

Bayer calculates the cost of capital on the basis of weighted average cost of equity and debt capital. The underlying capital structure of each subgroup is determined by benchmarking against comparable companies in the same industry sector. The cost of equity corresponds to the return expected by stockholders, while the cost of debt is based on the conditions on which comparable companies can obtain long-term financing. Both components are derived from capital market information.

To allow for the different risk and return profiles of the Bayer Group's principal businesses, the after-tax cost of capital is calculated separately for each subgroup. The discount rates used are 6.9% (2008: 7.6%) for HealthCare, 6.7% (2008: 7.0%) for MaterialScience and 7.0% (2008: 7.9%) for CropScience. As in the previous year, a risk premium of 3.5 percentage points was added to the discount rate for the strategic business entity Crop Improvement, which is part of the Environmental Science, BioScience reporting segment. The after-tax discount rates quoted above are equivalent to pre-tax rates of 8.5% to 9.9% (2008: 9.2% to 10.7%) for HealthCare, 8.5% to 12.0% (2008: 8.6% to 12.9%) for CropScience and 8.4% to 9.7% (2008: 8.5% to 10.7%) for MaterialScience. These rates are based on assumptions and estimates relating to business-specific costs of capital, which in turn depend on country risks, credit risks, and additional risks resulting from the volatility of certain businesses. The risk adjustment for each subgroup is determined by benchmarking against comparable companies in the same industry sector.

Sensitivity analysis is based on a 10% decline in future cash flows and a 10% increase in the weighted average cost of capital because changes up to this magnitude are reasonably possible, especially in the long term. Although greater changes than this have been observed due to the global economic and financial crisis, we do not believe these will be sustained, and such changes therefore remain likely only in the short term. We therefore concluded that there is no indication of potential goodwill impairment in any of the cash-generating units. In 2009, as in 2008, no impairment losses were recorded on the basis of the global annual impairment testing of the cash-generating units.

Although the estimates of the useful lives of certain assets, assumptions concerning the macro-economic environment and developments in the industries in which the Bayer Group operates and estimates of the discounted future cash flows are believed to be appropriate, changes in assumptions or circumstances could require changes in the analysis. This could lead to additional impairment charges in the future or – except in the case of goodwill – to valuation write-backs should the expected trends reverse.

5. Segment reporting

The accounting standard IFRS 8 (Operating Segments) was applied for the first time as of the beginning of 2009. In addition, the following changes were implemented compared with the Consolidated Financial Statements for 2008:

- The integration of the thermoplastic polyurethanes businesses into the Polyurethanes and the Coatings, Adhesives, Specialties business units completed an important phase in the reorganization of the MaterialScience portfolio. It led to an adjustment in the segment presentation for that subgroup. The previously separate Materials and Systems segments were combined to form a single MaterialScience segment in light of their similar long-term economic performance and the comparability of their products, production processes, customer industries, distribution channels and regulatory environment.

- We transferred our dermatology business (Intendis) and the medical equipment business Medrad from the Pharmaceuticals to the Consumer Health segment. The prior-year figures have been restated accordingly.
- Business activities that cannot be allocated to any other segment are reported under "All other segments." These include primarily the services of Bayer Business Services (BBS), Bayer Technology Services (BTS) and Currenta.
- Holding companies' activities and the elimination of intersegment sales are presented in our segment reporting as "Corporate Center and Consolidation."

At Bayer the Board of Management, as the chief operating decision maker, allocates resources to the operating segments and assesses their performance. The reportable segments and regions are identified, and the disclosures selected, in line with the internal financial reporting system (management approach).

As of December 31, 2009 the Bayer Group comprised three subgroups, with operations subdivided into strategic business entities known as divisions (HealthCare) or business units (CropScience and MaterialScience). Their activities are aggregated into the five reportable segments listed below according to economic characteristics, products, production processes, customer relationships and methods of distribution.

The segments' activities are as follows:

Activities of the Segments

[Table 4.10]

Subgroup/Segment	Activities
HealthCare	
Pharmaceuticals	Development, production and marketing of prescription pharmaceuticals, such as for the treatment of hypertension, cardiovascular diseases, infectious diseases, cancer, multiple sclerosis, and for contraception; contrast media for use in diagnostic imaging.
Consumer Health	Development, production and marketing of over-the-counter medications, dietary supplements for humans and animals, veterinary medicines and grooming products for animals; diagnostic systems such as blood glucose meters, medical equipment such as injection systems for diagnostic procedures.
CropScience	
Crop Protection	Development, production and marketing of a comprehensive portfolio of fungicides, herbicides, insecticides and seed treatment products to meet a wide range of regional requirements.
Environmental Science, BioScience	Development, production and marketing of a wide range of products for the green industry, garden care, non-agricultural pest and weed control as well as seeds and plant traits.
MaterialScience	
MaterialScience	Development, production and marketing of high-quality plastics granules, sheet and film; development, production and marketing of polyurethanes for a wide variety of applications and of coating and adhesive raw materials; production and marketing of inorganic basic chemicals.

The segment table presents continuing operations only. Details of the discontinued operations are given in Note [6.3].

The reconciliation in the region table eliminates interregional sales and reflects income, expenses, assets and liabilities not allocable to geographical areas, particularly those relating to the Corporate Center.

The segment data are calculated as follows:

- The intersegment sales reflect intra-Group transactions effected at transfer prices fixed on an arm's-length basis.
- Although EBIT before special items and EBITDA before special items are not defined in the International Financial Reporting Standards, they represent key performance indicators for the Bayer Group. The special items comprise effects that are non-recurring or do not regularly recur or attain similar magnitudes. EBITDA is the EBIT as reported in the income statement plus amortization and write-downs of intangible assets and depreciation and write-downs of property, plant and equipment.
- The gross cash flow comprises income from continuing operations after taxes, plus income taxes, plus non-operating result, minus income taxes paid or accrued, plus depreciation, amortization and write-downs, minus write-backs, plus/minus changes in pension provisions, minus gains/plus losses on retirements of noncurrent assets, plus non-cash effects of the remeasurement of acquired assets. The change in pension provisions includes the elimination of non-cash components of the operating result (EBIT). It also contains benefit payments during the year.
- The net cash flow is the cash flow from operating activities as defined in IAS 7 (Statement of Cash Flows).
- The capital invested comprises all assets serving the respective segment that are required to yield a return on their cost of acquisition. Noncurrent assets are included at cost of acquisition or construction throughout their useful lives because the calculation of cash flow return on investment (CFROI) requires that depreciation and amortization be excluded. Interest-free liabilities are deducted. The capital invested is stated as of December 31 of the respective year.
- The CFROI is the ratio of the gross cash flow to the average capital invested for the year and is thus a measure of the return on capital employed.
- The equity items reflect the earnings and carrying amounts of companies accounted for using the equity method (associates).
- Since financial management of Group companies is carried out centrally by Bayer AG, financial liabilities are not directly allocated among the segments. Consequently, the liabilities shown for the individual segments do not include financial liabilities.
- The number of employees is reported in full-time equivalents, with part-time employees included in proportion to their contractual working hours.

The reconciliations of the operating result (EBIT), assets and liabilities of the reporting segments to the pre-tax income, the assets and the liabilities of the Group are given in the following table:

Reconciliation of Segment Result

[Table 4.11]

	2008	2009
	€ million	€ million
Operating result of reporting segments	3,714	3,204
Operating result of Corporate Center	(170)	(198)
Operating result [EBIT]	3,544	3,006
Non-operating result	(1,188)	(1,136)
Income before income taxes (total)	2,356	1,870

Reconciliation of Segment Assets to Group Assets

[Table 4.12]

	2008	2009
	€ million	€ million
Assets of reporting segments	46,208	44,703
Corporate Center assets	1,270	1,222
Non-allocated assets	5,025	5,117
Assets held for sale and discontinued operations	8	-
Total assets	52,511	51,042

Reconciliation of Segment Liabilities to Group Liabilities

[Table 4.13]

	2008	2009
	€ million	€ million
Liabilities of reporting segments	11,855	12,295
Corporate Center liabilities	3,584	3,204
Non-allocated liabilities	20,719	16,592
Liabilities directly related to assets held for sale and discontinued operations	13	-
Total liabilities	36,171	32,091

The reconciliation of segment sales to Group sales is apparent from the table of key data by segment in Note [1].

Information on geographical areas

The following table provides a regional breakdown of external sales by market and of intangible assets, property, plant and equipment:

Information on Geographical Areas

[Table 4.14]

	Net sales (external) – by market		Intangible assets and property, plant and equipment	
	2008	2009	2008	2009
	€ million	€ million	€ million	€ million
Germany	4,797	4,147	16,896	15,944
United States	7,053	6,753	5,466	5,333
Other	21,068	20,268	9,728	9,678
Total	32,918	31,168	32,090	30,955

Information on major customers

Revenues from transactions with a single customer in no case exceeded 10% of Bayer Group sales in 2009 or 2008.