stage mRNA therapeutics company, Translate Bio. This year, Sanofi also completed the takeover of the clinical-stage biopharmaceutical company Kymab, based in the UK and specialized in developing human monoclonal antibodies for immune-mediated diseases and immuno-oncology therapies. On 8 February 2022, Sanofi completed the acquisition of the immuno-oncology specialized company Amunix Pharmaceuticals, Inc. Kymab and Amunix should increase Sanofi's presence in immunology and oncology with the aim of developing new medical treatments, based on Sanofi's strategy..

The Company has some joint ventures with local partners worldwide, as well as collaboration agreements with Regeneron, with whom the Company developed medications including Dupixent (atopic dermatitis, asthma and Inflammation of the nose), and Kevzara (rheumatoid arthritis), two important growth drivers and flagship products in Sanofi's pharmaceutical portfolio. In 2021, Dupixent made the largest sales contribution of the entire product portfolio, with a contribution in sales of 13.90%, and recorded the highest growth in comparison with 2020, amounting to 48.53% by leveraging the utility of the active ingredient.

Sanofi has three principal operating segments: Pharmaceuticals, Consumer Healthcare and Vaccines.

The operating segment Pharmaceuticals, which is further divided into the sub-segments General Medicine and Specialty Care, comprises a range of franchises in the following medical areas and products: Dupixent, rare diseases, multiple sclerosis, oncology, immunology, diabetes, cardiovascular and established prescription products. The activities connected to diabetes, cardiovascular and established prescription products, which comprise General Medicine, account for the largest share of Pharmaceutical's sales, with a net sale share of 52.7% in 2021, but recorded a decline in sales of 3.4% compared to 2020. The decline was offset by the increase in sales of Sanofi's strategic focus Specialty Care with 16.4% compared to 2020.

In total, the segment Pharmaceuticals has a net sale share of 77.4%, the highest net sale share of the Group's portfolio, recorded a net sale growth of 5.0% and an EBIT margin of 34.8% in 2021, the second largest after Vaccine.

Consumer Healthcare, which became a standalone business unit (own R&D, manufacturing and support functions) in 2021, comprises products in the categories of Allergy, Cough & Cold, Pain, and Digestive and Nutritionals, which are sold over-the-counter. In 2021, it recorded the lowest net sale share of 11.8%, the lowest growth rate of 1.7% of the principal operating segments and the lowest EBIT margin of 33.4% compared to 2020.

Vaccine, the segment with the second-highest net sale share of 16.7%, the highest growth rate of 5.8% and EBIT-Margin of 41.3%, is comprised of Sanofi Pasteur and, since 2021, Translate Bio. Sanofi Pasteur is a leading manufacturer in the areas of pediatric vaccines, influenza vaccines, meningitis vaccines, and travel and endemic vaccines. Sanofi acquired Translate Bio to develop

transformative vaccines, using mRNA technology, a further strategic area of Sanofi. To this end, Sanofi has established the Center of Excellence, an mRNA vaccine center dedicated in the development of next-generation vaccines with the help of special teams across sites at Cambridge, MA (US) and Marcy-l'Étoile, Lyon (France), investing roughly EUR 400 million annually.

Sanofi's strategy entails integration risks and the risk of non-realization of expected gains and synergies from the new acquisitions; however, it is in part the Company's innovation driver, which is necessary in the sector for Sanofi to remain at the cutting edge and withstand competitive pressure. The Company draws on long-time expertise based on a positive track record, enabling to maintain its global and leading market position. In summary, we assume below-average industry risks with regard to Sanofi, also because of its market position overall.

Business risk

The Company's wide product portfolio and international business activities expose Sanofi to a range of external and internal risks. The Group combats these risks through a prudent business policy and comprehensive risk management.

Taking into consideration and growing population worldwide and the ageing people predominantly in developed countries, as well as increasing medical needs in the Company's primary markets, we see the general market environment as favorable for the industry and so for the Company. Its product portfolio is not highly susceptible to any cyclical economic developments or crises. On the other hand, the life span of pharmaceuticals is subject to cyclical development associated with patent protection. In most countries, patent protection extends for approximately 20 years after the registration of a new molecule. The research and development (R&D) process can generally take up to 15 years. By the time marketing authorization is obtained, a significant portion of the patent has usually already passed, making the effective time of patent protection substantially shorter. After the expiry of a patent protection, generic and biosimilar producers have the right to bring their products to market, which is associated with price concessions and downward margin pressure on original products. Against this background, the decrease of revenues and profitability due to patent expirations can only be compensated by a strong pipeline and high-quality portfolio of new products. For this reason, continued innovation and R&D are particularly important for retaining a strong market position. In 2021, Sanofi's R&D expenditure amounted to EUR 5,472 million, representing 15.1% of sales (2020: EUR 5,530; 15.3%). Looking at Sanofi's portfolio and pipeline, we consider the Company to be very well-positioned, as it focuses on active substances against cancer and diseases of the immune system, and in particular against rare diseases, which are in high demand and still enable high margins.

Market delays and investigation terminations at an advanced stage also weaken the Company's business and earnings situation. In particular, the occurrence of significant side effects in connection with discontinued development and product liability claims, along with breaches of law, pose significant risks to the Company in this highly regulated and reputation-sensitive industry. Apart from very high claims for damages, the charges may also lead to product recalls, withdrawals or sales declines. The Company, in order to maintain its authorizations, must ensure that its structure, procedures, management and employees comply with the strict requirements set by supervisory authorities. Any changes to the Company's environmental, regulatory and policy framework, pricing or data privacy could adversely affect its financial position. In particular, product launches are subject to stringent government regulation and regulatory approval, which is often highly cost-intensive and does not always lead to the expected result or the expected benefit after launch. As of 2021, Sanofi has prioritized six of the products in its pipeline,

considering to have practice-changing potential in areas of high unmet patient need. In the case of one prioritized drug in the pipeline, the FDA required that studies already at an advanced stage be partially suspended due to the occurrence of severe side effects. For another of the prioritized products the studies were terminated at an advanced stage due to insufficient results.

A substantial part of the Company's revenues is generated from the sale of a few key flagship products, some of which have been suffering from sales deterioration due to patent expiry and competition from generics and biosimilars as mentioned above. Particularly critical is the decrease of revenues in the key diabetes product Lantus after the launch of its biosimilar from Eli Lilly, and of follow-on insulins by Merck and Mylan in Europe and USA, as well as resulting from granted rebates and the exclusion from the formulary by a few American healthcare system payers. The product generated revenues of EUR 5,714 million in 2016, representing 16.9% of Sanofi's sales for the year, recording a higher share of sales than currently Dupixent. In 2021, Lantus' sales amounted to EUR 2,494 million, recording steady declines with a negative CAGR of roughly 12.9%, or a total decline of 56.3% within the last six years, reflecting certain product portfolio dynamics. A range of other established flagship medicines has also been affected by generic and biosimilar competition, especially in the segment General Medicine. For Aubagio, too, a further key product and the second leading product of the segment Specialty Care with sales of EUR 1,955 million in 2021, Sanofi expects generic competition in the US market from March 2023.

We assume that the Company's product pipeline, as well as further new products developed by Sanofi or obtained in the course of the acquisitions and coupled with the announced cost saving measures, have enough potential to further outweigh the negative impact of patent expiries for the established flagship products and other negative effects, enabling a healthy balance between established and new products. Market launches, however, are generally associated with higher costs and uncertainty. In summary, we consider the business risks to be average.

Financial risk

CRA has adjusted the original values in the financial statements for purposes of the financial ratio analysis. We have deducted only 50 % of the goodwill reported in the balance sheet from equity, as we assume a certain recoverability of the balance sheet item. The following descriptions and indicators are largely based on CRA adjustments.

As of 31.12.2021, the structured total assets amounted to EUR 92,473 million (2020: EUR 91,411 million). The analytical Equity increased slightly from EUR 42,020 million in 2020 to EUR 42,879 million (+2.0) in 2021, while total debt remained relatively stable at EUR 49.594 million (2020: EUR 49.391 million) (+0.4%). The increase in equity, which was significantly mitigated by CRA's structuring measures, was mainly due to the generated net income in 2021. The equity according to IFRS increased from EUR 63,252 to EUR 69,031 million (+9.1%), also due to positive currency translation effects, amounting to (EUR 2,459 EUR).

We hold the view that the capital structure of the Company is stable and well-balanced, taking into consideration its solid adjusted equity ratio of 46.4% as of 31 December 2021 (2020: 46.0%) and the predominantly long- and medium-term character of its liabilities, which accounted for 70.6% of total debt. In addition, the solid asset coverage ratio (excluding medium-term debt) of 95.84% emphasizes the good balance structure.

As of 31 December 2021, reported net financial debt (excluding leasing) rose by 13.6%, amounting to EUR 9,983 million (2020: EUR 8,790 million), mainly in connection with acquisition funding

and dividend payments. However, CRA's ratio Net total debt to EBITDA adj. ratio, significant for the rating, was at a still satisfactory level, marking 3.37x (2020: 3.26x) due to improved adj. EBITDA (excluding non-recurring effects) in comparison with 2020. To relieve its debt, Sanofi managed to reduce the reported total financial debt from 22,631 in 2020 to 20,250 in 2021, as Sanofi repaid two bonds which matured in 2021 with a total nominal value of EUR 2.5 billion without issuing any new bond in that year. The reported cash flow provided by operating activities was strong, amounting to EUR 10,522 million (2020: EUR 7,418).. The operating cash flow, however, was not sufficient to cover the payments of the acquisitions, dividends and the reimbursement of the bonds, so that payment settlement also took place via liquidity funds. Cash and cash equivalents amounted to EUR 10,098 million (2020: EUR 13,915), thus more than sufficient.

In general, the Group finances its operations and acquisitions through operating cash flows and borrowing facilities, particularly through senior notes (not-subordinated) from capital markets (98.2% of the reported financial debt as of 31 December 2021). Sanofi disposes of an EMTN program with a maximum total value of EUR 25 billion. As of 31.12.2021, the bonds issued under the EMTN program totaled a nominal value of EUR 17,060 million. In April 2022, Sanofi issued out two bonds with different maturities totaling EUR 1.5 billion and three bonds, totaling EUR 2.7 billion were redeemed before due date so that financial debt was reduced from EUR 20,314 to EUR 19,257 million.

As of 30 June 2022, the reported net financial debt excluding leasing increased further from EUR 10,047 million to EUR 12,244 due to a cash reduction mainly as a result of debt repayment, acquisition funding and dividend payments. As a consequence, cash and cash equivalents were reduced from EUR 10,098 million to EUR 6,899 million. In connection with Sanofi's strong cash flow generation and credit facilities, we still consider Sanofi's liquidity position to be solid; however, a significant rise in net-debt could dampen a rating upgrade. Sanofi has two syndicated credit facilities of EUR 4 billion each, drawable in EUR and USD, due on December 2023 and on December 2026 (the latter extendable for one more year) respectively, which can be used to cover current operational needs. Furthermore, Sanofi has two commercial paper programs: a six billion-euro Negotiable European Commercial Paper program in France and a USD 10 billion program in the United States. As of 30 June 2022, neither of these programs was being used. In the first half of 2022, the U.S. program was utilized with an average drawdown of US dollar 2.2 billion.

Sanofi is exposed to risks of changes in interest rates, currency exchange rates and commodity prices. The Group therefore uses derivative financial instruments to mitigate the potential impact of those changes on its performance. As of June 30 2022, there were no financial covenants associated with the financial facilities of the Company. Overall, we see no significant short or medium-term financial risks for Sanofi that could endanger the Company's financial sustainability. The Company has well-balanced and diversified funding sources at its disposal and generates solid operating cash flows to meet its investments. However, a prolonged deterioration of Sanofi's financials in connection with challenging environment conditions or worsening sales conditions, or rising leverage due to Sanofi's expansion path, could have a negative impact on the rating assessment.

Issue rating

The rating objects of this issue rating are exclusively the long-term senior unsecured issues, denominated in euro, issued by Sanofi S.A. and which are included in the list of ECB-eligible marketable assets. The ECB list of eligible marketable assets can be found on the website of the ECB.

The notes have been issued within the framework of the Euro Medium Term Note (EMTN) programme, of which the latest base prospectus dates from 15 June 2022. This EMTN programme amounts to EUR 25 billion. The notes under the EMTN programme are senior unsecured, and rank at least pari passu among themselves and with all other present and future unsecured obligations of the issuer. Additionally, the notes benefit from a negative pledge provision and a cross default mechanism.

We have provided the debt securities issued by Sanofi S.A. with a rating of A+ / positive. The rating is based on the corporate rating of Sanofi S.A. Other types of debt instruments or issues denominated in other currencies of the issuer have not been rated by CRA. For a list of all currently valid ratings and additional information, please consult the website of Creditreform Rating AG.

Other types of debt instruments or issues denominated in other currencies have not been rated by CRA. For a list of all currently valid ratings and additional information, please consult the website of Creditreform Rating AG.

Overview

Table 4: Overview of CRA Ratings I Source: CRA

Rating Category	Details	
	Date	Rating
Sanofi S.A. (Issuer)	11.11.2022	A+ / positive
Long-term Local Currency (LC) Senior Unsecured Issues	11.11.2022	A+ / positive
Other	--	n.r.

Table 5: Overview of 2022 Euro Medium Note Programme I Source: Base Prospectus dated 15.06.2022

Overview of 2022 EMTN Programme			
Volume	EUR 25,000,000,000	Maturity	Depending on respective bond
Issuer	Sanofi S.A.	Coupon	Depending on respective bond
Arranger	BNP PARIBAS	Currency	Depending on respective bond
Credit enhancement	none	ISIN	Depending on respective bond

All future LT LC senior unsecured Notes that will be issued by Sanofi S.A. and that have similar conditions to the current EMTN programme, denominated in Euro and included in the list of ECB-eligible marketable assets will, until further notice, receive the same ratings as the current LT LC senior unsecured Notes issued under the EMTN programme. Notes issued under the programme in any currency other than euro, or other types of debt instruments, have not yet been rated by CRA. For a list of all currently valid ratings and additional information, please consult

the website of Creditreform Rating AG. For the time being, other emission classes or programmes (such as the Commercial Paper Programme) and issues that do not denominate in euro will not be assessed.

Financial ratio analysis

Table 6: Financial key ratios |Source: Sanofi S.A. Annual Report 2021, structured by CRA

Asset structure	2018	2019	2020	2021
Fixed asset intensity (%)	69.85	65.49	57.97	64.85
Asset turnover	0.43	0.43	0.41	0.41
Asset coverage ratio (%)	89.61	93.83	114.33	95.84
Liquid funds to total assets	8.16	11.17	15.22	10.92
Capital structure				
Equity ratio (%)	42.30	39.18	45.97	46.37
Short-term debt ratio (%)	20.48	24.16	21.09	23.03
Long-term debt ratio (%)	20.30	22.27	20.31	15.78
Capital lock-up period (in days)	53.39	53.68	53.62	59.74
Trade-accounts payable ratio (%)	5.94	6.30	5.79	6.68
Short-term capital lock-up (%)	33.06	39.54	37.05	38.46
Gearing	1.17	1.27	0.84	0.92
Leverage	2.24	2.45	2.34	2.17
Financial stability				
Cash flow margin (%)	18.99	35.13	21.36	22.58
Cash flow ROI (%)	7.71	15.04	8.42	9.22
Total debt / EBITDA adj.	6.22	3.85	4.54	4.23
Net total debt / EBITDA adj.	5.34	3.14	3.26	3.37
ROCE (%)	10.64	19.92	14.96	16.22
Total debt repayment period	6.58	5.34	4.07	3.65
Profitability				
Gross profit margin (%)	100.00	100.00	100.00	100.00
EBIT interest coverage	10.72	11.85	36.93	22.09
EBITDA interest coverage	17.36	28.61	46.54	31.19
Ratio of personnel costs to total costs (%)	26.90	25.30	25.18	24.73
Cost income ratio (%)	87.32	86.52	69.14	79.70
Ratio of interest expenses to total debt (%)	0.89	0.86	0.77	0.74
Return on investment (%)	5.52	3.72	13.85	7.15
Return on equity (%)	12.27	8.23	32.84	14.79
Net profit margin (%)	12.80	7.85	34.21	16.63
Operating margin (%)	13.53	14.56	39.14	21.52
Liquidity				
Cash ratio (%)	39.85	46.24	72.17	47.41
Quick ratio (%)	100.51	100.12	149.80	107.32
Current ratio (%)	147.21	142.88	199.26	152.65

Appendix

Rating history

The rating history is available under https://www.creditreform-rating.de/en/ratings/published-ratings.html.

Table 7: Corporate Issuer Rating of Sanofi S.A.

Event	Rating created	Publication date	Monitoring until	Result
Initial rating	30.11.2018	11.12.2018	20.12.2021	A+ / stable

Table 8: LT LC Senior Unsecured Issues issued by Sanofi S.A.

Event	Rating created	Publication date	Monitoring until	Result
Initial rating	30.11.2018	11.12.2018	20.12.2021	A+ / stable

Regulatory requirements

The rating[3] was not endorsed by Creditreform Rating AG (Article 4 (3) of the CRA-Regulation).

The present rating is, in the regulatory sense, an unsolicited rating, that is public. The analysis was carried out on a voluntary basis by Creditreform Rating AG, which was not commissioned by the Issuer or any other third party to prepare the present rating.

The rating is based on the analysis of published information and on internal evaluation methods for the assessment of companies and issues. The rating object was informed of the intention of creating or updating an unsolicited rating before the rating was determined.

The rating object participated in the creation of the rating as follows:

Unsolicited Corporate Issuer / Issue Rating	
With rated entity or related third party participation	No
With access to internal documents	No
With access to management	No

The rating was conducted based on the following information.

A management meeting did not take place within the framework of the rating process.

The documents and information gathered were sufficient to meet the requirements of Creditreform Rating AG's rating methodologies.

The rating was conducted based on the following rating methodologies and the basic document.

Rating methodology	Version number	Date
Corporate Ratings	2.4	July 2022
Non-financial Corporate Issue Ratings	1.0	October 2016
Rating Criteria and Definitions	1.3	January 2018

The documents contain a description of the rating categories and a definition of default.

[3] In these regulatory requirements the term "rating" is used in relation to all ratings issued by Creditreform Rating AG in connection to this report. This may concern several companies and their various issues.

The rating was carried out by the following analysts:

Name	Function	Mail-Address
Christina Sauerwein	Lead-analyst	C.Sauerwein@creditreform-rating.de
Christian Konieczny	Analyst	C.Konieczny@creditreform-rating.de

The rating was approved by the following person (person approving credit ratings, PAC):

Name	Function	Mail-Address
Stephan Giebler	PAC	S.Giebler@creditreform-rating.de

On 11 November 2022, the analysts presented the rating to the rating committee and the rating was determined. The rating result was communicated to the company on 14 November 2022. There has not been a subsequent change to the rating.

The rating will be monitored until Creditreform Rating AG withdraws the rating. The rating can be adjusted as part of the monitoring, if crucial assessment parameters change.

In 2011, Creditreform Rating AG was registered within the European Union according to EU Regulation 1060/2009 (CRA-Regulation). Based on this registration, Creditreform Rating AG is allowed to issue credit ratings within the EU and is bound to comply with the provisions of the CRA-Regulation.

ESG-factors

You can find out whether ESG factors were relevant to the rating in the upper section of this rating report "Relevant rating factors".

A general valid description for Creditreform Rating AG, as well as a valid description of corporate ratings for understanding and assessing ESG factors in the context of the credit rating process, can be found here.

Conflict of interests

No conflicts of interest were identified during the rating process that might influence the analyses and judgements of the rating analysts involved or any other natural person whose services are placed at the disposal or under the control of Creditreform Rating AG and who are directly involved in credit rating activities or in approving credit ratings and rating outlooks.

In the event of providing ancillary services to the rated entity, Creditreform Rating AG will disclose all ancillary services in the credit rating report at this point:

No ancillary services in the regulatory sense were carried out for this rating object.

Rules on the presentation of credit ratings and rating outlooks

The approval of credit ratings and rating outlooks follows our internal policies and procedures. In line with our ”Rating Committee Policy”, all credit ratings and rating outlooks are approved by a rating committee based on the principle of unanimity.

To prepare this credit rating, Creditreform Rating AG has used following substantially material sources:

Corporate issuer rating:

1. Annual report

2. Website

3. Internet research

Corporate issue rating:

1. Corporate issuer rating incl. information used for the corporate issuer rating

2. Documents on issues / instruments

There are no other attributes and limitations of the credit rating or rating outlook other than those displayed on the Creditreform Rating AG website. Furthermore, Creditreform Rating AG considers as satisfactory the quality and extent of information available on the rated entity. With respect to the rated entity, Creditreform Rating AG regarded available historical data as sufficient.

Between the time of disclosure of the credit rating to the rated entity and the public disclosure, no amendments were made to the credit rating.

The Basic Data Information Card indicates the principal methodology or version of methodology that was used in determining the rating, with a reference to its comprehensive description.

In cases where the credit rating is based on more than one methodology or where reference only to the principal methodology might cause investors to overlook other important aspects of the credit rating, including any significant adjustments and deviations, Creditreform Rating AG explains this fact in the credit rating report and indicates how the different methodologies or other aspects are taken into account in the credit rating. This information is integrated in the credit rating report.

The meaning of each rating category, the definition of default or recovery and any appropriate risk warning, including a sensitivity analysis of the relevant key rating assumptions such as mathematical or correlation assumptions, accompanied by worst-case scenario credit ratings and best-case scenario credit ratings are explained.

The date at which the credit rating was initially released for distribution and the date when it was last updated, including any rating outlooks, is indicated clearly and prominently in the Basic Data Information Card as a “rating action”; initial release is indicated as “initial rating”, other updates are indicated as an “update”, “upgrade” or “downgrade”, “not rated”, “confirmed”, “selective default” or “default”.

In the case of a rating outlook, the time horizon is provided during which a change in the credit rating is expected. This information is available within the Basic Data Information Card.

In accordance with Article 11 (2) EU-Regulation (EC) No 1060/2009, a registered or certified credit rating agency shall make available, in a central repository established by ESMA, information on its historical performance data including the rating transition frequency and information about credit ratings issued in the past and on their changes. Requested data are available at the ESMA website.

An explanatory statement of the meaning of Creditreform Rating AG’s default rates are available in the credit rating methodologies disclosed on the website.

Disclaimer

Any rating performed by Creditreform Rating AG is subject to the Creditreform Rating AG Code of Conduct, which has been published on the web pages of Creditreform Rating AG. In this Code of Conduct, Creditreform Rating AG commits itself – systematically and with due diligence – to establish its independent and objective opinion as to the sustainability, risks and opportunities concerning the enterprise or the issue under review.

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We have assumed that the documents and information made available to us by the client are complete and accurate and that the copies provided to us represent the full and unchanged contents of the original documents. Creditreform Rating AG assumes no responsibility for the true and fair representation of the original information.

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