

Merck KGaA

Germany, Chemicals/Pharmaceuticals



Corporate profile

Merck KGaA is a diversified chemicals/pharmaceuticals group that was founded in 1668 with the opening of a Merck pharmacy in Darmstadt, Germany, where the group is still based. The Merck family holds 70% of the voting rights with the remainder in public ownership. After several acquisitions and divestments, the group now consists of three divisions: Healthcare (pharmaceuticals and consumer healthcare), Life Science and Performance Materials (centred on its global market leadership in liquid crystals). In 2015, Merck acquired the US-based life science company Sigma Aldrich for a price of USD 17bn and became one of the consolidators in that industry. In pharmaceuticals, it is a specialised, mid-sized producer of drugs, relying on two blockbuster products, Erbitux and Rebif, but has developed a new focus on immunoncological products, mainly represented by its antibody avelumab. At the end of 2014, US-based big pharma company Pfizer acquired partial ownership of the molecule as well as US distribution rights for USD 850m.

Key metrics

Scope credit ratios	2016	2017F	Scope estimates	
			2018F	2019F
EBITDA/interest cover (x)	13.0x	15.4x	18.3x	21.9x
SaD/EBITDA	2.9x	2.5x	1.8x	1.5x
Scope-adjusted FFO/SaD	25%	32%	44%	53%
FOCF/SaD	21%	22%	28%	29%

Rating rationale

Scope Ratings affirms its issuer rating of A- to Germany-based Merck KGaA (Merck). The short-term rating is S-1. The rating Outlook is Stable.

The rating affirmation reflects Scope Ratings' view of Merck's credit-supportive business risk profile, consisting of the mostly stable and cash-generative business models of its three critically-sized divisions. In addition, Scope sees the group's diversified structure as reflecting the owning family's strategy of achieving balanced cyclical exposure. Merck's Healthcare division still hinges on its mature product portfolio and is only gradually moving towards a broader pharmaceuticals portfolio by way of expansion into immunoncology. The group's other divisions could, however, offset potentially weaker profitability in pharmaceuticals thanks to their stable cash flows. The ratings also reflect Scope's perception of Merck's conservative financial policy, which has focused on organic growth and deleveraging since the debt-funded acquisition of Sigma Aldrich in 2015. Credit metrics are presently sub-par for the ratings because of the acquisition's immediate impact; financial policy was, however, supportive of rapid deleveraging following the Serono and Millipore acquisitions.

Scope continues to assess Merck's business risk profile as A+. This is based on a weighted approach with regard to the three divisions' industry risk and competitive positioning to form the group's business risk profile. In Scope's view, Merck's exposure to the relatively stable, high-margin liquid crystals and life science industries continues to support the ratings.

Ratings & Outlook

Corporate Ratings	A-/Stable
Short Term Rating	S-1/Stable

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Related methodology

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The group has extremely large global market shares and operating margins in the former, with the latter offering growth potential and comparatively high profitability. However, Scope continues to believe that the Healthcare division, in its present transitional state, somewhat weakens the group's business risk profile, despite the initial success attained with drug approvals for Bavencio and Mavenclad. Emerging margin pressure in Performance Materials as a consequence of stronger competitive forces in the liquid crystals area do not have a negative bearing on Scope's business risk assessment for the division yet, as the division's operating profit margins are still expected to reach close to 40% in 2017 overall.

Scope's assessment of Merck's financial risk profile continues to reflect its expectation that the group is both able and willing to reduce debt continuously in the coming years. The group has already cut gross financial debt by EUR 1.2bn since the end of 2015. However, Merck's growth strategy involves budgeted rises in R&D, marketing and capital expenditures, and, as most of these increases will be incurred in 2017 and 2018, credit metrics are likely to improve more slowly than expected in the current year. Potential profit weakness in Performance Materials is also a consideration. However, the group's management has decided to assess strategic options for its Consumer Health activities during 2018 which might generate disposal proceeds north of EUR 2bn if sold, in our view. Depending on the timing of the transaction, credit metrics for 2018 are likely to be very favourably affected, balancing out the negative factors mentioned above by far. For 2017, Scope expects the FFO/Scope-adjusted-debt (SaD) ratio to recover to about 30% and the adjusted EBITDA/SaD ratio to fall to about 2.5x.

Outlook

The Stable Outlook reflects Scope's expectations that Merck should improve its financial risk profile in 2018 to levels of about 2.5x with regard to SaD/EBITDA. Scope views credit metrics of SaD/EBITDA of 2.5x and FFO/SaD of 30-35% as indicative for the current rating and outlook and reflective of a financial risk profile assessment in the BBB category.

A higher rating could be triggered by both an improved business risk assessment, if the Healthcare division performs well in the future, and a sustainable enhancement of credit metrics above the aforementioned levels. A negative rating action could result in the event of a more aggressive financial policy (which Scope does not anticipate) or a sustained negative deviation from the ratio levels commensurate with the present ratings (SaD/EBITDA of above 2.5x and FFO/SaD of below 30%).

Rating drivers

Positive rating drivers	Negative rating drivers
<ul style="list-style-type: none"> • Diversified group structure with positive effects on internal risk balancing • World market leader by far in liquid crystal production • Potential pharma blockbuster in development • Significant and consistent free cash generation • Acquisition of Sigma Aldrich has led to group becoming a life science consolidator • Conservative financial policy with good track record 	<ul style="list-style-type: none"> • Healthcare division in transition • Margin pressure in liquid crystals • Credit metrics currently at sub-par levels for the rating

Rating-change drivers

Positive rating-change drivers	Negative rating-change drivers
<ul style="list-style-type: none"> • Considerable, uninterrupted improvement in credit metrics • Significant turnaround in Healthcare division, for example through the approval of new antibody avelumab 	<ul style="list-style-type: none"> • Inability to deleverage quickly, resulting in no significant improvement in credit metrics • Change to more aggressive financial policy



Financial overview

	Scope estimates			
Scope credit ratios	2016	2017F	2018F	2019F
EBITDA/interest cover (x)	13.0x	15.4x	18.3x	21.9x
SaD/EBITDA	2.9x	2.5x	1.8x	1.5x
Scope-adjusted FFO/SaD	25%	32%	44%	53%
FOCF/SaD	21%	22%	28%	29%
Scope-adjusted EBITDA in EUR m	2016	2017F	2018F	2019F
EBITDA	4,086	4,281	4,103	4,279
Operating lease payment in respective year	98	97	104	97
Other	0	0	0	0
Scope-adjusted EBITDA	4,184	4,378	4,207	4,376
Scope funds from operations in EUR m	2016	2017F	2018F	2019F
EBITDA	4,086	4,281	4,103	4,279
less: (net) cash interest as per cash flow statement	-305	-235	-170	-140
less: cash tax paid as per cash flow statement	-788	-500	-570	-670
add: depreciation component operating leases	98	97	104	97
Scope funds from operations	3,091	3,643	3,470	3,570
Scope-adjusted debt in EUR m	2016	2017F	2018F	2019F
Reported gross financial debt	12,597	11,209	8,687	6,987
Hybrid bond	-744	-744	-744	-744
deduct: cash, cash equivalents	-1,084	-918	-1,808	-1,073
Cash not accessible	300	300	300	300
add: pension adjustment	969	850	902	950
add: operating lease obligation	293	293	293	293
Other	-128	-150	-150	-150
Scope-adjusted debt	12,203	10,840	7,480	6,564

Business risk profile

Three critically sized divisions

Based on its long-term commitment to diversified pharmaceuticals/chemicals exposure, Merck has built its group structure around three sizeable divisions holding, in part, significant market shares. The acquisition of US-based Sigma Aldrich for the group's Life Science division in 2015, positioned it among the top three producers of laboratory equipment and related products globally. While its liquid crystals business (as part of its Performance Materials division) continues to enjoy global supremacy, Merck's pharmaceutical subdivision is a mid-sized drug producer which has only recently been able to gain approval for novel pipeline projects ending a period of years without innovation.

Internal risk balancing

Scope believes Merck's group structure can effectively shield group cash generation from recessions and a potential downturn in pharmaceuticals. This is based on our view of both the life science and liquid crystals industries' comparatively low cyclicality and high cash flow generation. While the pharmaceutical industry is generally less exposed to macroeconomic downturns, cyclicality risk is of a more long-term nature, defined by product lifecycles and the pipeline replacement of patent-expired products.

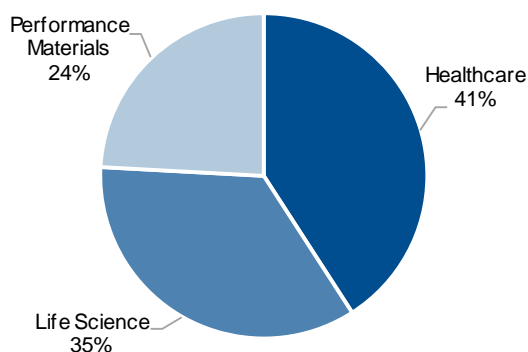
Solid business risk profile

In accordance with its corporate ratings methodology, Scope assesses each of the group divisions' business risk profile separately, taking into account the divisions' different characteristics. By applying weights related to the divisions' individual profit contribution to the group (see Figure 1), we determined Merck's group business risk profile as falling within the A category.

Credit-supportive mix of industries

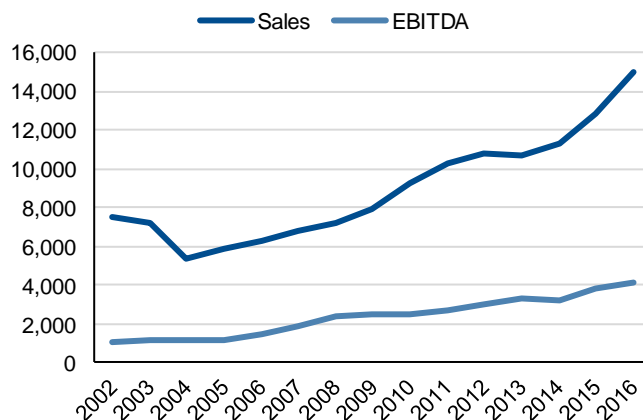
Scope views the mix of industries which Merck is exposed to as very credit-supportive. It is our belief that all underlying industries are only very faintly exposed to macroeconomic downturns. The Life Science and Healthcare divisions are driven by ageing societies and unhealthy lifestyles, as well as innovation. The Performance Materials division generally supplies speciality products for a large number of industrial applications, making a sharply negative cyclical impact less likely for the overall division. We also believe that barriers to entry are high in pharmaceuticals (R&D, marketing expertise) and liquid crystals (technical expertise and a high degree of concentration in the industry). While we consider that the group's other performance material activities (pigments and electronics) shift the divisional entry barrier risk down slightly, we view the life science industry, which deals with medical equipment, as well protected by medium-risk barriers to entry due to its focus on speciality products and increasing network requirements.

Figure 3: Profit breakdown by division, 2017E



Source: Scope estimates

Figure 4: Stable long-term trends, in EUR m



Source: Scope estimates

Group's competitive position weighed down by healthcare

Merck's pharmaceutical activities suffer from an aged and comparatively small product portfolio. While its two mature blockbusters Erbitux (oncology) and Rebif (multiple sclerosis), are already past patent expiry in major markets, both are still holding up sales extremely well, which is important in the present transitional phase of the overall division. While first indication approvals of Bavencio (avelumab), Merck's prospective anti-PDL-1 blockbuster, and Mavenclad, its oral multiple sclerosis treatment, are positive, they do not yet change our assessment of the group's competitive position in healthcare overall, as sales generation is still outstanding. High margins and good pipeline prospects are also credit-supportive, despite the heavy focus on avelumab. However, the rating is held back by the group's small market shares and high product concentration rates, with the top three healthcare products generating 46% of pharmaceutical revenues in the first half of 2017 (compared with 36% at Bayer, for example).

Performance Materials: dominated by liquid crystals

Scope regards the competitive position of Merck's Performance Materials division as very comfortable from a ratings point of view. This is particularly due to its liquid crystals exposure, which we estimate as generating more than half of divisional profit. The group's liquid crystals business is extremely strong both in terms of market share and EBITDA margin, despite having come under pressure from intense price competition. Merck's pigments and electronics activities (integrated circuit materials, OLEDs) diminish this strength somewhat from a rating perspective, but nevertheless have good market shares and margins, attesting to the highly specialised nature of the products.

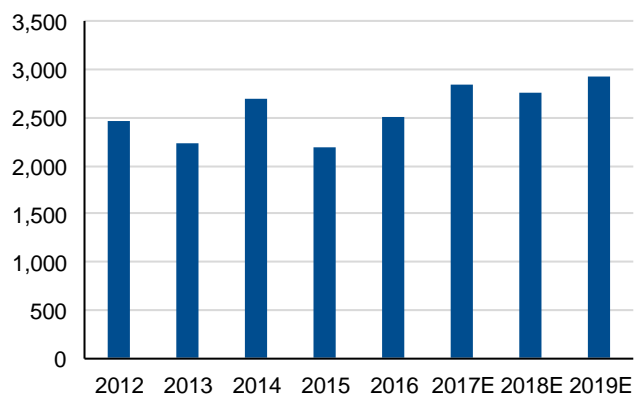
Life Science: enhanced competitive position

With the inclusion of Sigma Aldrich, Merck's Life Science division now ranks among the top three suppliers worldwide. All major product categories are covered (except for diagnostic instruments) and market shares are significant. We therefore regard diversification as key to our assessment of the division's competitive position. Furthermore, Sigma Aldrich's industry-leading EBITDA margin of 32% (2015) and strong cash generation are likely to propel Merck's divisional profitability going forward. In the first six months of 2017, divisional EBITDA margins improved to more than 28%, up from 26% in the same period in 2016. In addition, the division looks set to benefit from growth levels that are expected to be well above that of GDP in the mid-term. From a geographic perspective, the Sigma Aldrich acquisition will significantly strengthen the division's US exposure within an already global structure. On a combined basis, the division is well represented in Europe and North America, which are home to about 80% of the life science industry.

Financial risk profile**Improving credit metrics**

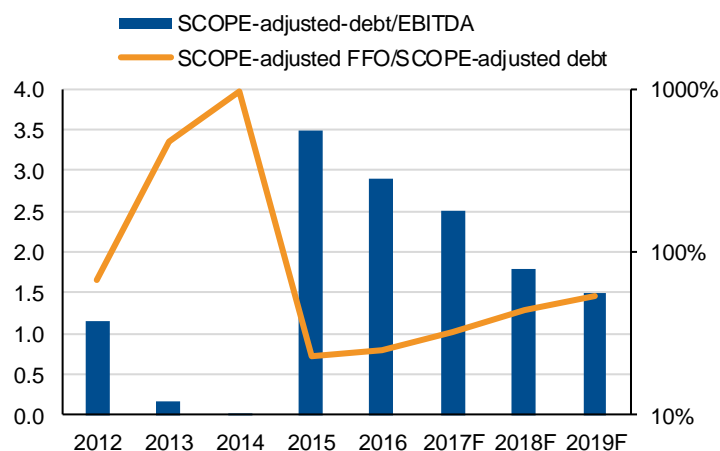
Merck's key credit metrics came close to a net cash position in 2014, based on continuous deleveraging after 2011, the year of the EUR 5bn Millipore takeover. The Sigma Aldrich transaction in 2015 led to a steep increase in gross financial debt by about EUR 8bn compared with the year before, and was responsible for adjusted leverage rising above 3x, its highest historical level. We continue to expect a strong rise in operating cash flows, up from a low base in 2015, as already demonstrated by a 15% increase in reported operating cash flow in 2016 to allow for continuous deleveraging. While Merck's management has recently dampened excessively high profit expectations for 2017 and 2018, anticipated divestiture proceeds for its consumer healthcare activities are likely to boost deleveraging tremendously. This is despite the planned increase in R&D and marketing expenses as well as higher capital expenditures in the coming years, coupled with lower expected liquid crystals profits. Financial debt has already been reduced by more than EUR 1bn since the end of 2015, in line with the management strategy of prioritising deleveraging in 2017 and 2018.

Figure 3: Sigma boosts operating cash flow, in EUR m



Source: Scope estimates

Figure 4: ... enabling continuous credit quality recovery



Source: Scope

Committed financial policy

Scope considers Merck's financial policy to be sound and committed, as underlined by the deleveraging trend following acquisitions in 2012 and 2015. After the Sigma Aldrich takeover, the group's management stated publicly that it would enter a phase of consolidation and organic growth with a focus on reducing debt quickly, not least motivated by the intention of keeping ratings stable. This strategy is very credible in our view, as supported by a positive track record in the cases of the Serono (2007) and Millipore (2010) acquisitions. It shows that the group is willing to deleverage, and its ability to do so is underscored by a projected increase in annual operating cash flows including Sigma (see Figure 3). After dividends to outside shareholders and the Merck family, a free cash flow level of over EUR 1bn is likely on an annual basis.

Conservative liquidity management

We continue to view Merck's liquidity management as conservative, based on the sustained excess cash that acts as a cushion on the balance sheet. While we have determined about EUR 200m in cash as the minimum level necessary to run the business from a technical perspective, Merck has historically kept balance sheet liquidity at more than EUR 1bn. Short-term maturities at the end of June 2017 were still at a high EUR 4.2bn, which is about EUR 2bn greater than the historical average. This reflects the funding of Sigma Aldrich through the partial use of Merck's EUR 2bn commercial paper programme, as well as additional bank lines, which are effectively rolled over but which technically constitute short-term debt. We expect the group's short-term debt to fall rapidly in the coming quarters, as the bilateral bank lines should be paid back first. The continued availability of EUR 2bn in committed back-up facilities and the group's increasing free cash generation were further factors contributing to our analysis.

S-1 short-term rating

Based on our positive assessment of liquidity as well as Merck's solid investment grade rating, Scope has assigned a short-term rating of S-1. This rating also reflects our perception of the group's sustainable cash-generative business model which continues to improve thanks to the Sigma Aldrich acquisition. Including all internal and external sources of liquidity, coverage of short-term debt is projected at 2x, a level we deem commensurate with the rating.



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I. Regulatory disclosures - Important information

Information pursuant to Regulation (EC) No 1060/2009 on credit rating agencies, as amended by Regulations (EU) No. 513/2011 and (EU) No. 462/2013

Responsibility

The party responsible for the dissemination of the financial analysis is Scope Ratings AG, Berlin, District Court for Berlin (Charlottenburg) HRB 161306 B, Chief Executive Officer: Torsten Hinrichs, Dr Stefan Bund.

Rating prepared by

Olaf Tölke, Lead Analyst

Rating committee responsible for approval of the rating

Werner Stäblein, Committee Chair

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Key sources of information for the rating

- | | |
|---|--|
| <input checked="" type="checkbox"/> Website of the rated entity | <input checked="" type="checkbox"/> Detailed information provided on request |
| <input checked="" type="checkbox"/> Valuation reports, other opinions | <input checked="" type="checkbox"/> Data provided by external data providers |
| <input checked="" type="checkbox"/> Current performance record | <input checked="" type="checkbox"/> External market reports |
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Scope Ratings considers the quality of the available information on the evaluated company to be satisfactory. Scope ensured as far as possible that the sources are reliable before drawing upon them, but did not verify each item of information specified in the sources independently.

Methodology

The methodologies applicable for this rating (Corporate Rating Methodology; Rating Methodology: European Pharmaceuticals) are available on www.scoperatings.com. The historical default rates of Scope Ratings can be viewed on the central platform (CEREP) of the European Securities and Markets Authority (ESMA): <http://cerrep.esma.europa.eu/cerrep-web/statistics/defaults.xhtml>. A comprehensive clarification of Scope's default rating, definitions of rating notations and further information on the analysis components of a rating can be found in the documents on methodologies on the rating agency's website.

Examination of the rating by the rated entity prior to publication

Prior to publication, the rated entity was given the opportunity to examine the rating and the rating drivers, including the principal grounds on which the credit rating or rating outlook is based. The rated entity was subsequently provided with at least one full working day, to point out any factual errors, or to appeal the rating decision and deliver additional material information. Following that examination, the rating was not modified.



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