

The impact of an increasing cost of capital on impairment testing as per year-end 2022:

Is it fair to assume a increased risk of impairment of assets?

How do current market circumstances affect the risk of impairment of assets?

Over the next couple of months, many companies will be involved in impairment testing procedures as part of their year-end financial reporting. It is fair to say that the current economic and geopolitical circumstances (e.g. war in Ukraine, increased energy prices, inflation rates spiking, increasing interest rates and a potential recession) represent uncertain times. **How will this affect the risk of impairment of assets?**

Since nobody has a crystal ball, it remains uncertain what the future will bring in terms of cash flows to be generated by an asset. However, if the forecasted cash flows would remain unchanged compared to last year's impairment test and only the development of the discount rate (i.e. cost of capital) since 31 December 2021 is taken into account, can it already be concluded that the risk of an impairment has increased?

In this article we will focus on impairment testing under IAS 36. However, our observations are also applicable to impairment testing under other accounting standards (e.g. Dutch GAAP and US GAAP).

IAS 36 Impairment of Assets sets out requirements for impairment which cover a range of assets (and groups of assets, termed 'cash generating units' or CGUs). A number of assets are excluded from its scope (e.g. financial instruments and inventories) and IAS 36 is therefore predominantly applicable to property, plant and equipment, intangible assets and goodwill.

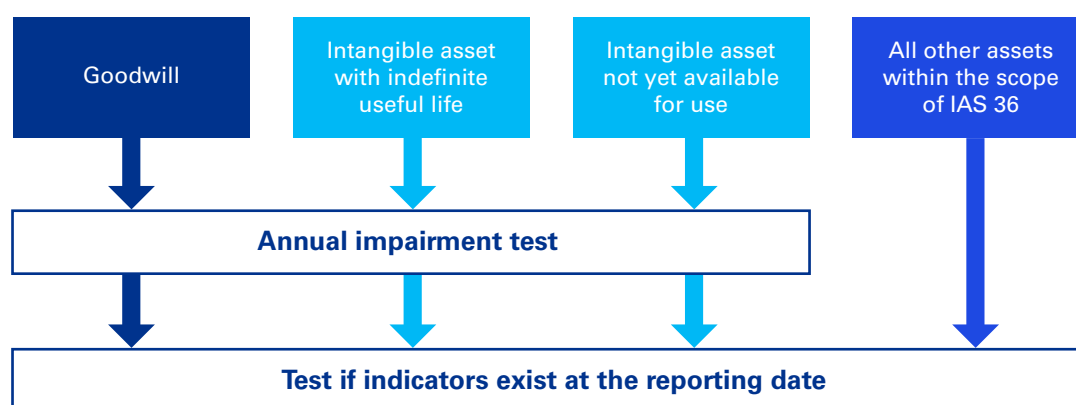
For certain assets, impairment tests are required to be carried out on an annual basis irrespective of whether any indicators of impairment have been identified.

These assets include:

- Goodwill;
- Intangible assets with an indefinite life;
- Intangible assets not yet available for use.

For other assets or CGUs, in circumstances in which indicators of impairment are identified, an impairment test is required to be carried out. The impairment test compares the asset's or (CGU's) **carrying amount** with its recoverable amount. The **recoverable amount** is the higher of the amounts calculated under the **fair value less cost of disposal** and **value in use** approach.

When to test for impairment?



How is the WACC calculated?

Value in use can shortly be defined as future cash inflows and outflows from continuing use of the asset and from its ultimate disposal, which are then discounted to reflect the time value of money and risk; or to put it differently, the net present value of the cash flows generated by an asset as it is currently being used by the owner. Often a discounted cash flow (“DCF”) method is used to determine the value in use. The DCF method is based on the assumption that the value of an asset equals the net present value of the operating free cash flows, which in future years eventually will be paid to the providers of debt and equity. To calculate the net present value of the operating free cash flows, these cash flows are discounted by a cost of capital that should reflect the risks incorporated in the cash flows.

Fair value less cost of disposal is the at arm’s length sale price between knowledgeable willing parties less costs of disposal. If a market price is not available, fair value less cost of disposal can also be determined using a DCF method. However, the cash flows will be based on the perspective of an average market participant (which can deviate from the cash flows used in the value in use approach).

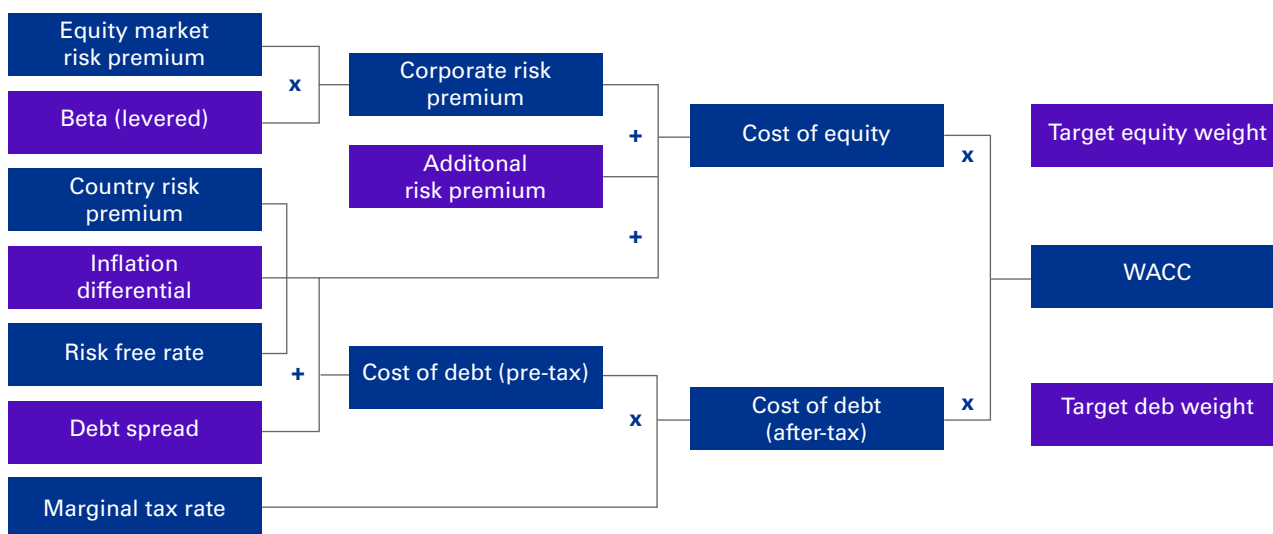
The cost of capital used should reflect the current market assessment of:

1. time value of money for the periods until the end of the asset’s useful life;
2. risks specific to the asset for which the future cash flow estimates have not been adjusted.

The cost of capital used for testing assets for impairment should not be specific to the entity. Therefore, a benchmark rate based on listed comparable companies (i.e. comparable in terms of industry they operate in, position in the value chain, growth outlook, life cycle, country/region) should be used instead of an entity-specific one.

While there are several ways to derive a cost of capital, the most commonly applied methodology is the ‘build-up methodology’ based on the Capital Asset Pricing Model (“CAPM”). The table below visualizes the formula for the calculation of the weighted average cost of capital (“WACC”) in a simplified way. Please note that this formula can be adjusted to include the impact of operational leases when these are considered to be a source of funding (i.e. IFRS 16). The individual components will be discussed on the next page in more detail.

Determinants of the WACC



The risk-free rate and MRP are parameters used in the determination of the WACC

Risk-free rate: the basic principle of a risk-free interest rate is that it is an estimate of the return that can be achieved by a risk-free investment. The risk-free rate should only include the following two elements:

1. Time value of money; and
2. Inflation

Often the yield on a German government bond (e.g. with a tenure of 30 years) is used as a proxy for the European risk free rate.

Country risk premium (“CRP”): the country risk premium is the risk that a company faces by doing business in various countries across the world and as a result is exposed to various risks including (but not limited to) political risks, legislative risks, regulatory risks and tax risks.

Inflation differential: the extent to which a company is exposed to inflation related risk is dependent on the currency of the cash flow forecast and the assumptions taken into account in pricing the products of the company.

Equity market risk premium (“MRP”): the MRP can be sourced from various providers. The Dutch Corporate Finance & Valuations team of KPMG provides a quarterly update based on a comparison of required returns on stocks and actual returns on government bonds in major capital markets. For more information please see our website: [KPMG MRP](#).

Additional risk premium (“ARP”): an additional risk premium can be added for various reasons. For example small companies’ stocks are statistically more volatile than those of larger companies and investors require a higher return for these companies. Also if the financial forecasts of the asset are not in line with market expectations, an additional forecasting risk premium should be considered in the WACC.

Target capital structure: the target capital structure shows how a company is ideally financed based on a benchmark of comparable listed companies (‘peer group’). A distinction should be made between the providers of equity, i.e. the shareholders, the providers of debt, i.e. the lenders, and the providers of leases.

Beta: the beta is determined by calculating the relative movements of the shares of the peer group compared to an applicable market index.

Cost of debt: the cost of debt is determined by adding the risk-free rate and the credit spread related to the credit rating of the peer group and then deducting the applicable tax rate.



Both the risk-free rate and MRP have increased since 31 December 2021

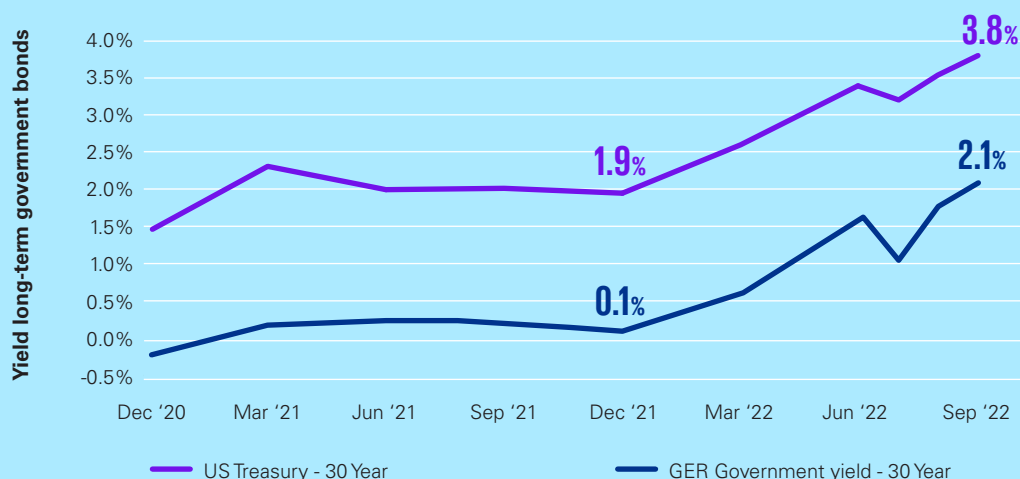
With respect to the parameters used in the calculation of the WACC, we note that the risk-free rate and the MRP have increased substantially since 31 December 2021.

For illustrative purposes, let's assume a Dutch retail company that has a beta (levered) of 1, a target capital structure consisting for 50% of debt and 50% of equity

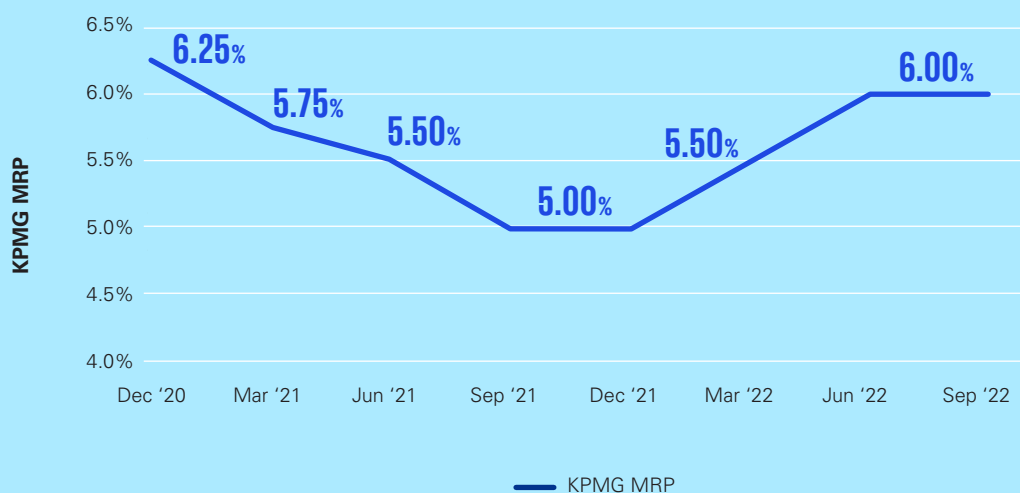
and a credit rating (based on the peer group) of BBB. As per 31 December 2021, the WACC amounted to **5.5%** (see the next page for the calculation).

Since 31 December 2021, the risk-free rate (based on both a 30 year German government bond as well as a 30 year US Treasury bond) and the MRP (based on KMPG) have developed as follows:

Yield on 30 year German government bond and 30 year US Treasury bond



MRP based on KPMG research

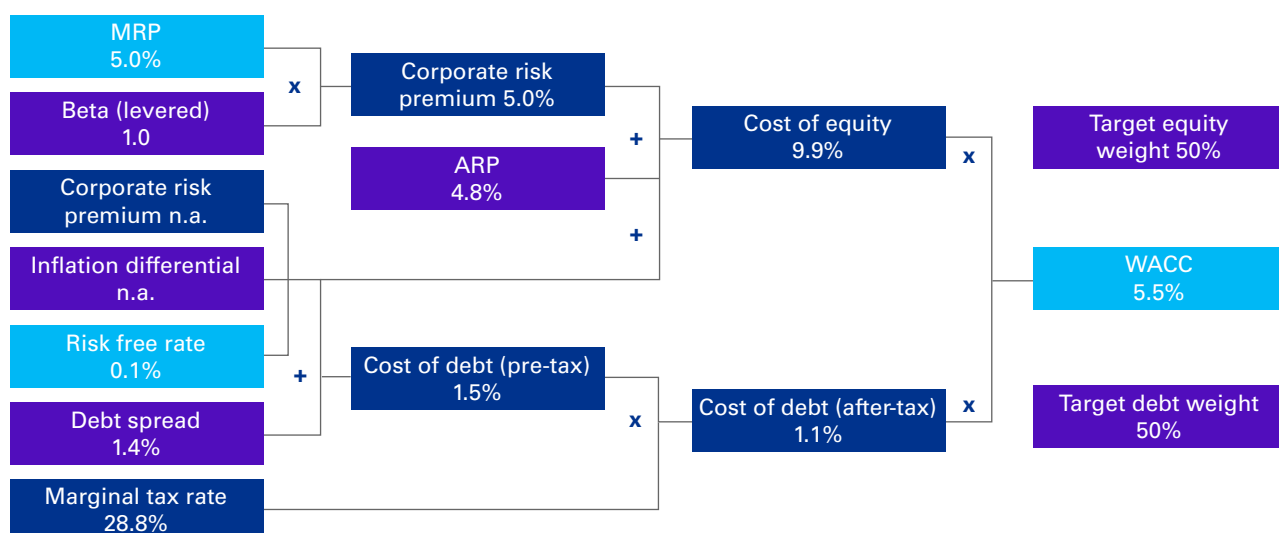


Given the development in cost of capital, the risk of impairment of assets has increased

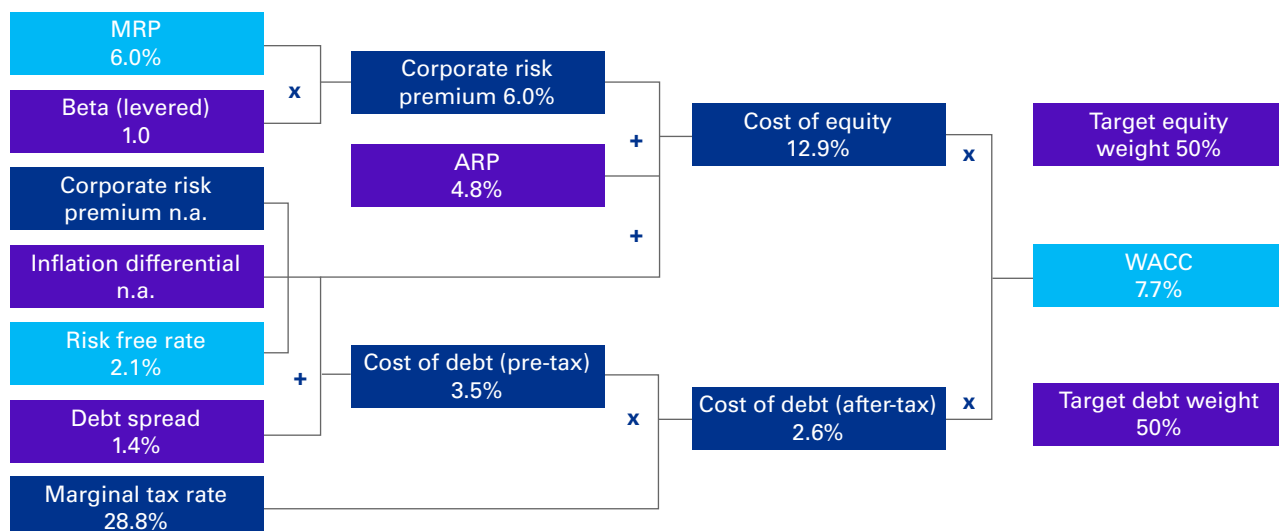
For illustrative purposes we assume that for this Dutch retail company, as at 30 September 2022, the levered beta, target capital structure, credit rating and related credit spread have remained unchanged. As a result of the increase in the risk-free rate and the MRP, the WACC as at 30 September 2022 amounts to **7.7%**. This **2.2%-point increase** in WACC will, ceteris paribus, lead to a lower net present value of the operating free cash flows and therefore a lower value in use. Disregarding a potential off-setting impact

(i.e. improvement) in the forecasted cash flows (both in the explicit forecast period and the terminal value (growth rate)) as well as in the other WACC parameters, **it is fair to assume that the risk of impairment of assets has increased compared to the situation as per 31 December 2021**. As a concluding remark we note that according to IAS 36.12c, an increase of market interest rates or other market rates of return on investments represent an impairment trigger and therefore **all assets within the scope of IAS 36 are impacted**.

WACC calculation per 31 December 2021



WACC calculation per 30 September 2022



KPMG can assist you with your impairment testing process

How can KPMG assist you?

KPMG Corporate Finance & Valuations and KPMG's Accounting specialists can support you with your impairment testing process from both a valuation and accounting perspective. We will work closely with you but at the same time will be objective and independent in our approach. For more information please contact Sander Mulder, Niels Ebbinkhuijsen or Fred Versteeg.



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