



Impairment Analysis of Listed Italian Companies

October 2021



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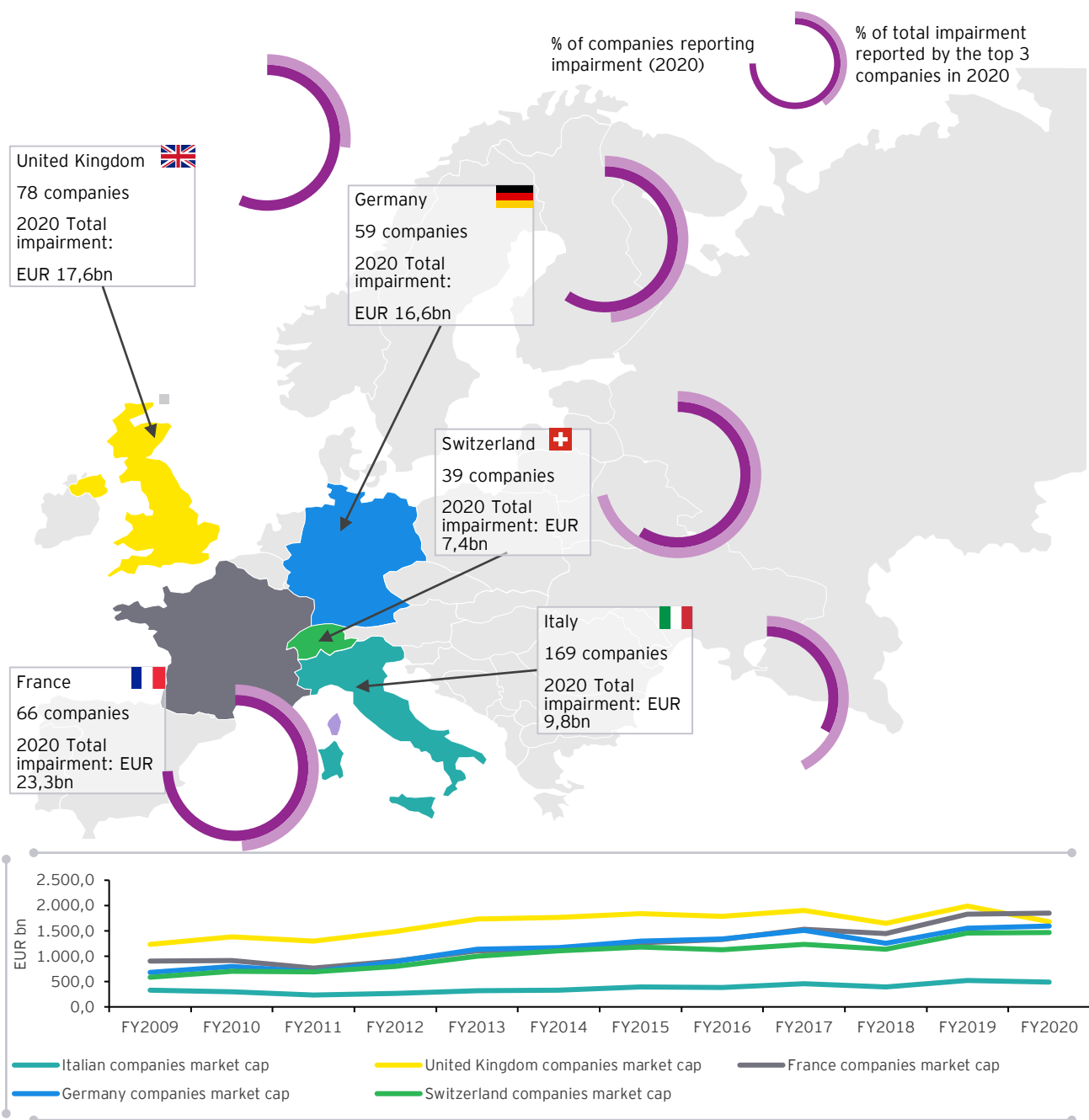


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Executive summary:

Impairment analysis for top 5 countries



- ▶ Italian companies include FTSE AIM and FTSE MIB companies
- ▶ Other countries companies include MSCI Europe companies

Executive summary:

FTSE MIB impairment analysis for top 5 sectors (based on average of 10 years total impairment, 2011-2020)



FTSE MIB	Year	Energy	Financial services	TMT	DIP	Automotive	Others	Total
n° of companies	2020	7	13	3	7	3	7	40
Total impairment (EUR bn)	2020	3,0	2,4	0,0	2,6	0,4	1,3	9,7
	5 yrs Average	2,1	1,0	0,5	0,9	0,2	0,7	5,5
	10 yrs Average	4,1	4,1	1,7	0,8	0,5	0,5	11,7
% of companies reporting impairment	2020	100,0%	61,5%	66,7%	85,7%	66,7%	71,4%	75,0%
	5 yrs Average	94,3%	52,3%	60,0%	68,6%	46,7%	62,9%	64,5%
	10 yrs Average	85,7%	53,8%	63,3%	74,3%	40,0%	61,4%	64,0%
Market capitalization (EUR bn)	2020	154,7	130,7	44,7	56,4	39,1	63,7	489,3
	5 yrs Average	145,0	131,8	34,1	57,0	25,5	53,8	447,2
	10 yrs Average	130,3	115,7	27,6	47,8	13,6	43,0	378,0
Market-to-book ratio	2020	1,5x	0,6x	1,1x	0,9x	1,3x	2,7x	1,1x
	5 yrs Average	1,3x	0,7x	1,1x	0,9x	1,0x	2,3x	1,0x
	10 yrs Average	1,1x	0,7x	0,9x	0,9x	0,6x	2,2x	0,9x

- ▶ In 2020, Energy sector reported highest total impairment with EUR 3,0bn followed by DIP sector with EUR 2,6bn
 - ▶ As per 5 years average total impairment, Energy sector reported highest impairment with EUR 2,1bn followed by Financial services sector (EUR 1,0bn)
 - ▶ As per 10 years average total impairment, Energy and Financial services sectors both reported highest impairment with EUR 4,1bn
- ▶ In 2020, % of companies reporting impairment was 75,0% for FTSE MIB, while all Energy sector companies reported impairment
 - ▶ Over the last 5/10 years, a strong majority of companies in Energy sector recorded impairments
- ▶ In 2020, Energy sector reported the highest market-to-book-ratio - equal to 1,5x - whereas Automotive and TMT sectors reported 1,3x and 1,1x, respectively. The lowest market-to-book ratio in 2020 belongs to the Financial Service industry (0,6x)
 - ▶ As per 5 years average market-to-book-ratio, Energy and DIP sectors reported highest ratio - respectively 1,3x and 1,1x - followed by Automotive sector with a ratio equal 1,0x. The Energy sector shows the highest 10 years average ratio (1,1x) followed by TMT and DIP sectors with a ratio of 0,9x. "Others" are excluded from the analysis.

Executive summary:

MSCI Europe impairment analysis for top 5 sectors (based on average of 10 years total impairment, 2011-2020)



MSCI Europe	Year	Energy	Financial services	TMT	DIP	RCP	Others	Total
n° of companies	2020	40	74	43	66	66	127	416
Total impairment (EUR bn)	2020	30,8	21,4	5,1	17,1	11,5	26,2	112,2
	5 yrs Average	17,7	11,1	5,1	7,2	6,7	13,7	61,4
	10 yrs Average	28,9	13,8	9,9	6,4	5,7	10,9	75,7
% of companies reporting impairment	2020	72,5%	63,5%	62,8%	63,6%	68,2%	57,5%	63,2%
	5 yrs Average	69,5%	54,9%	54,9%	54,8%	54,8%	46,1%	53,6%
	10 yrs Average	70,3%	54,6%	52,3%	55,3%	52,1%	41,5%	51,6%
Market capitalization (EUR bn)	2020	1.260,9	1.470,3	962,2	1.365,2	2.213,2	3.044,6	10.316,5
	5 yrs Average	1.216,2	1.619,9	841,4	1.264,4	1.330,2	1.914,1	9.419,9
	10 yrs Average	1.117,0	1.493,4	759,2	1.095,9	1.566,8	1.613,7	8.210,7
Market-to-book ratio	2020	1,6x	0,7x	2,1x	2,4x	3,5x	2,3x	1,8x
	5 yrs Average	1,4x	0,8x	2,0x	2,3x	3,1x	2,1x	1,7x
	10 yrs Average	1,3x	0,8x	1,9x	2,2x	3,1x	2,1x	1,6x

- ▶ In 2020, Energy sector reported the highest total impairment with EUR 30,8bn followed by Financial services sector with EUR 21,4bn
 - ▶ As per 5 and 10 years average total impairment, Energy sector reported the highest impairment (EUR 17,7bn and EUR 28,9bn respectively), Financial Service sector was the second higher.
- ▶ In 2020, % of companies reporting impairment was 63,2% for MSCI Europe, while the highest % of companies reporting impairment was recorded by the Energy sector (72,5%)
- ▶ In 2020, RCP sector reported the highest market-to-book-ratio (equal to 3,5x), whereas, DIP and TMT sectors reported 2,4x and 2,1x
- ▶ As per 5 and 10 years average market-to-book-ratio, RCP sector reported the highest values (3,1x for both averages), followed by DIP sector (2,3x and 2,2x respectively)

Introduction:

Impairment testing in Italy

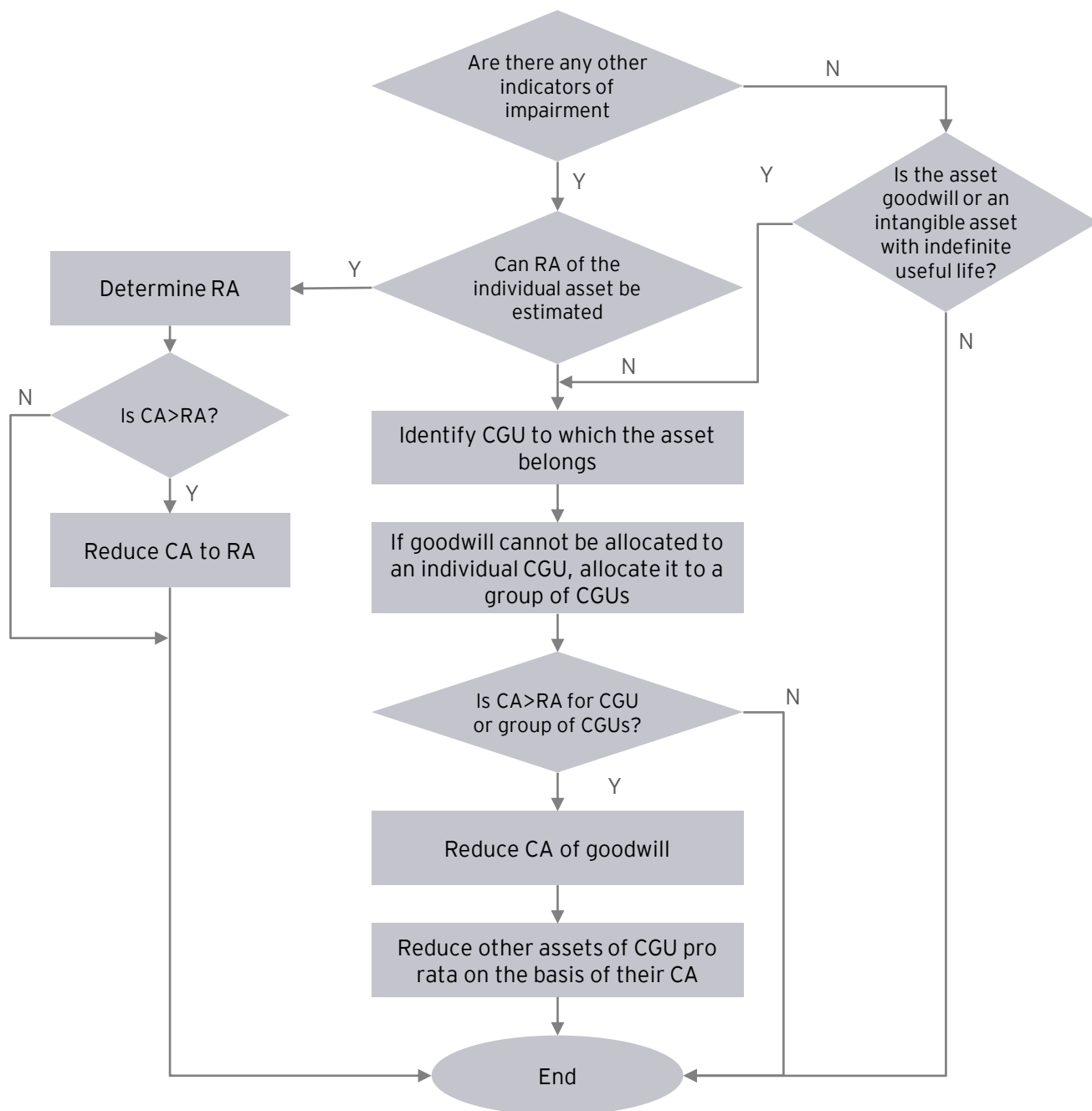


Impairment testing (IAS - 36)

- ▶ IAS 36 specifies that the assets are to be carried at no more than their recoverable amount (RA). The companies test for impairment for its assets
- ▶ IAS 36 requires an entity to assess, at each reporting date if an asset may be impaired
- ▶ To measure impairment, assets carrying amount (CA) is compared with recoverable amount
- ▶ Recoverable amount is calculated as higher of its “fair value less costs to sell” and its “value in use” (VIU)
- ▶ Fair value less costs to sell (FVLCS) is the amount obtainable from the sale of the asset in an arm’s length transaction between knowledgeable and willing parties, less the costs of disposal
- ▶ Fair value can also be calculated using Discounted cash flow methodology
- ▶ VIU is the present value of the future cash flows expected to be derived from an asset or a cash generating unit (CGU)
- ▶ VIU can be calculated either by a comparable assets approach or expected cash flow approach. However, IAS 36 indicates that the expected cash flow approach is, in some situations, a more effective measurement tool than the traditional approach (comparable assets)
- ▶ Reasonable and supportable assumptions are to be considered to calculate future cash flow. An entity is required to consider both external sources (such as market interest rates, significant adverse changes in the technological, market, economic or legal environment in which the entity operates, market capitalisation being lower than net assets) and internal sources (such as internal restructurings, evidence of obsolescence or physical damage)
- ▶ Future cash flows of the asset are calculated and a discount rate is applied to arrive at the present value of the future cash flows
- ▶ An impairment loss is recognised to the extent the CA of the asset exceeds its RA. For assets carried at historical cost, impairment losses are recognised as an expense immediately in profit or loss
- ▶ Primary difference with US GAAP: The reversal of previously recognised impairment losses is prohibited
- ▶ The key disclosures required:
 - ▶ The amount of impairment recognised and reversed and the events and circumstances that were the cause thereof
 - ▶ The amount of goodwill per CGU or group of CGUs
 - ▶ The valuation method applied: FVLCS or VIU and its approach in determining the appropriate assumptions
 - ▶ The key assumptions applied in the valuation, including the growth and discount rate used
 - ▶ A sensitivity analysis, when a reasonably possible change in a key assumption would result in an impairment, including the ‘headroom’ in the impairment calculation and the amount by which the assumption would need to change to result in an impairment

Process flow:

Determining and accounting for Impairment



RA = Recoverable amount; CA = Carrying amount; CGU = Cash generating unit

Valuation methods:

DCF remained most widely adopted method for Impairment test



Valuation methods used for top 10 companies by impairment value; considered for the period of 2011 - 2020

Industry	Company Name	DCF (Discounted Cash Flows)	OPM (Options Pricing Model)	DDM (Dividend Discount Model)	GGM (Gordon Growth Model)	Comparable Approach
DIP	Company A	✓				✓
	Company B	✓				✓
Energy	Company C	✓				
	Company D	✓				
Financial Services	Company E	✓	✓		✓	✓
	Company F	✓	✓	✓		✓
	Company G	✓	✓	✓		✓
Infrastructure	Company H	✓				
TMT	Company I	✓				✓
Automotive	Company J	✓				

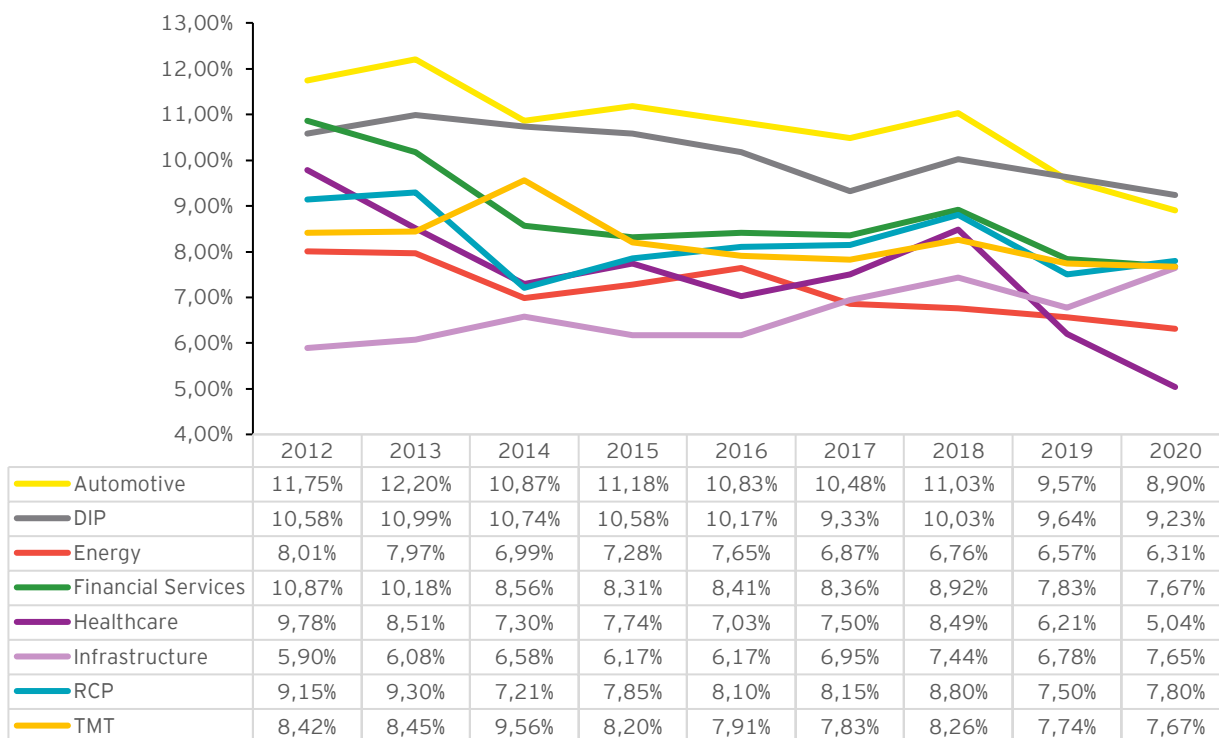
- ▶ DCF is the most widely used method for the impairment testing analysed for the top 10 companies by impairment value for the period of 2014 - 2020
 - ▶ Comparable Approach (using comparable transaction or multiples) preferred besides DCF for various asset evaluation under impairment testing
- ▶ Financial Services industry used the widest variety of valuation methods to ascertain the fair market value (FMV) or fair value (FV) of the assets while experiencing impairment test

2012-2020 Industry WACC:

Declining WACC for FTSE MIB companies from 2012 to 2020



2012-2020 WACC of FTSE MIB companies as per industry classification



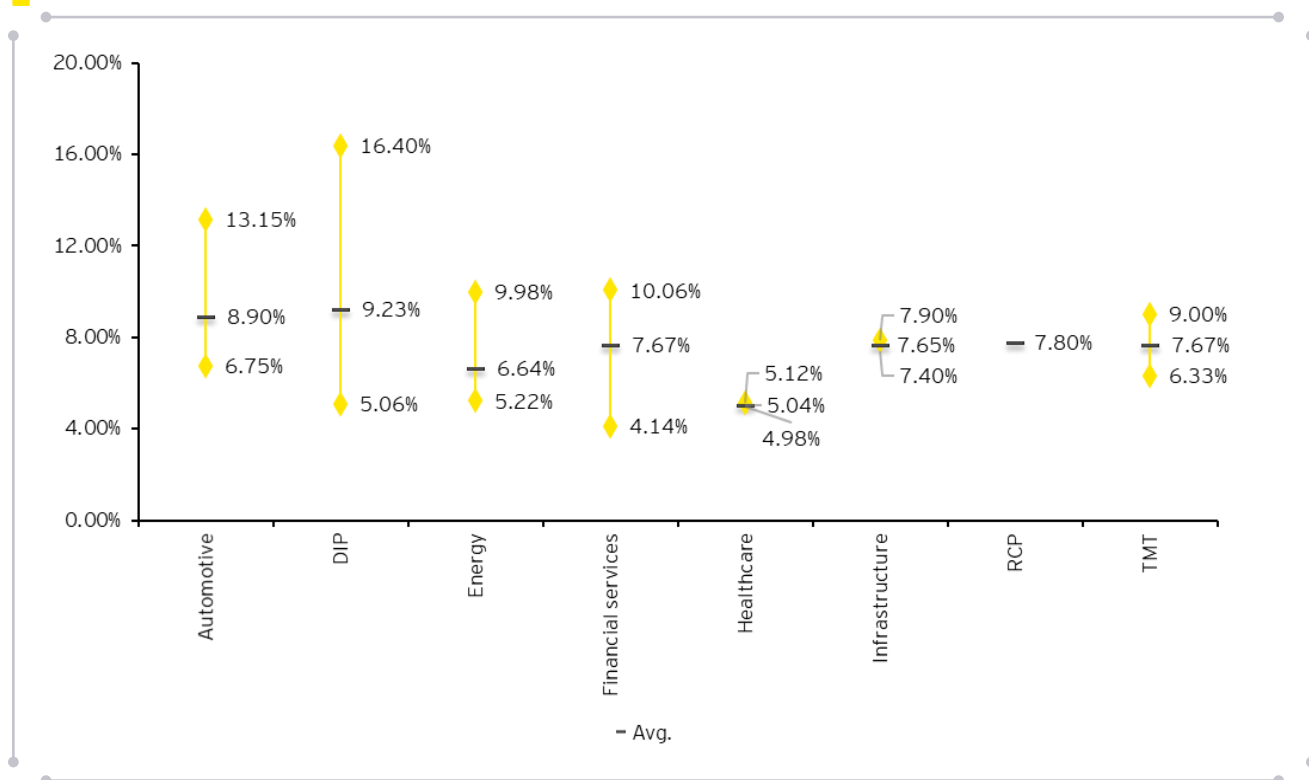
- ▶ Industry WACC shows low correlation among industries between 2012 and 2020
- ▶ Automotive WACC reached a peak in 2013, however, the WACC of this sector decreased reaching a minimum of 8,90% in 2020
- ▶ Over the period 2012 - 2016, the Infrastructure sector showed the lowest WACCs, while in 2017 and 2018 the minimum was recorded by the Energy sector and in 2019 and 2020 by Healthcare (6,21% and 5,04% respectively)
- ▶ Overall, 2020 WACC was lower compared to that of 2012 for all industries, except for infrastructure

2020 Industry WACC:

DIP companies had highest average WACC followed by Automotive and RCP



2020 WACC of FTSE MIB companies as per industry classification



- ▶ In 2020, the DIP industry recorded the highest maximum WACC, (compared to the WACCs analysed for 2020 of FTSE MIB companies) with a value of 16,40% followed by Automotive companies with maximum WACC of 13,15% and 10,06% for Financial services.
- ▶ Average WACC for DIP industry was the highest (9,23%) followed by Automotive with 8,90% and RCP with 7,8%, whereas Healthcare industry had the lowest average WACC, equal to 5,04%
- ▶ FTSE MIB average WACC is 7,66%.

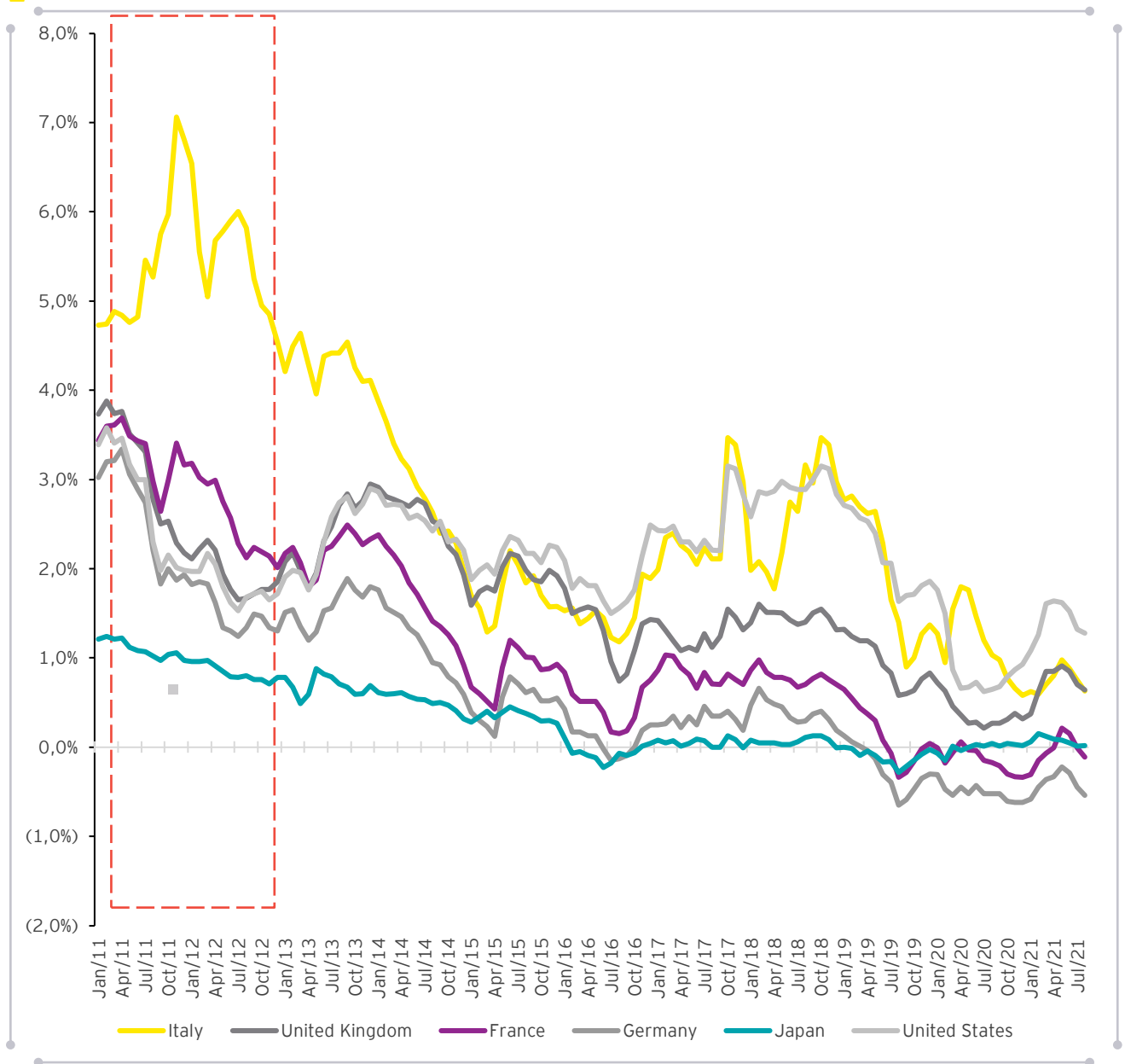
* Rates can be pre and post taxes. In cases where companies had more than one WACC for different CGUs, an average was made in order to define the WACC for the selected year.

10 years government bonds:

Italy's 10 year government bond has the highest interest rate as compared to United Kingdom and Germany



Interest rates of 10 year government bond

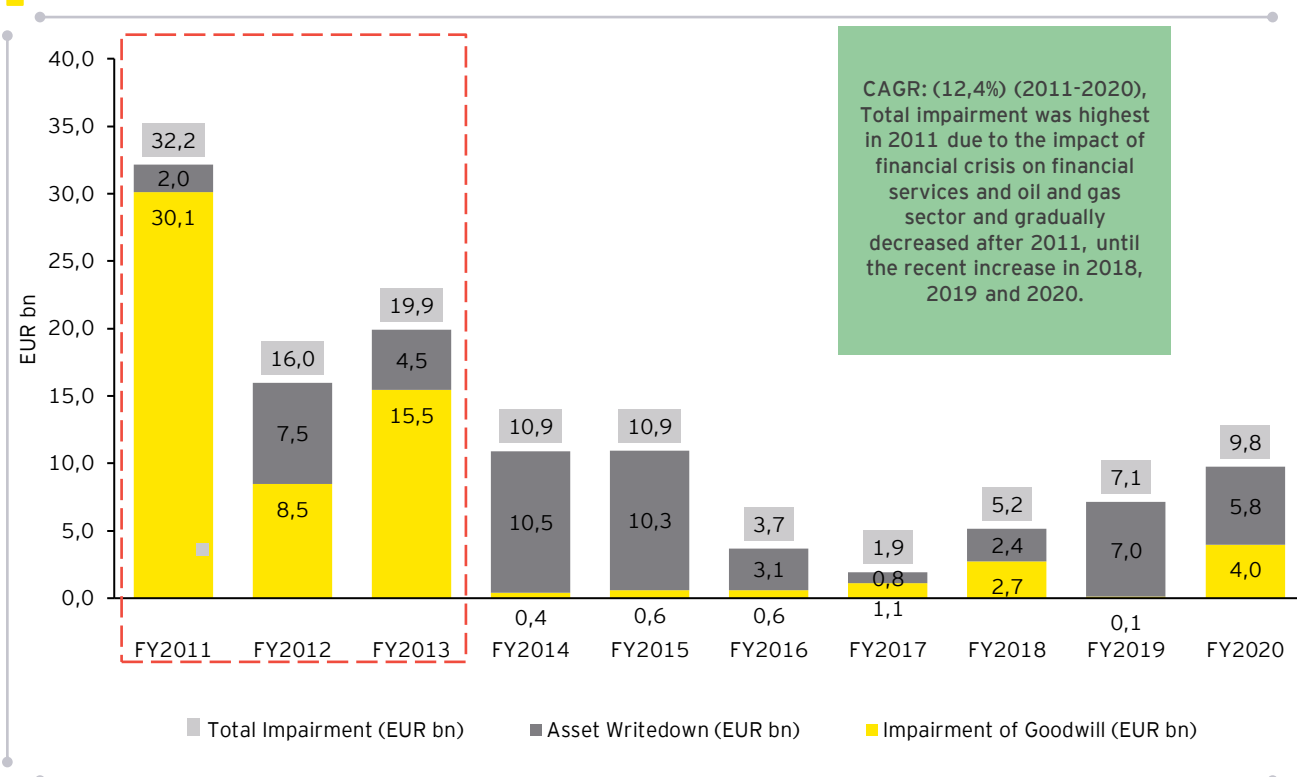


Total impairment:

Significant decrease in Total impairment by Italian firms especially Financial companies after 2011-13 post-crisis period, and increase of 2020 Goodwill Impairment due Covid-19 crisis



Total impairment of Italian companies*



- ▶ Total impairment recorded by Italian companies decreased at a (12,4%) 2011 - 2020 CAGR, reaching EUR 9,8bn in 2020 from EUR 32,2bn in 2011
 - ▶ The highest goodwill impairment was recorded in 2011 (EUR 30,1bn), and then decreased reaching EUR 0,1bn in 2019. In 2020 goodwill impairment of Italian companies increased at EUR 4,0bn, due to Covid-19 crisis
 - ▶ The assets write down increased at CAGR 2011 - 2020 of 12,5% reaching EUR 5,8bn in 2020 from EUR 2,0bn in 2011
- ▶ Total impairment showed the highest value in 2011, with EUR 32,2bn, due to the impact of the financial crisis on financial services and energy companies
- ▶ Total impairment showed an increasing trend from 2017 to 2020
- ▶ Covid-19 crisis caused the significant increase of Impairment of Goodwill in 2020

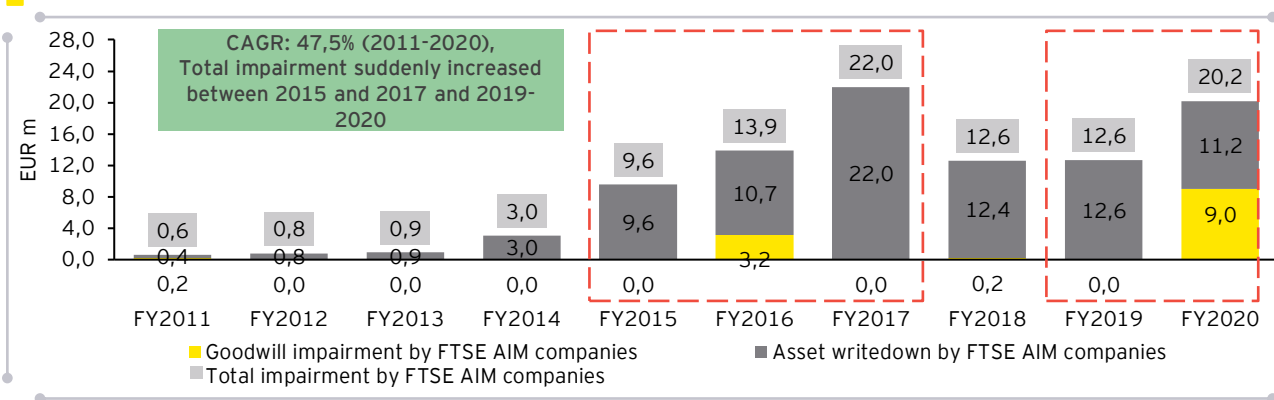
* Italian companies include FTSE AIM and FTSE MIB companies

Total impairment:

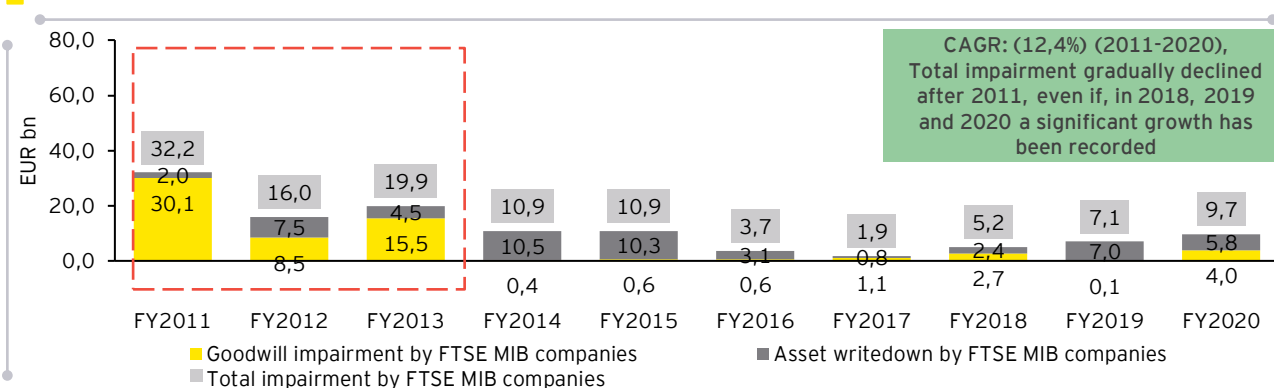
Owing to their relative size, FTSE MIB listed companies reported significantly higher impairment than FTSE AIM listed companies



Total impairment of FTSE AIM companies (EUR m)



Total impairment of FTSE MIB companies (EUR bn)



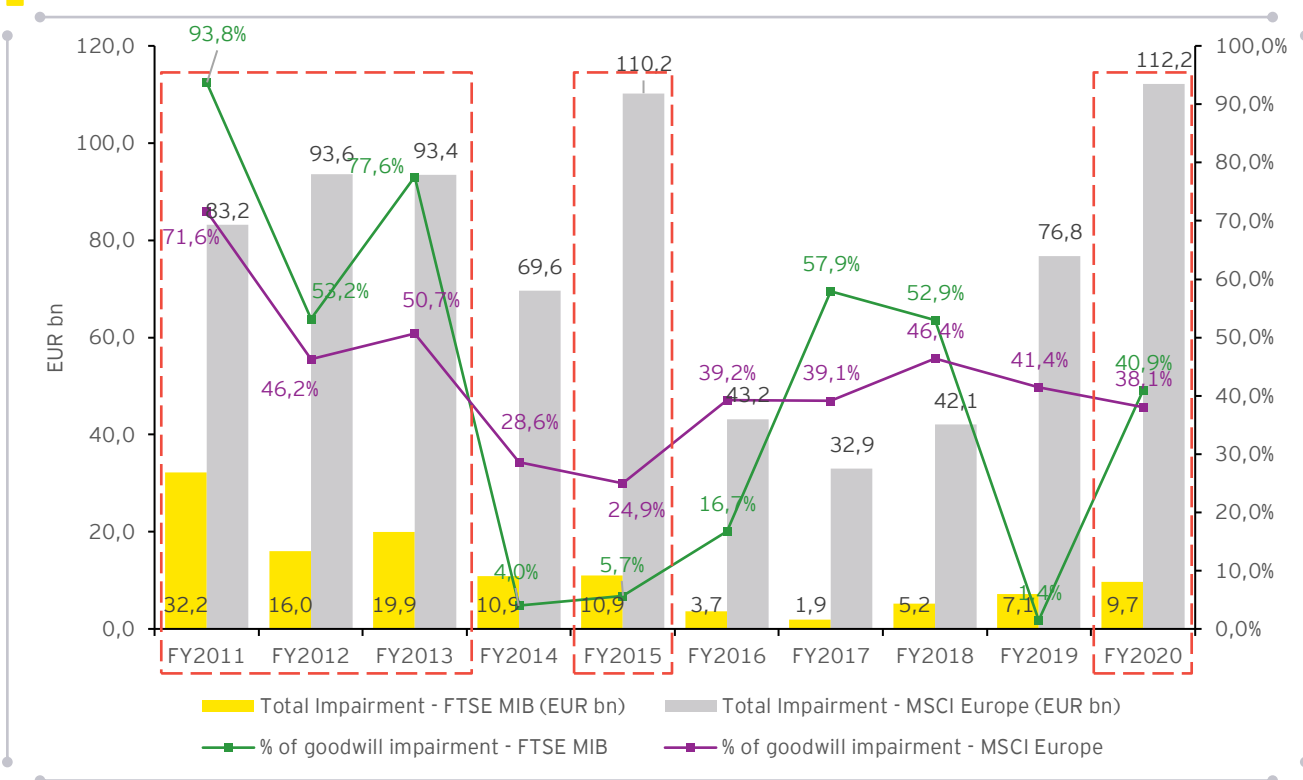
- ▶ Total impairment of FTSE MIB decreased at a CAGR of (12,4%) over the period 2011 - 2020, while FTSE AIM showed an increasing trend with a 47,5% CAGR during the same period
 - ▶ Total impairment of FTSE AIM companies increased between 2011 and 2017, reaching a peak of EUR 22,0m in 2017. In 2018 and 2019 total impairment decreased at EUR 12,6m and grew again in 2020 due to Covid-19 crisis
 - ▶ Total impairment of FTSE MIB companies was highest in 2011 (EUR 32,2bn) and decreased gradually until 2017, afterwards it started increasing yearly
- ▶ The impact of financial crisis is clear on FTSE MIB companies, with the highest impairment recorded in 2011 due to the impairment of goodwill in financial services sector companies

Total impairment:

MSCI Europe registered highest impairment in 2020, due to Covid-19 crisis



Total impairment of FTSE MIB vs MSCI Europe companies



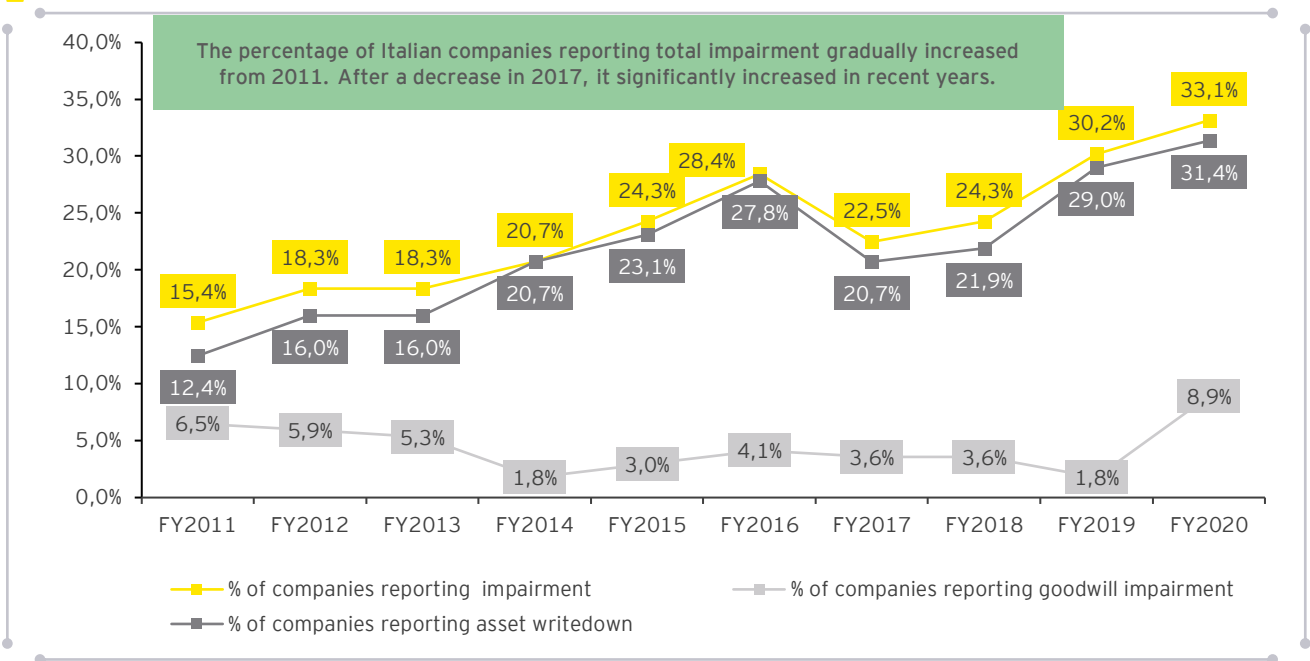
- ▶ Total impairment for MSCI Europe companies increased at a 2011 - 2020 CAGR of 3,4% while decreased for FTSE MIB companies at a CAGR (12,4%) during 2011 - 2020 period
- ▶ For MSCI Europe companies, total impairment reached a peak in 2020 (EUR 112,2bn) due to Covid-19 crisis, surpassing the value registered in 2015 (EUR 110,2bn)
- ▶ Impairment was led by Energy, and Metals and Mining sectors due to decrease in crude oil and metal prices in 2015, while in 2020 by Energy and Financial Services
- ▶ The % of goodwill impairment for MSCI Europe companies decreased from 71,6% in 2011 to 24,9% in 2015 and then increased reaching 38,1% in 2020.
- ▶ The % of goodwill impairment for FTSE MIB companies decreased from 93,8% in 2011 to a minimum of 1,4% in 2019 and then increased in 2020 reaching 40,9%.
- ▶ In terms of trend, FTSE MIB and MSCI Europe had different Total impairment trends from 2011 to 2015, however, from 2016, the trends are similar: decrease of Total impairment in 2017 and increase from 2018 onwards.

% of Companies reporting impairment:

Companies reporting total impairment (asset write down and goodwill impairment) increased between 2018 and 2020



Percentage of Italian companies* reporting impairment



- ▶ The percentage of Italian companies reporting total impairment increased from 15,4% in 2011 to 33,1% in 2020, primarily due to increase in reporting of asset write-down by the Italian companies since 2011
 - ▶ The percentage of companies reporting goodwill impairment increased from 6,5% in 2011 to 8,9% in 2020, with minimum value reached in 2014 and 2019 (1,8%)
 - ▶ The percentage of companies reporting asset write-down increased from a minimum of 12,4% in 2011 to the maximum of 31,4% in 2020
- ▶ Over the past 10 years, on average, only 4,4% of the companies reported goodwill impairment, as compared to an average of 21,9% for asset write-down over the same period (2011-2020)
 - ▶ In 2011, companies reporting impairment of goodwill and asset write-down were 6,5% and 12,4%, respectively
 - ▶ In 2020, companies reporting impairment of goodwill and asset write-down were 8,9% and 31,4%, respectively

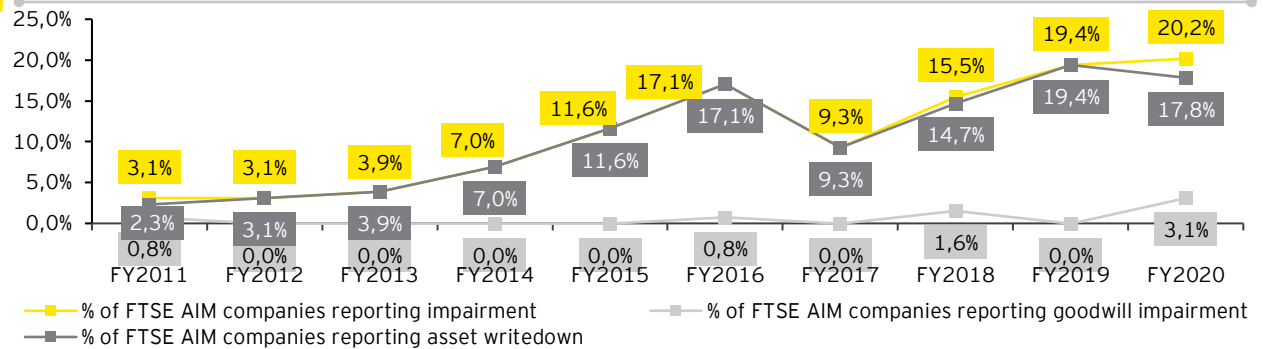
* Italian companies include FTSE AIM and FTSE MIB companies

% of Companies reporting impairment:

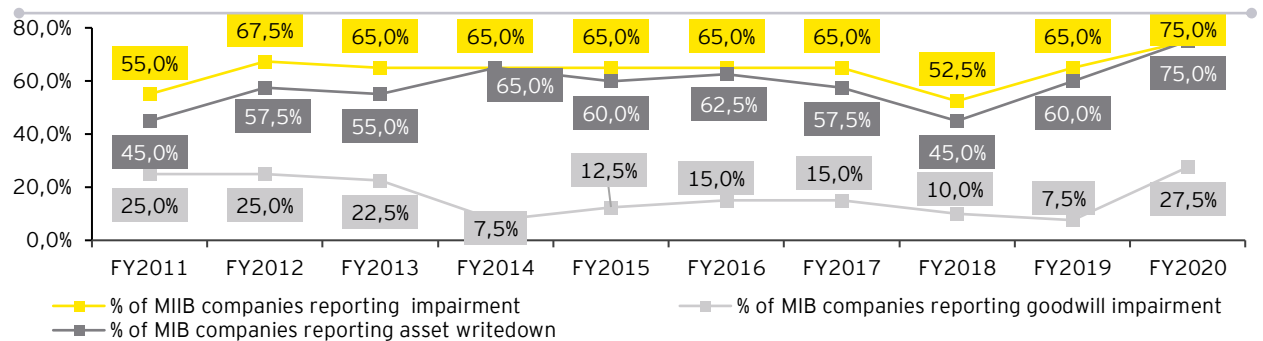
In 2020 alone, 75,0% of FTSE MIB listed companies and 20,2% of FTSE AIM listed companies recorded total impairment



Percentage of FTSE AIM companies reporting impairment



Percentage of FTSE MIB companies reporting impairment



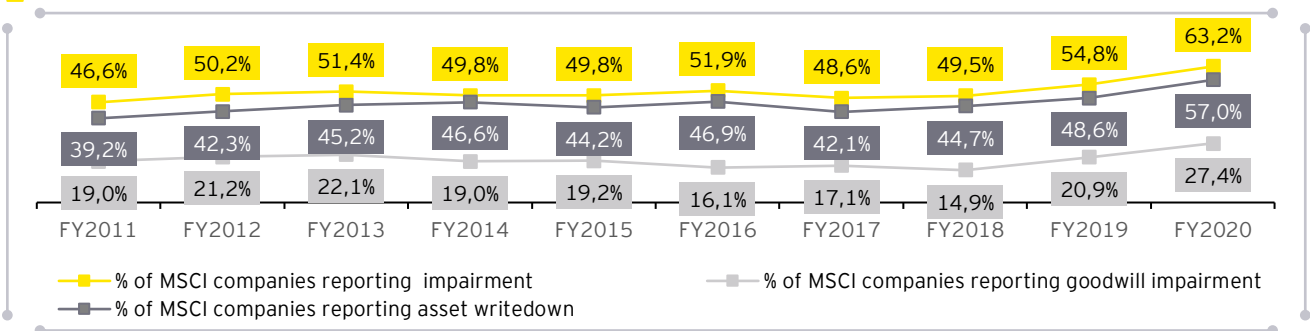
- ▶ In 2020, reporting of total impairment increased for both FTSE MIB and FTSE AIM companies
 - ▶ 75,0% of FTSE MIB companies reported total impairment in 2020 vs. 65,0% in 2019
 - ▶ Similarly, 20,2% of FTSE AIM companies reported total impairment in 2020 vs. 19,4% in 2019
- ▶ Reporting of goodwill impairment was comparatively lower than asset write-down across companies over the past 10 years (2011-2020)
 - ▶ FTSE AIM companies reported an average of 0,6% for goodwill impairment against 10,6% for asset write-down
 - ▶ FTSE MIB companies reported an average of 16,8% for goodwill impairment against 58,3% for asset write-down
- ▶ No goodwill was impaired by FTSE AIM companies during 2012-15 and even in 2017 and 2019, the figures are negligible as these companies are too small and inactive in M&A space

% of Companies reporting impairment:

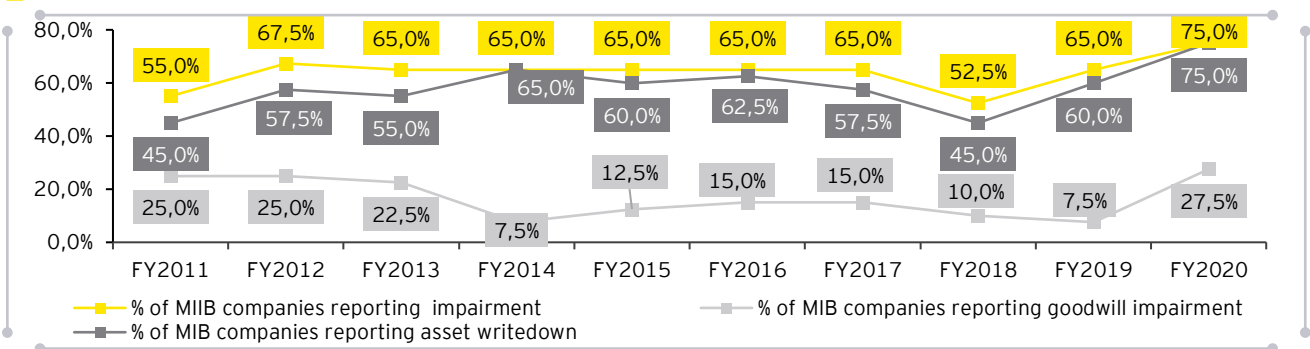
MSCI Europe companies increased impairment reporting but there are around half of the companies not reporting impairment



Percentage of MSCI Europe companies reporting impairment



Percentage of FTSE MIB companies reporting impairment



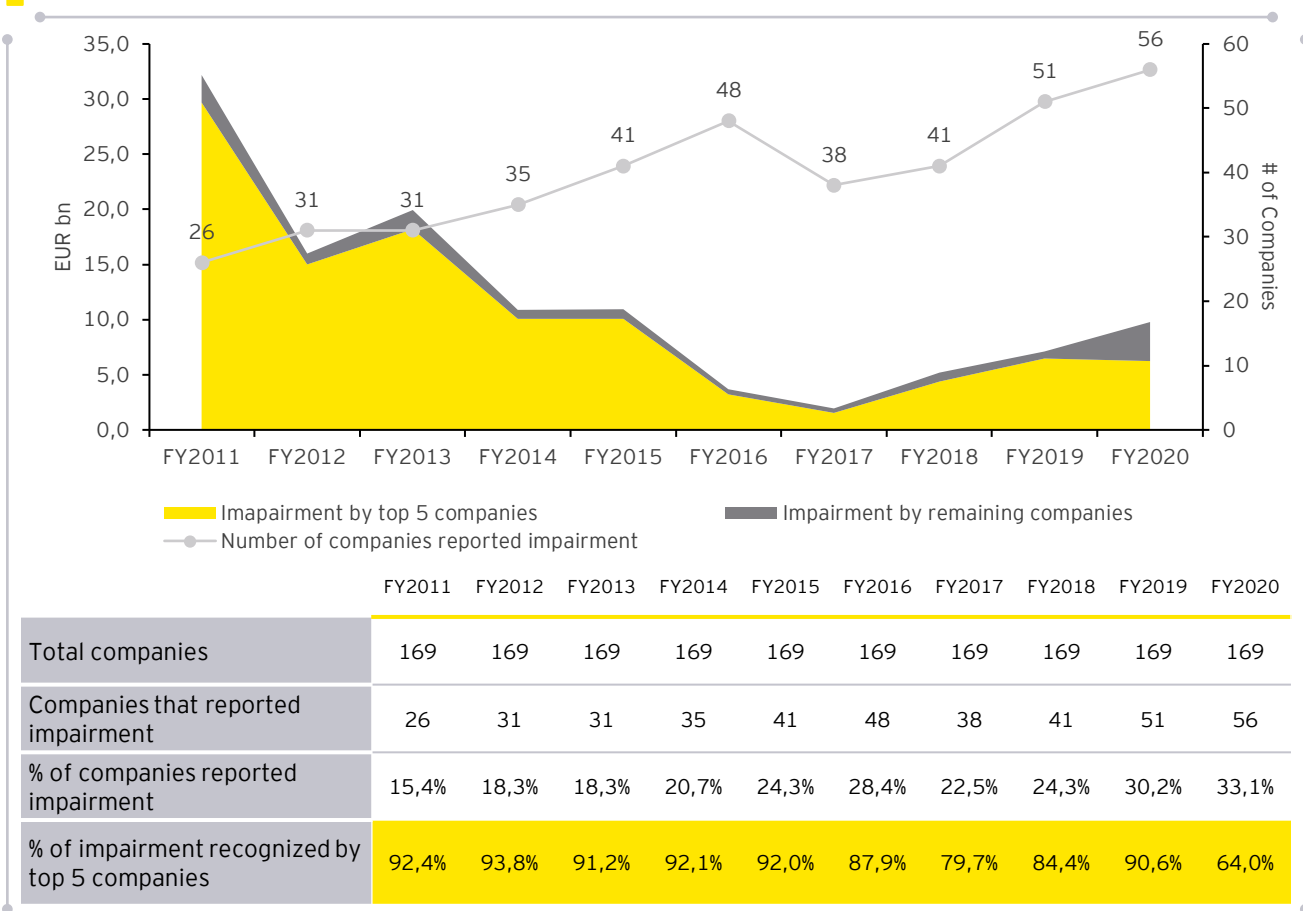
- ▶ For MSCI Europe, 222 companies did not report impairment in 2011 as compared to 153 companies in 2020
 - ▶ In 2020, 63,2% of MSCI Europe companies and 75,0% of FTSE MIB companies reported impairment
- ▶ Reporting of goodwill impairment was comparatively lower than asset write-down.
 - ▶ For MSCI Europe, 27,4% of companies reported goodwill impairment vs. 27,5% of FTSE MIB companies in 2020
- ▶ On average, 51,6% of MSCI Europe companies reported a total impairment, against 64% of FTSE MIB companies between 2011 and 2020
 - ▶ For same period, on average, % of companies reporting goodwill impairment was 19,7% for MSCI Europe and 16,8% for FTSE MIB, while % of companies reporting asset write-down was 45,7% and 58,3% respectively

Concentration of impairment:

Total impairment was highly concentrated among top 5 companies



Concentration of impairment for Italian companies*



- Impairment was highly concentrated in the top 5 companies between 2011 and 2020
 - Since 2012, the concentration of impairment in the top 5 companies decreased, reaching a minimum in 2020, also due to an increase in the number of companies reporting impairment.
 - From 2011 to 2020, on average, 86,8% of the impairment was reported by the top 5 companies,

* Italian companies include FTSE AIM and FTSE MIB companies

Concentration of impairment:

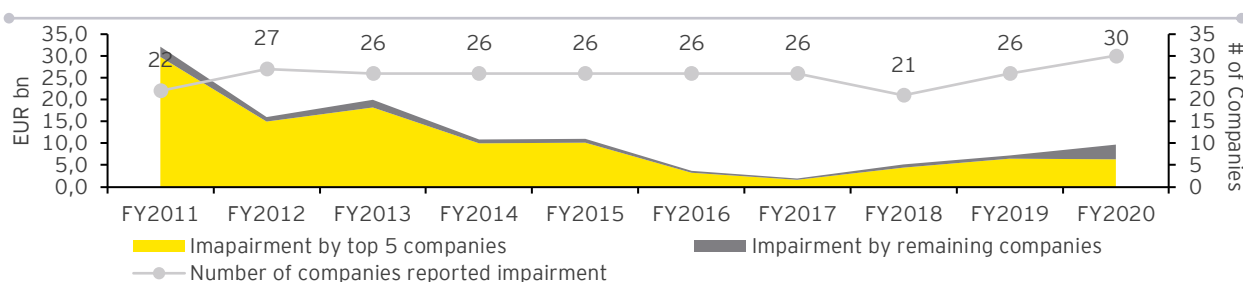
In 2020 82,9% and 64,1% of total impairment was reported by top 5 companies in FTSE AIM and FTSE MIB, respectively



Concentration of impairment of FTSE AIM companies

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Total companies	129	129	129	129	129	129	129	129	129	129
Companies that reported impairment	4	4	5	9	15	22	12	20	25	26
% of companies reported impairment	3,1%	3,1%	3,9%	7,0%	11,6%	17,1%	9,3%	15,5%	19,4%	20,2%
% of impairment recognized by top 5 companies (by value)	100,0%	100,0%	100,0%	97,4%	79,9%	92,1%	96,4%	86,0%	64,8%	82,9%

Concentration of impairment of FTSE MIB companies



	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Total companies	40	40	40	40	40	40	40	40	40	40
Companies that reported impairment	22	27	26	26	26	26	26	21	26	30
% of companies reported impairment	55,0%	67,5%	65,0%	65,0%	65,0%	65,0%	65,0%	52,5%	65,0%	75,0%
% of impairment recognized by top 5 companies (by value)	92,4%	93,8%	91,2%	92,1%	92,0%	88,3%	80,6%	84,6%	90,8%	64,1%

- ▶ Total impairment was highly concentrated in the top 5 companies for both FTSE AIM and FTSE MIB companies
 - ▶ FTSE AIM: Impairment recognized by top 5 companies was 100% from 2011 to 2013, and as more companies reported total impairment over the years, concentration decreased. However, the % of impairment recognized by top 5 companies increased from 64,8% in 2019 to 82,9% in 2020.
 - ▶ FTSE MIB: The concentration of impairment by top 5 companies decreased until 2017 and then increased in 2018 and 2019, before dropping significantly in 2020, also due to an increase in the number of companies reporting impairment

Concentration of impairment:

% of impairment recognized by top 5 companies decreased for FTSE MIB and MSCI Europe companies between 2011 and 2020



Concentration of impairment of MSCI Europe companies

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Total companies	416	416	416	416	416	416	416	416	416	416
Companies that reported impairment	194	209	214	207	207	216	202	206	228	263
% of companies reported impairment	46,6%	50,2%	51,4%	49,8%	49,8%	51,9%	48,6%	49,5%	54,8%	63,2%
% of impairment recognized by top 5 companies	48,0%	38,5%	45,9%	39,4%	30,3%	34,1%	33,9%	43,5%	32,2%	27,3%
% of impairment recognized by top 10 companies	62,6%	56,7%	63,3%	58,7%	52,4%	49,8%	49,2%	57,0%	49,5%	39,2%

Concentration of impairment of FTSE MIB companies

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Total companies	40	40	40	40	40	40	40	40	40	40
Companies that reported impairment	22	27	26	26	26	26	26	21	26	30
% of companies reported impairment	55,0%	67,5%	65,0%	65,0%	65,0%	65,0%	65,0%	52,5%	65,0%	75,0%
% of impairment recognized by top 5 companies	92,4%	93,8%	91,2%	92,1%	92,0%	88,3%	80,6%	84,6%	90,8%	64,1%
% of impairment recognized by top 10 companies	99,1%	98,8%	99,0%	97,5%	98,3%	96,5%	91,4%	95,4%	96,9%	92,5%

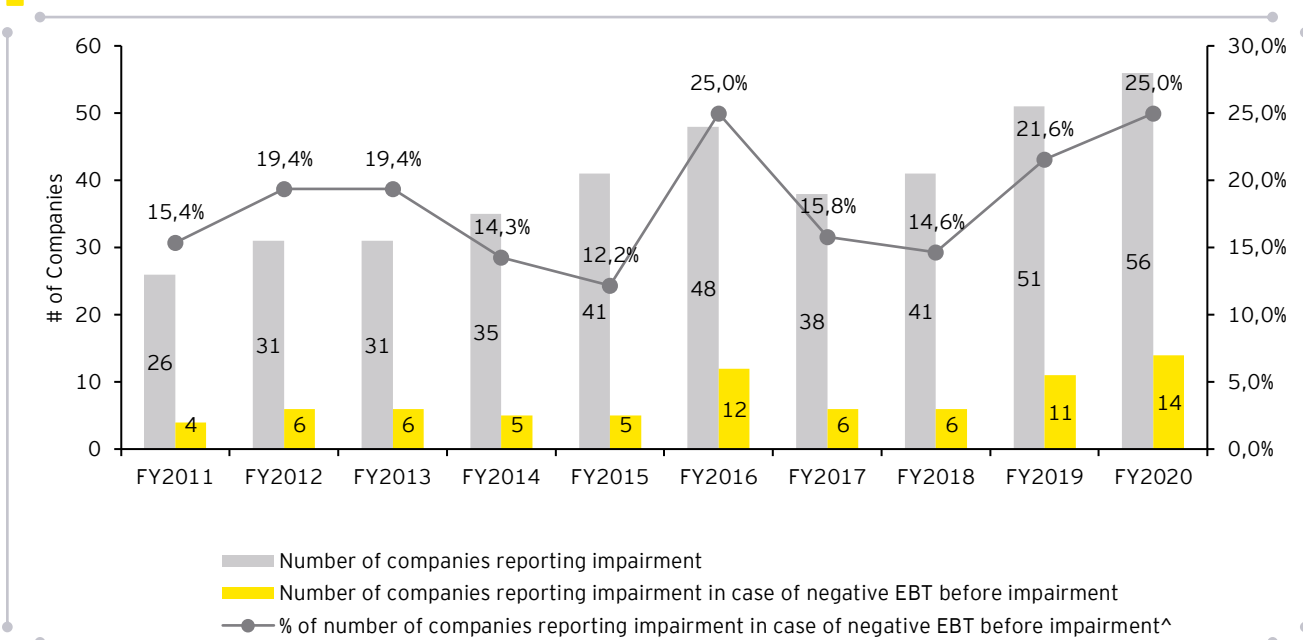
- ▶ Total impairment was concentrated in the top 10 companies for both MSCI Europe and FTSE MIB companies
 - ▶ MSCI Europe: Impairment recorded by top 5 companies decreased from 48,0% in 2011 to 27,3% in 2020, due to the change in the n° of companies reporting impairment
 - ▶ FTSE MIB: The concentration of impairment by top 5 companies decreased probably due to an increase in the n° of companies reporting impairment
- ▶ Total impairment concentrated in the top 10 companies decreased for both MSCI Europe and FTSE MIB companies from 2019 to 2020

Timing of impairment:

Majority of organization recorded impairment only if operational and financial performance was positive



Timing of impairment for Italian companies*



- ▶ The above chart indicates the companies recognizing impairment when they reported negative EBT before impairment
 - ▶ From 2011 to 2020, on average, 23,6% of the Italian companies reported impairment
 - ▶ The chart shows that the majority of the companies reported impairment when they recorded positive EBT before impairment
- ▶ Number of companies reporting impairment in case of negative EBT (before impairment) over the last 10 years period (2011-2020) was on average 8, with a peak of 14 companies in 2020 and a minimum in 2011 with four companies
- ▶ % of number of companies reporting impairment in case of negative EBT (before impairment) over the last 10 years period (2011-2020) was on average 18,3%. The highest figure was reached in 2016 and 2020 (25,0%) and the lowest in 2015 (12,2%)

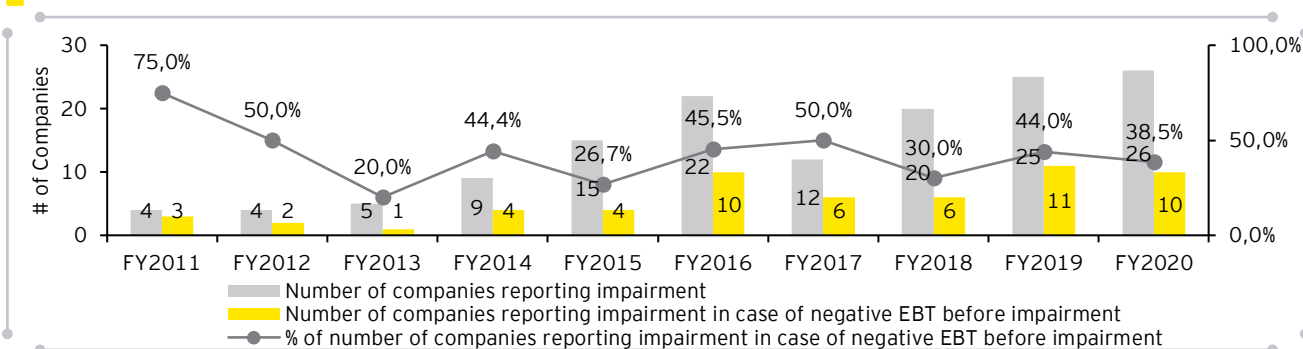
* Italian companies include FTSE AIM and FTSE MIB companies

Timing of impairment:

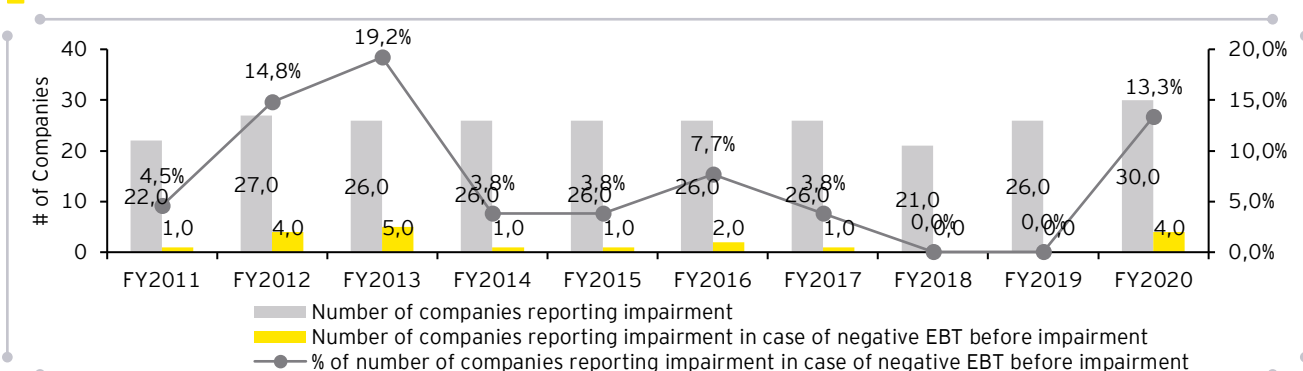
Majority of the FTSE MIB listed companies timed Impairment to coincide with positive EBT



Timing of impairment (FTSE AIM)



Timing of impairment (FTSE MIB)



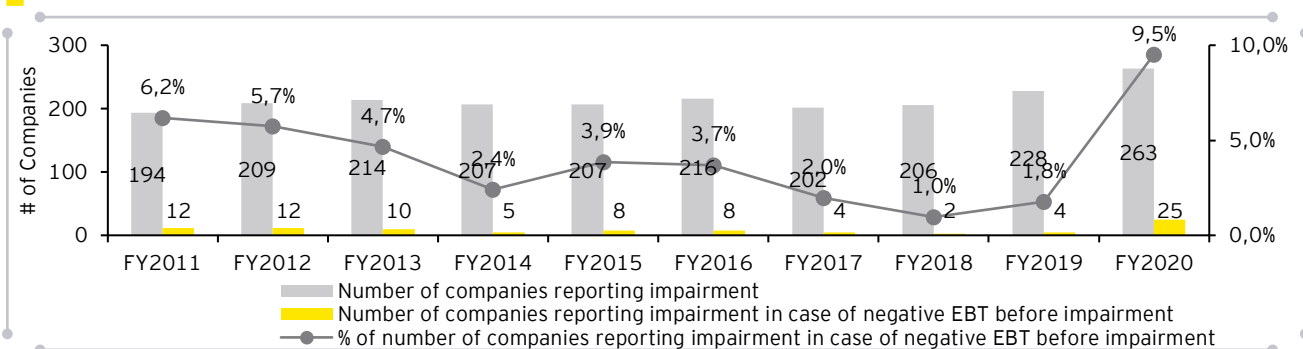
- ▶ Number of FTSE AIM companies reporting impairment in case of negative EBT before impairment increased from 3 in 2011 to 10 in 2020
 - ▶ On average, 42,4% of the companies reported impairment in case of negative EBT before impairment over the last 10 years period (2011-2020)
- ▶ Number of FTSE MIB companies reporting impairment in case of negative EBT before impairment increased from 2011 to 2013, due to financial markets impact on the companies and then declined until 2020 when it started increasing again probably due to Covid-19 crisis
 - ▶ The n° of companies reporting impairment between 2018 and 2020 increased significantly but the n° of companies reporting impairment in case of negative EBT before impairment remained only increased in 2020. Generally no more than 5 companies reported impairment in case of negative EBT during the period (2011-2020)

Timing of impairment:

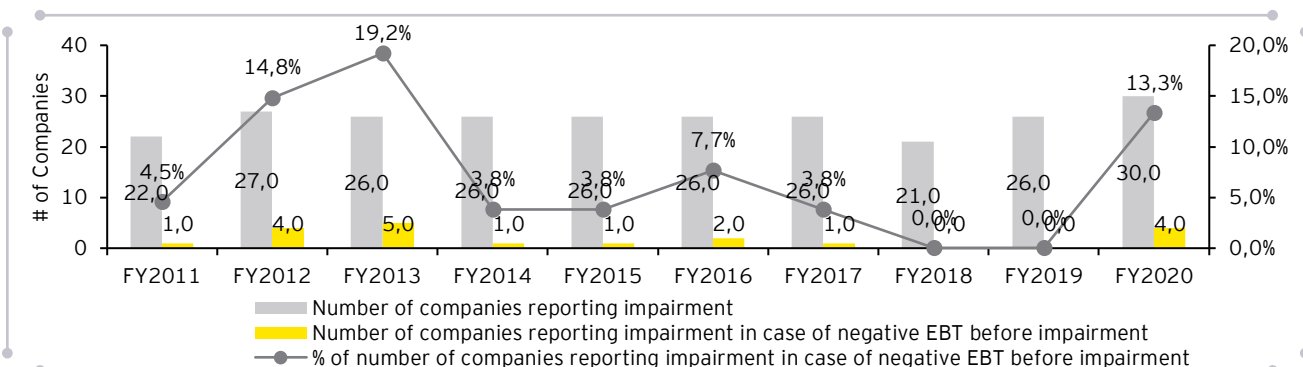
Majority of the MSCI Europe and FTSE MIB companies timed Impairment to coincide with positive EBT



Timing of impairment (MSCI Europe)



Timing of impairment (FTSE MIB)



- ▶ Number of MSCI Europe companies reporting impairment in case of negative EBT before impairment decreased from 2011 to 2019, and strongly increased in 2020
 - ▶ Both the number of companies and the % of companies reporting impairment in case of negative EBT before impairment reached a peak in 2020 (25 and 9,5% respectively)
- ▶ Number of FTSE MIB companies reporting impairment in case of negative EBT before impairment increased from 2011 due to financial markets impact on the companies, but declined again after 2013, until 2020 when 13,3% of the companies reported impairment with negative EBT before impairment

Intensity of impairment:

Majority of companies reported Impairment between EUR 0-5m



Distribution of Italian companies* by the amount of impairment reported

# of Companies	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
No impairment	143	138	138	134	128	121	131	128	118	113
0m-5m	8	13	12	14	20	29	15	22	30	32
5m-10m	0	1	2	2	2	5	5	4	4	3
10m-20m	3	2	2	4	6	0	6	1	2	5
20m-50m	3	6	5	4	4	6	6	2	5	1
50m-100m	2	3	0	3	1	2	3	5	4	3
100m-200m	2	0	3	4	1	1	1	3	1	1
200m-500m	2	0	1	2	5	3	1	2	2	2
>500m	6	6	6	2	2	2	1	2	3	9
Total Impaired	26	31	31	35	41	48	38	41	51	56
Total	169	169	169	169	169	169	169	169	169	169

- ▶ Highest number of companies reported impairment between EUR 0-5m
 - ▶ In 2020, 33,1% of total companies reported an impairment
 - ▶ On average, 23,6% of the companies reported impairment during 2011-2020, with a peak of 33,1% in 2020 and a minimum of 15,4% in 2011
- ▶ From 2011 to 2013, a sizeable number of companies reported an impairment greater than EUR 500m
- ▶ While between 2018 and 2019 both number of companies reporting impairment and total market capitalization increased, during 2020 the number of companies reporting impairment increased, but the market capitalization decreased
- ▶ Number of companies reporting no impairment was significantly high with an average 76,4% over the period 2011-2020

* Italian companies include FTSE AIM and FTSE MIB companies

Intensity of impairment:

Majority of AIM and MIB listed companies reported Impairment between EUR 0-5m



Distribution of FTSE AIM companies by the amount of impairment

# of Companies	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
No impairment	125	125	124	120	114	107	117	109	104	103
0m-5m	4	4	5	9	15	21	10	19	25	25
5m-10m	0	0	0	0	0	1	2	1	0	1
>10m	0	0	0	0	0	0	0	0	0	0
Total Impaired	4	4	5	9	15	22	12	20	25	26
Total	129	129	129	129	129	129	129	129	129	129

Distribution of FTSE MIB companies by the amount of impairment

# of Companies	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
No impairment	18	13	14	14	14	14	14	19	14	10
0m-5m	4	9	7	5	5	8	5	3	5	7
5m-10m	0	1	2	2	2	4	3	3	4	2
10m-20m	3	2	2	4	6	0	6	1	2	5
20m-50m	3	6	5	4	4	6	6	2	5	1
50m-100m	2	3	0	3	1	2	3	5	4	3
100m-200m	2	0	3	4	1	1	1	3	1	1
200m-500m	2	0	1	2	5	3	1	2	2	2
>500m	6	6	6	2	2	2	1	2	3	9
Total Impaired	22	27	26	26	26	26	26	21	26	30
Total	40	40	40	40	40	40	40	40	40	40

- ▶ The highest n° of companies reported impairment between EUR 0-5m in both FTSE AIM and FTSE MIB
- ▶ FTSE AIM: No company reported impairment greater than EUR 10m from 2011 to 2020
- ▶ FTSE MIB: The companies reporting impairment greater than EUR 5m increased from 18 in 2011 to 23 in 2020
 - ▶ The companies reporting impairment between EUR 5-100m increased from 8 in 2011 to 11 in 2020; from 36,4% to 36,7% respectively of total companies reporting impairment
 - ▶ In 2020, 9 companies reported impairment higher than 500m, possibly related to Covid-19 crisis

Intensity of impairment:

MSCI Europe companies reporting impairment >EUR 500m from 31 companies in 2011 to 55 companies in 2020



Distribution of MSCI Europe companies by the amount of impairment

# of Companies	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
No impairment	222	207	202	209	209	200	214	210	188	153
0m-5m	42	45	51	41	35	46	50	42	45	33
5m-10m	16	15	11	16	22	23	22	23	26	17
10m-20m	18	20	27	21	21	23	22	25	18	24
20m-50m	30	34	27	39	34	40	35	38	36	33
50m-100m	18	21	25	25	24	17	21	19	34	34
100m-200m	21	25	25	19	14	28	16	24	15	30
200m-500m	18	19	16	18	13	16	17	13	18	37
500m-1,000m	11	9	13	11	23	11	12	14	16	25
>1,000m	20	21	19	17	21	12	7	8	20	30
Total Impaired	194	209	214	207	207	216	202	206	228	263
Total	416	416	416	416	416	416	416	416	416	416

Distribution of FTSE MIB companies by the amount of impairment

# of Companies	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
No impairment	18	13	14	14	14	14	14	19	14	10
0m-5m	4	9	7	5	5	8	5	3	5	7
5m-10m	0	1	2	2	2	4	3	3	4	2
10m-20m	3	2	2	4	6	0	6	1	2	5
20m-50m	3	6	5	4	4	6	6	2	5	1
50m-100m	2	3	0	3	1	2	3	5	4	3
100m-200m	2	0	3	4	1	1	1	3	1	1
200m-500m	2	0	1	2	5	3	1	2	2	2
>500m	6	6	6	2	2	2	1	2	3	9
Total Impaired	22	27	26	26	26	26	26	21	26	30
Total	40	40	40	40	40	40	40	40	40	40

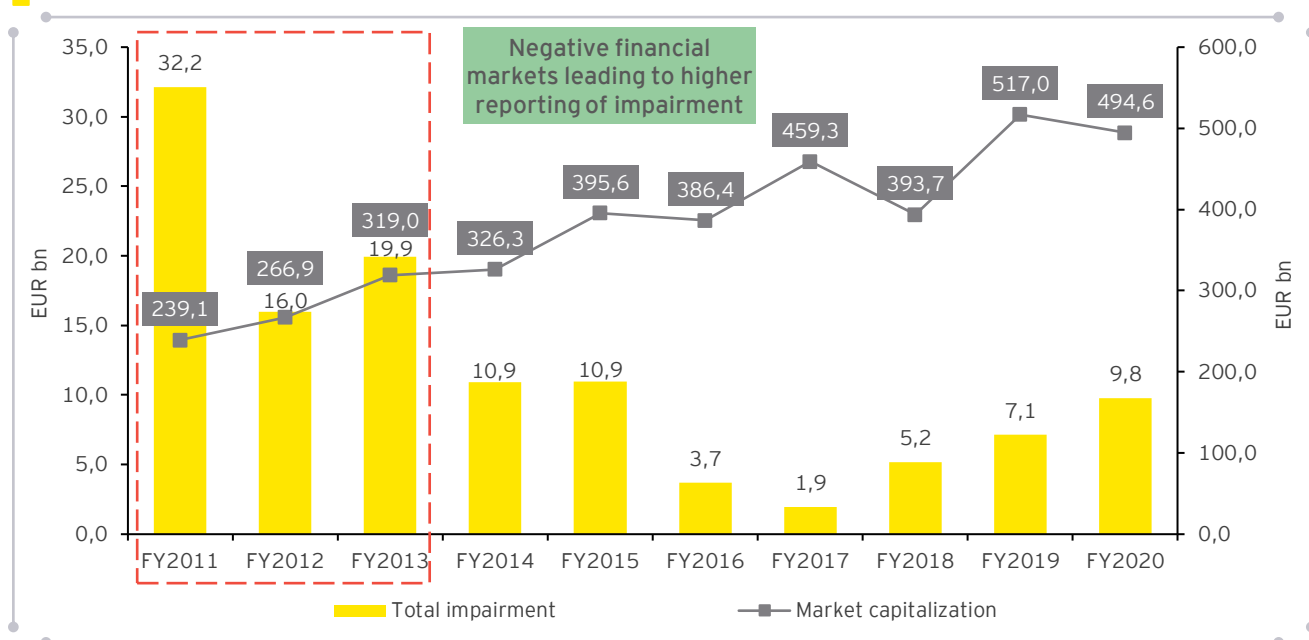
- ▶ Maximum n° of companies reported impairment between EUR 0-5m in both MSCI Europe and FTSE MIB for the majority of the period.
 - ▶ Anyway, for FTSEMIB, in 2011 maximum n° of companies reported impairment of EUR >500m, in 2015 between EUR 10-20m, in 2017 between EUR 10-20m and between EUR 20-50m, in 2018 between EUR 50-100m, and in 2020 of EUR >500m
 - ▶ For MSCI Europe, in 2020 maximum n° of companies reported impairment of EUR >500m
- ▶ MSCI Europe: n° of companies reporting impairment higher than EUR 500m reached a peak in 2020 (55 companies) from 31 companies in 2011, possibly related to Covid-19 crisis

Impairment vs. Market cap.:

The total Impairment tends to be higher when financial markets are negative and lower when they are positive



Italian companies* evolution of impairment vs. market cap.



- ▶ The total impairment tends to be higher when the market capitalization of the companies are lower, this indicates that the companies tend to report higher impairments when the financial markets are negative and lower when financial markets are positive
- ▶ The high value of total impairment in 2011, EUR 32,2bn, was related to the financial market crash; as the market capitalization of the companies was below the book value, most of the companies reported goodwill impairment
 - ▶ After 2011, the total impairment decreased gradually as the financial markets improved, while from 2018 onwards it started to increase again
- ▶ In 2020, companies reported a total impairment of EUR 9,8bn with a market cap of EUR 494,6bn
- ▶ Market capital grew at a CAGR of 8,4% over the past 10 years to reach EUR 494,6bn in 2020 from EUR 239,1bn in 2011
- ▶ Generally, total impairment and market capitalization seems to be inversely related, anyway the 2019 values do not follow this trend because both Total impairment and Market capitalization increased

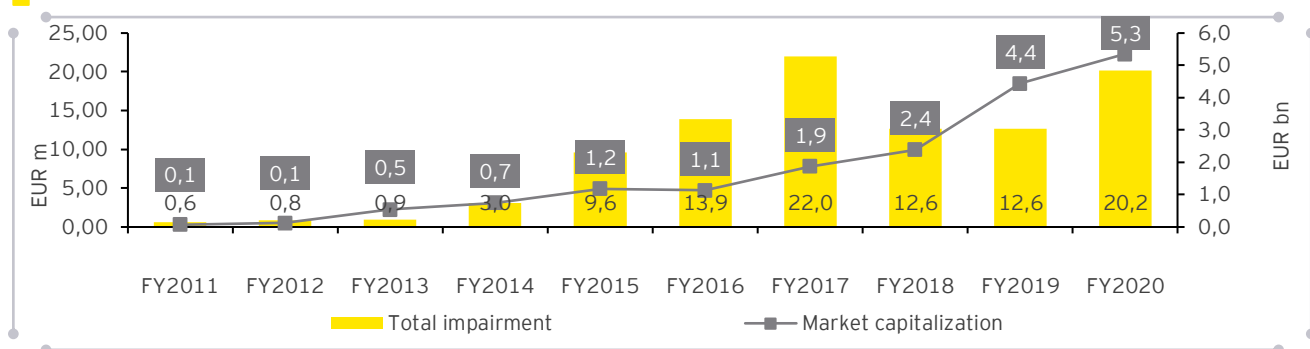
* Italian companies include FTSE AIM and FTSE MIB companies

Impairment vs. Market cap.:

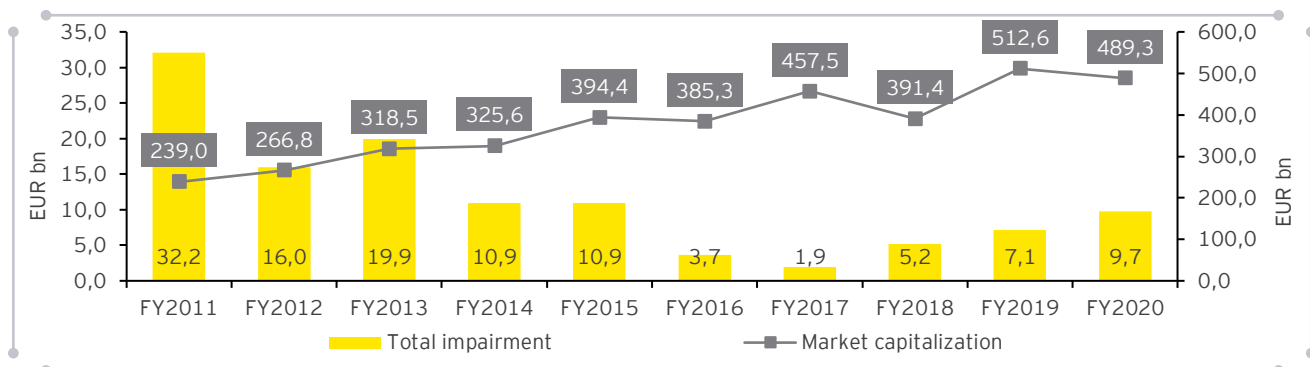
FTSE MIB companies and FTSE AIM companies had different trends in terms of both Total impairment and Market capitalization



Evolution of impairment vs. market capitalization (FTSE AIM)



Evolution of impairment vs. market capitalization (FTSE MIB)



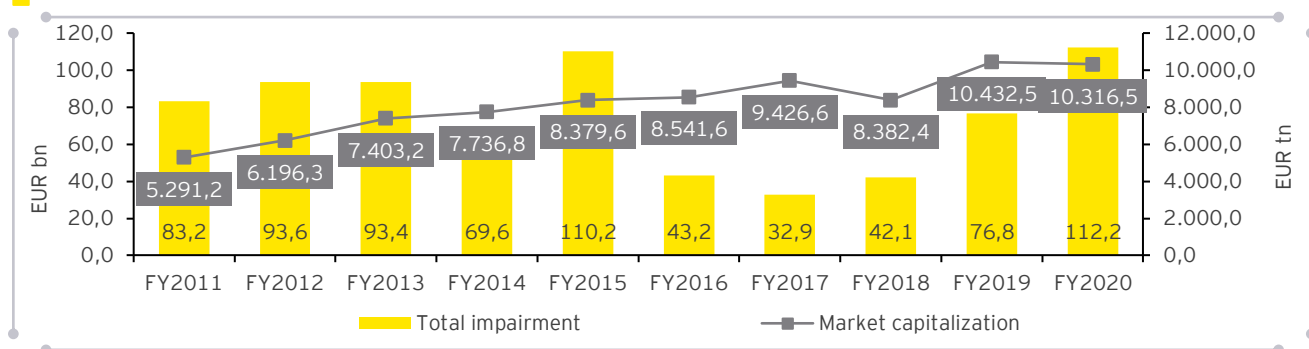
- ▶ FTSE MIB companies: total impairment tends to be higher when the market capitalization of the companies is lower; this indicates that the companies tend to report higher impairments when the financial markets are negative and lower when financial markets are positive
 - ▶ In 2011, total impairment reached a peak due to the financial market crash, as the market capitalization of the companies was below the book value, most of the companies reported goodwill impairment
- ▶ As FTSE AIM companies are very small as compared to FTSE MIB companies, there was no such correlation between market capitalization and the reported total impairment

Impairment vs. Market cap.:

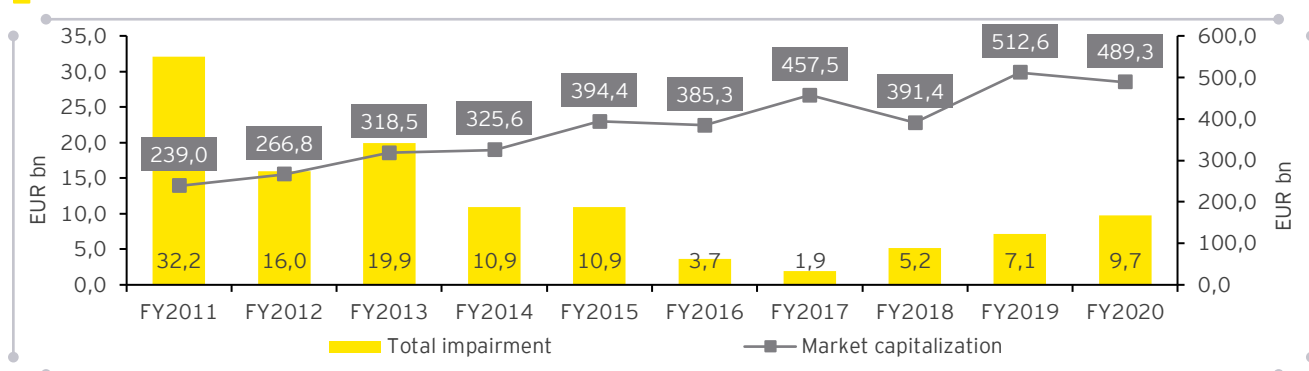
In 2020, MSCI EUROPE companies' total impairment recorded its peak, for FTSE MIB it happened in 2011



Evolution of impairment vs. market capitalization (MSCI Europe)



Evolution of impairment vs. market capitalization (FTSE MIB)



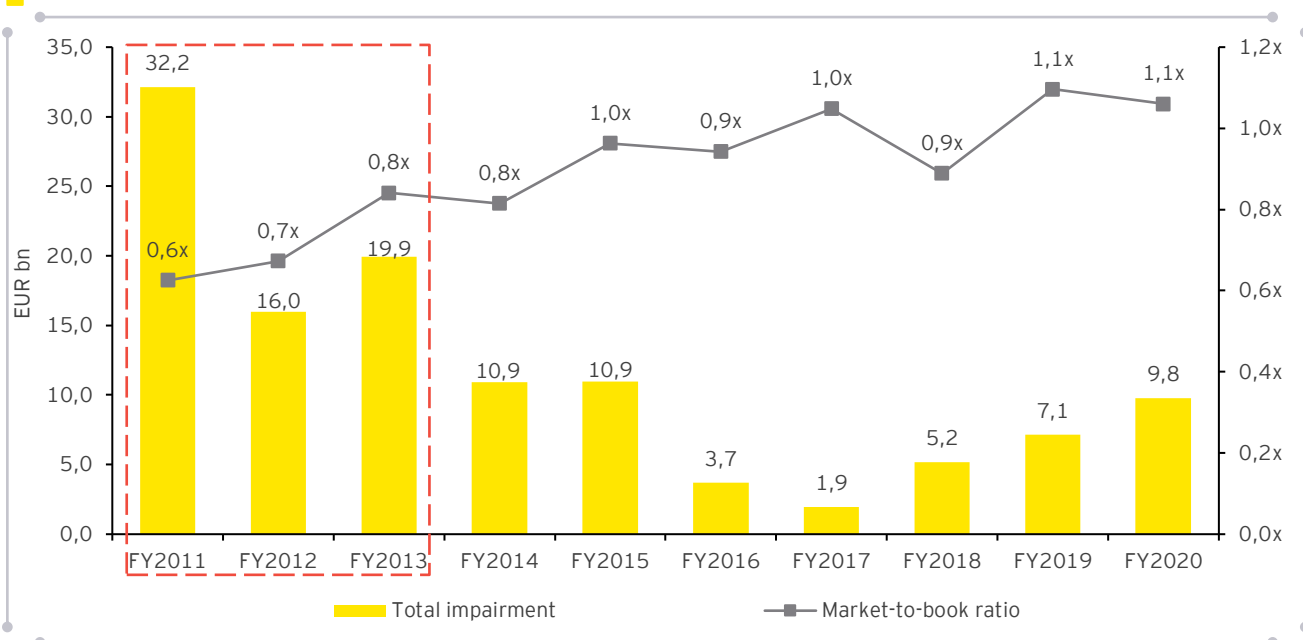
- ▶ MSCI Europe companies:
 - ▶ In 2011, the market capitalization was affected by European debt crisis in late 2009 and 2010
 - ▶ The market capitalization increased at a CAGR of 7,7% during 2011 - 2020 period, reaching a peak in 2019 (10.432,5bn), and a minimum in 2011 (5.291,2bn)
 - ▶ In terms of total impairment, MSCI Europe companies recorded a total impairment of EUR 112,2bn, due to Covid-19 crisis
- ▶ FTSE MIB companies: Market capitalization increased at a CAGR of 8,3% during 2011-2020, with a maximum in 2019 (EUR 512,6bn) and a minimum in 2011 with EUR 239,0bn

Market-to-book ratio vs. Impairment:

In 2011, market to book ratio was lowest with highest impairment



Market-to-book ratio vs. total impairment for Italian companies*



- ▶ In 2011, the market-to-book ratio was the lowest of last 10 years (0,6x) as compared to the highest total impairment (32,2bn), primarily due to decrease in market capitalization
 - ▶ As financial markets recovered, the ratio improved and total impairment started declining
- ▶ In 2019, the market-to-book value ratio reached a peak (1,1x)
- ▶ Between 2019 and 2020, market-to-book ratio slightly decreased while total impairment increased from 7,1bn to 9,8bn
- ▶ From 2011 to 2020, Net assets increased at a CAGR of 2,2% and market capitalization increased at a CAGR of 8,4%
 - ▶ Total impairment decreased at a CAGR of (12,4%) during the same period
 - ▶ Average Market to book ratio was 0,9x over the last 10 years (2011-2020)

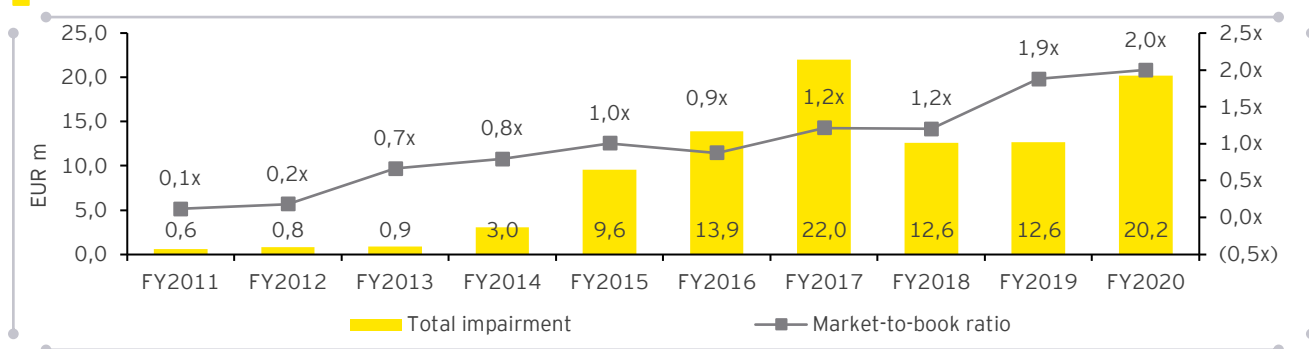
* Italian companies include FTSE AIM and FTSE MIB companies

Market-to-book ratio vs. Impairment:

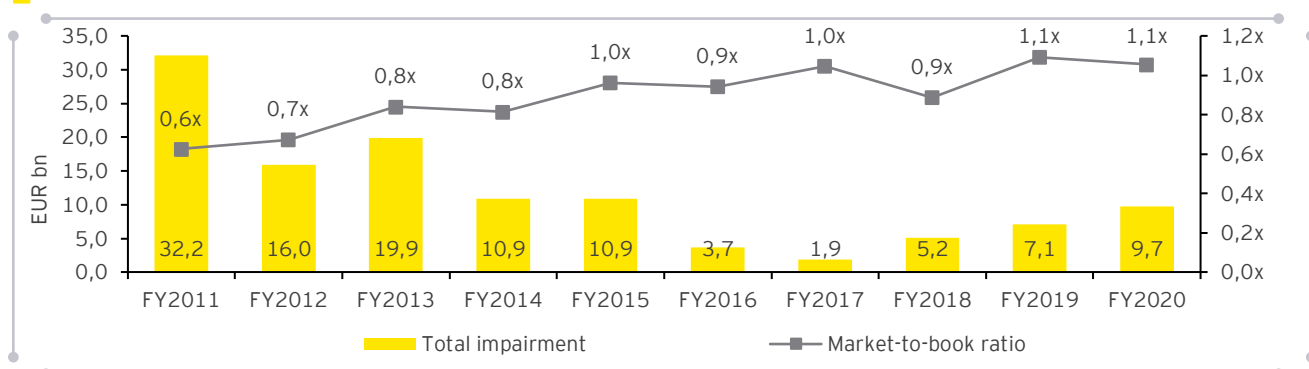
FTSE MIB companies tended to report highest total impairment when market-to-book ratio was at the lowest levels



Market-to-book ratio vs. total impairment (FTSE AIM)



Market-to-book ratio vs. total impairment (FTSE MIB)



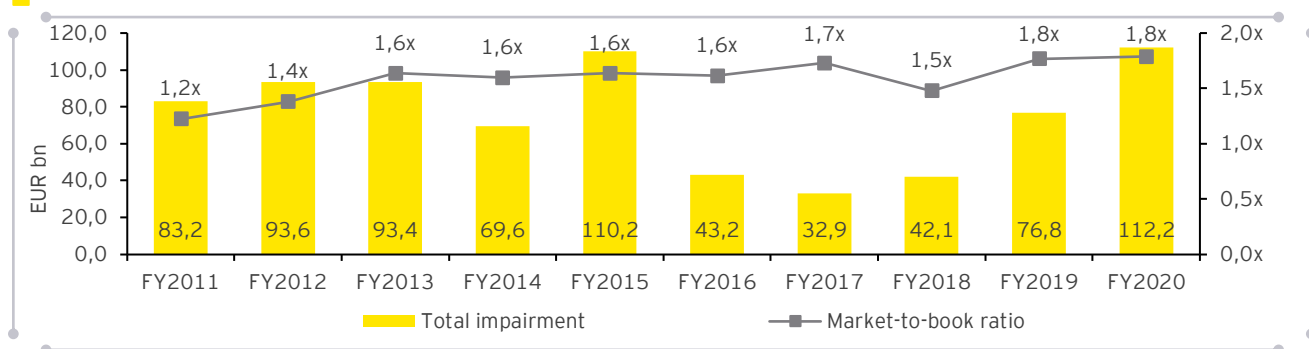
- ▶ Market-to-book ratio of FTSE MIB increased from 0,6x in 2011 to 1,1x in 2020, for FTSE AIM companies it was 0,1x in 2011 and 2,0x in 2020
- ▶ Net assets increased at a CAGR of 19,1% for FTSE AIM and of 2,2% for FTSE MIB companies
- ▶ For FTSE AIM, Market-to-book ratio increased yearly, while total impairment increased until 2017 (when it recorded its maximum value of EUR 22,0 m), decreased in 2018, and increased again in 2019 and 2020

Market-to-book ratio vs. Impairment:

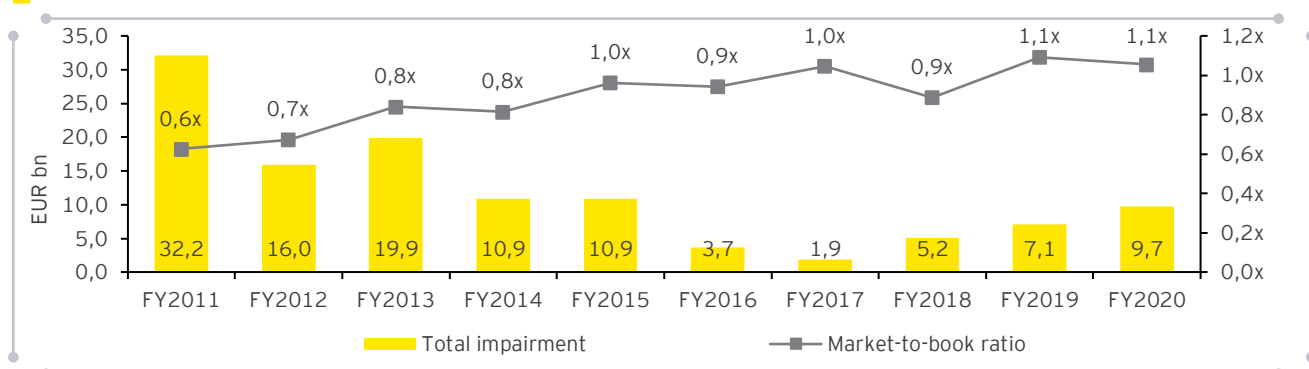
No relation can be seen between market-to-book ratio and total impairment reported by MSCI Europe companies



Market-to-book ratio vs. total impairment (MSCI Europe)



Market-to-book ratio vs. total impairment (FTSE MIB)



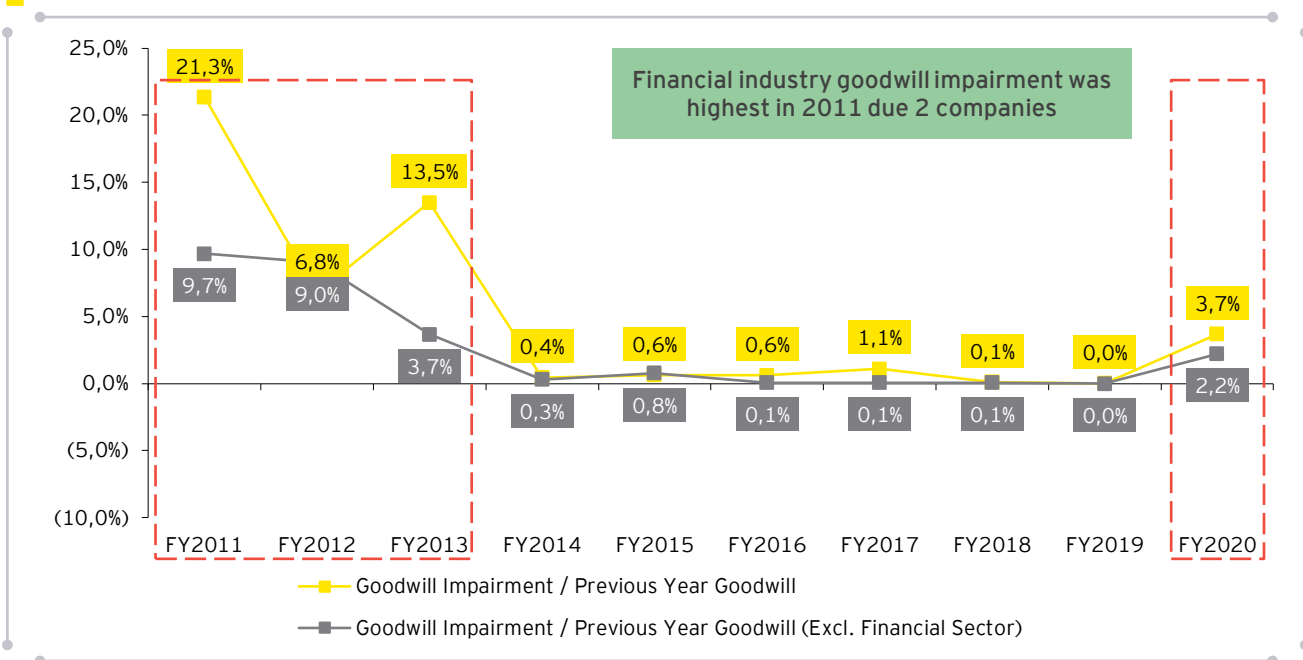
- ▶ Market-to-book ratio has been largely constant for both MSCI Europe and FTSE MIB in the last few years
 - ▶ For MSCI Europe companies, it increased from 1,2x in 2011 to 1,8x in 2020, while for FTSE MIB companies, it increased from 0,6x in 2011 to 1,1x in 2020
- ▶ MSCI Europe: No relation can be found between market-to-book ratio and total impairment reported
 - ▶ The market-to-book ratio reached a minimum in 2011 (1,2x), whereas total impairment reached a peak in 2020 (EUR 112,2bn)
- ▶ FTSE MIB: In 2011, Market-to-book ratio was lowest being 0,6x, with total impairment reaching a maximum of EUR 32,2bn, primarily due to decrease in market capitalization

Goodwill Impairment over prior year Goodwill:

Significant % of Goodwill Impaired by Financial services companies during 2011-13



Goodwill impairment over prior year goodwill for Italian companies*



- ▶ Goodwill impairment / previous year goodwill ratio, refers to the intensity of impairment as the ratio of impairment charged in a period over the opening balance of goodwill
- ▶ Goodwill impairment / previous year goodwill ratio decreased from 21,3% in 2011 to 3,7% in 2020, with highest figures reached during 2011-2013 period and the lowest in 2019, before Covid-19 crisis.
- ▶ Companies recognized goodwill impairment/ previous goodwill ratio on an average of 5,1% during 2011-2020 period, however if we exclude 2011-2013 period then the average drops at 1,3%
- ▶ Goodwill impairment / previous year goodwill (Excl. Financial Sector) decreased from 9,7% in 2011 to 2,2% in 2020, with highest figures showed between 2011 and 2013.
- ▶ Companies recognized goodwill impairment/ previous goodwill (Excl. Financial Sector) ratio on an average of 2,9% during 2011-2020 period, however, if we exclude 2011-2013 period then the average drops at 1,0%
- ▶ In 2011, goodwill impairment was highest primarily due to impairment in financial sector companies

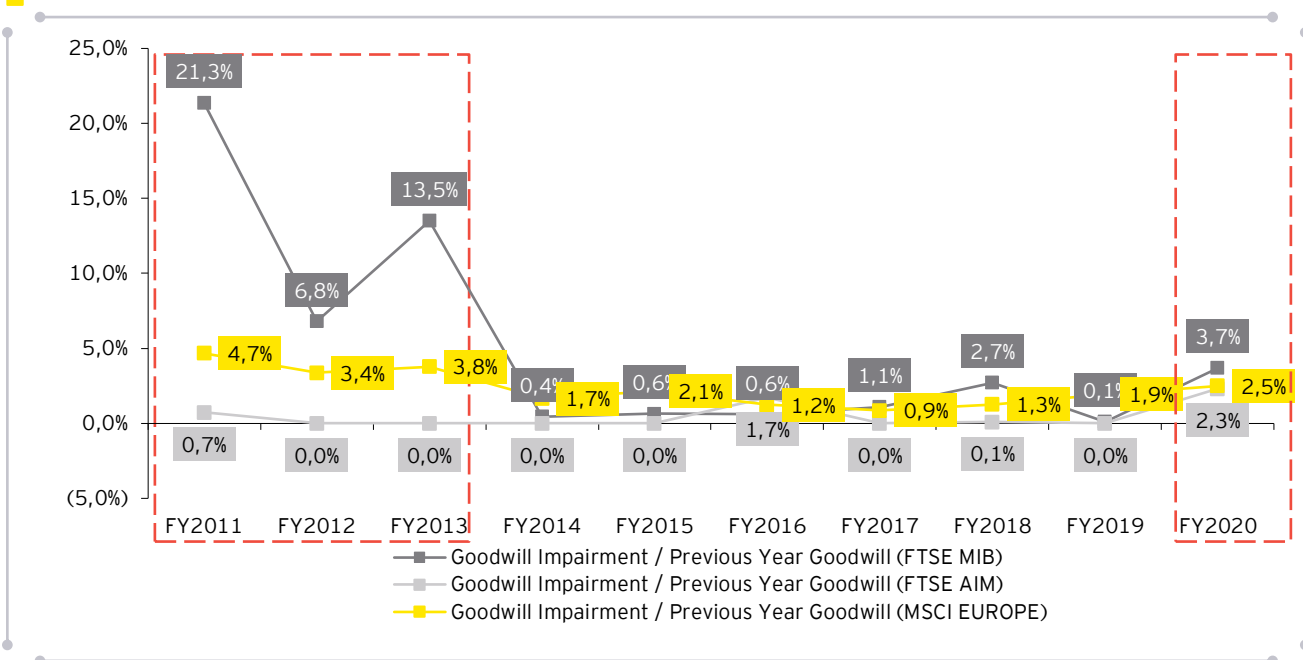
* Italian companies include FTSE AIM and FTSE MIB companies

Goodwill Impairment over prior year Goodwill:

During 2011 - 2013 period, goodwill impairment was high for both FTSE MIB and MSCI Europe companies



Goodwill impairment over prior year goodwill



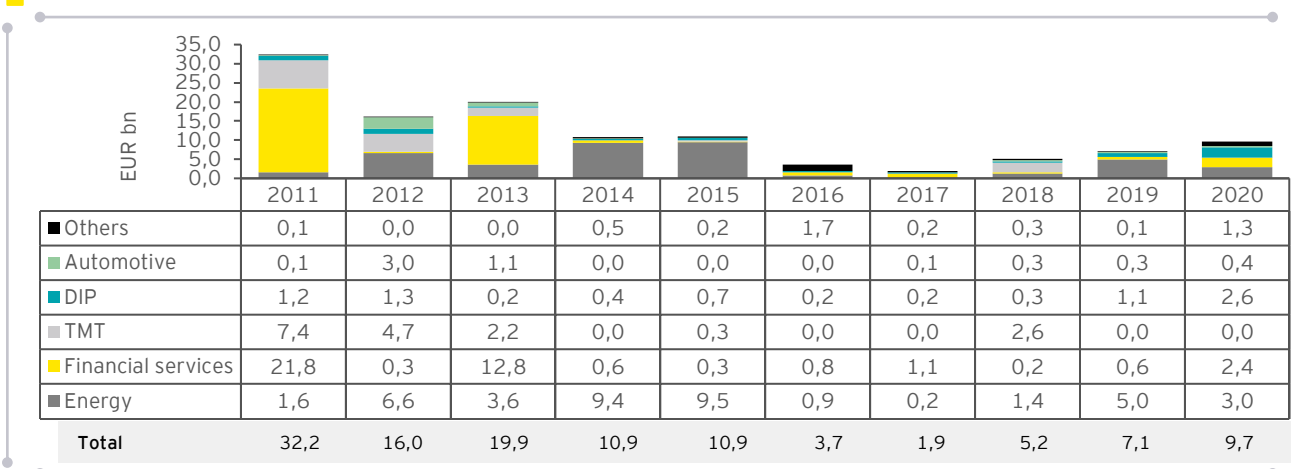
- ▶ Goodwill impairment / Previous Year Goodwill ratio, refers to the intensity of impairments as the ratio of impairment charged in a period over the opening balance of goodwill
- ▶ FTSE AIM: These are small cap listed companies, the companies hardly reported any goodwill impairment
- ▶ FTSE MIB: Companies recognized goodwill impairment / previous goodwill ratio on an average of 2,3% during 2011-2020 period, however if we exclude 2011-2013 period, the average decreases at 1,7%
- ▶ MSCI Europe: Goodwill impairment / previous year goodwill ratio changed from 4,7% in 2011 to 2,5% in 2020, with highest ratio during 2011-2013 period
 - ▶ Companies recognized goodwill impairment / previous goodwill ratio on an average of 2,3% between 2011 and 2020, however if we exclude 2011-2013 period then average decreases at only 1,7%

FTSE MIB impairment by sector:

In 2020, 82,5% of total Impairment reported by Financial services, Energy and DIP sectors over the 2011-2020 period

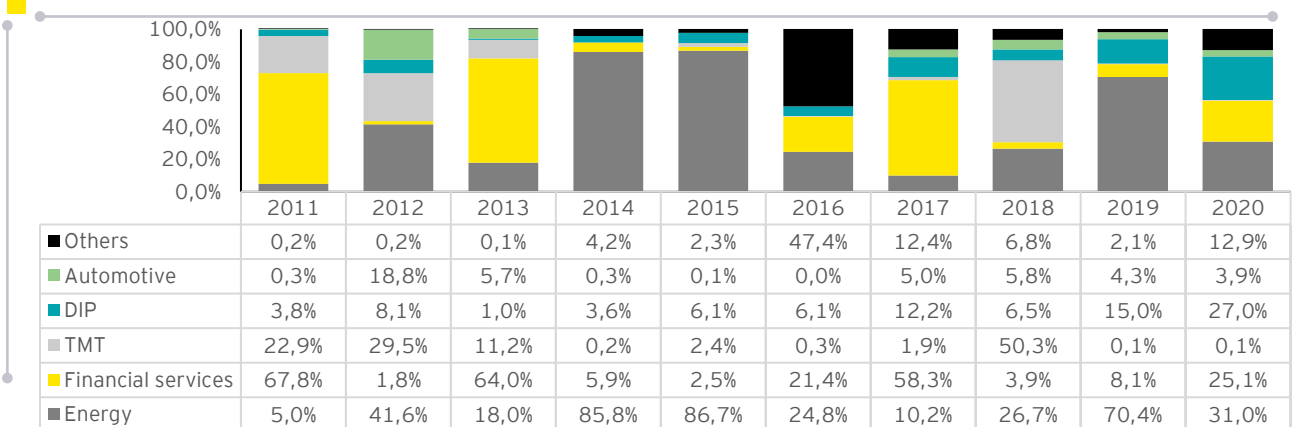


Total impairment by sector



- ▶ Financial services sector reported its highest impairment in 2011 due to the financial debt crisis, whereas Energy sector reported its highest impairment in 2014-15 period due to decline in oil prices and DIP in 2020 due to Covid-19 crisis
- ▶ In 2020, 82,5% of total impairment is reported by Financial services, Energy and DIP sectors
 - ▶ Financial services sector provided the highest contribution in terms of total impairment in 2011
 - ▶ After 2011, energy sector contributed highest % of total impairment, except for 2013 and 2017
 - ▶ Total impairment of DIP sector strongly increased in 2019 and 2020

Total impairment composition by sector



* FTSE MIB companies by sector have been covered as FTSE AIM companies reported negligible impairment

FTSE MIB impairment by sector:

% of companies reporting Impairment increased during the period 2011 to 2020 in all the sectors



% of companies reporting impairment by sector

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Automotive	33,3%	33,3%	33,3%	33,3%	33,3%	0,0%	66,7%	33,3%	66,7%	66,7%
DIP	71,4%	71,4%	85,7%	85,7%	85,7%	71,4%	71,4%	57,1%	57,1%	85,7%
Energy	57,1%	100,0%	71,4%	71,4%	85,7%	71,4%	100,0%	100,0%	100,0%	100,0%
Financial services	53,8%	61,5%	61,5%	53,8%	46,2%	61,5%	53,8%	30,8%	53,8%	61,5%
Healthcare	33,3%	66,7%	66,7%	66,7%	33,3%	66,7%	66,7%	33,3%	66,7%	66,7%
Infrastructure	100,0%	50,0%	50,0%	100,0%	100,0%	100,0%	50,0%	50,0%	100,0%	100,0%
RCP	50,0%	50,0%	50,0%	50,0%	50,0%	50,0%	50,0%	50,0%	50,0%	50,0%
TMT	33,3%	66,7%	66,7%	66,7%	100,0%	100,0%	33,3%	66,7%	33,3%	66,7%

- ▶ % of companies reporting Impairment increased for all sectors
 - ▶ % of Automotive companies reporting impairment increased from 33,3% in 2011 to 66,7% in 2020
 - ▶ % of DIP companies reporting impairment increased from 71,4% in 2011 to 85,7% in 2020
 - ▶ % of Energy companies reporting impairment increased from 57,1% in 2011 to 100,0% in 2020
 - ▶ % of Financial services companies reporting impairment increased from 53,8% in 2011 to 61,5% in 2020
 - ▶ % of Healthcare companies reporting impairment increased from 33,3% in 2011 to 66,7% in 2020
 - ▶ % of Infrastructure companies reporting impairment remained steady at 100,0% from 2011 to 2020
 - ▶ % of RCP companies reporting impairment remained stable at 50,0% from 2011 to 2020
 - ▶ % of TMT companies reporting impairment increased from 33,3% in 2011 to 66,7% in 2020

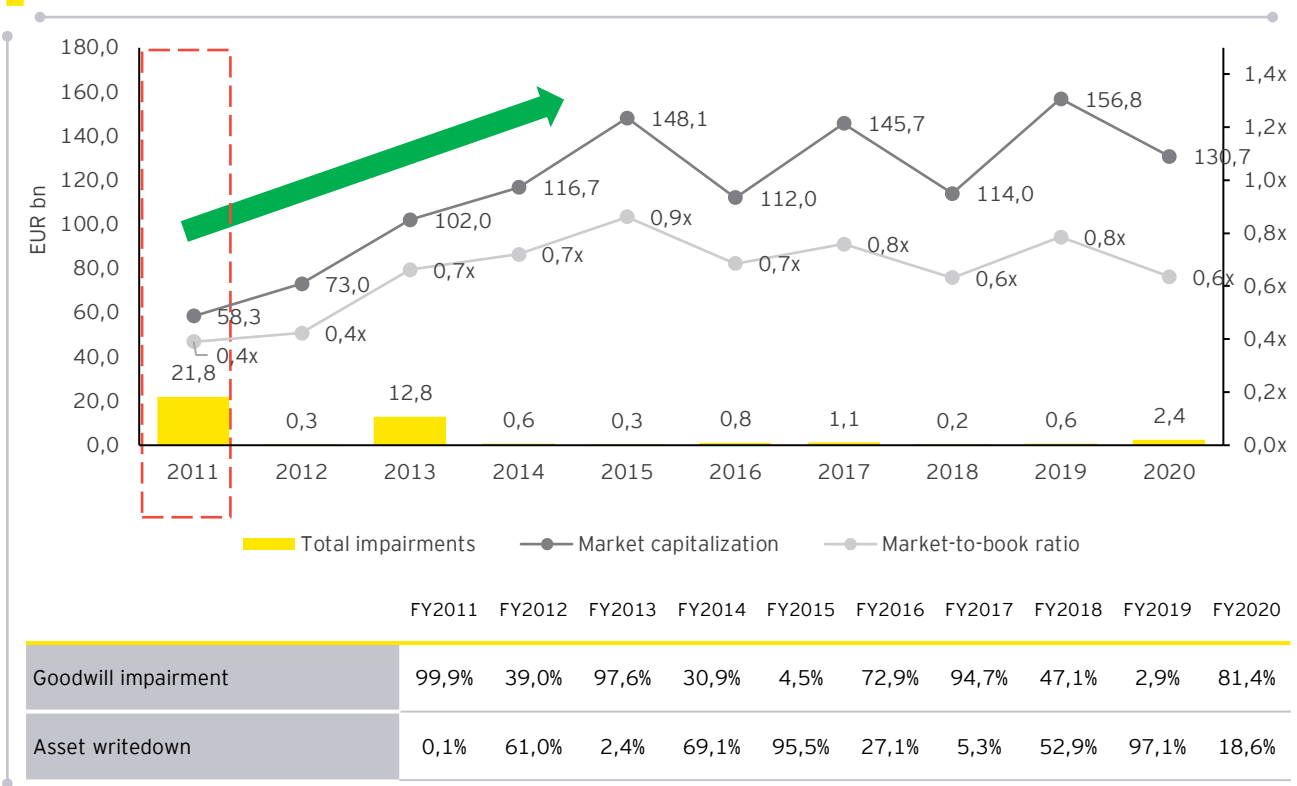
* FTSE MIB companies by sector covered as FTSE AIM companies reported negligible impairment

FTSE MIB Financial Services sector:

Decrease in Impairment over the period after the great recession and European debt crisis, consequent increase in 2020 related to Covid-19 crisis



Financial services sector impairment vs. Market cap. and Market-to-book



- ▶ Financial services sector was significantly impacted due to the great recession and European debt crisis, resulting in the increase in reporting of total impairment
 - ▶ In 2011, market capitalization (EUR 58,3bn) and market-to-book ratio (0,4x) reached a minimum, while impairment was at its peak of EUR 21,8bn
- ▶ Goodwill impairment reported by Financial companies, which decreased after the financial crisis 2011-2013, increased from 2,9% in 2019 to 81,4% in 2020, due to Covid-19 crisis

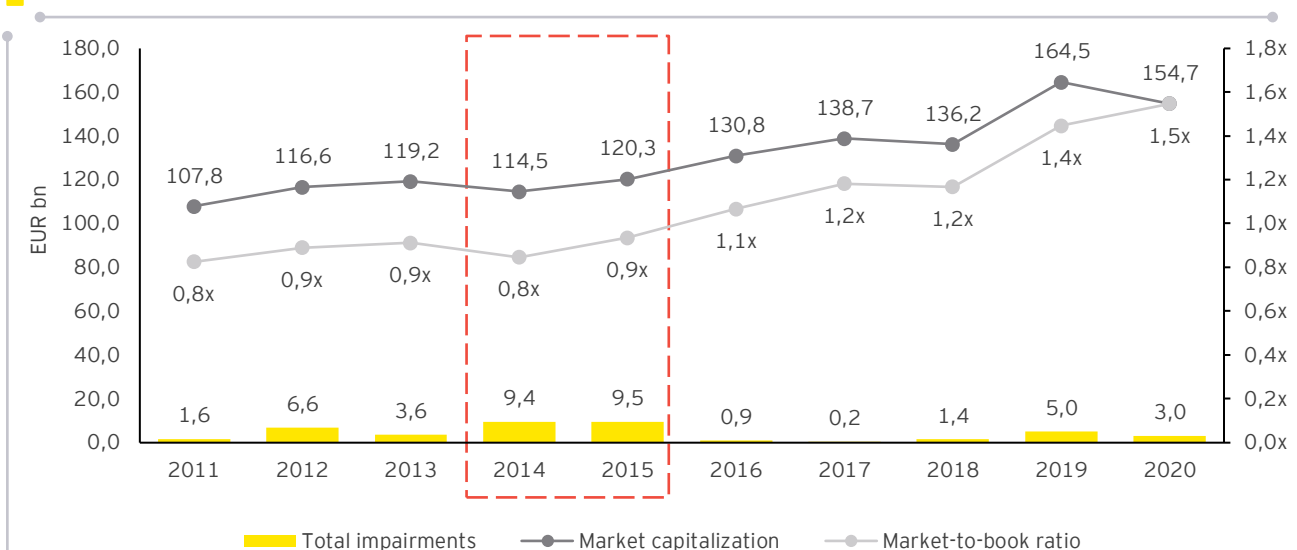
* FTSE MIB companies by sector covered as FTSE AIM companies reported negligible impairment

FTSE MIB Energy sector:

The decline in global oil prices lead to an increase in asset write-down



Energy sector impairment vs. Market cap. and Market-to-book



FY2011 FY2012 FY2013 FY2014 FY2015 FY2016 FY2017 FY2018 FY2019 FY2020

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Goodwill impairment	18,3%	38,9%	20,8%	2,1%	0,0%	3,8%	23,7%	3,2%	1,7%	9,1%
Asset writedown	81,7%	61,1%	79,2%	97,9%	100,0%	96,2%	76,3%	96,8%	98,3%	90,9%

- ▶ Due to the decline in oil prices in 2014, the O&G companies significantly increased their asset write-down
- ▶ In energy sector, goodwill impairment was lower than asset write-down: on average, over the last 10 years, 87,8% of impairment stems from asset write-down
- ▶ In 2015, O&G companies reported the highest total impairment of EUR 9,5bn due to asset write-down of EUR 9,45bn deriving from top three companies
- ▶ Total impairment increased to EUR 3,0bn in 2020 from EUR 1,6bn in 2011

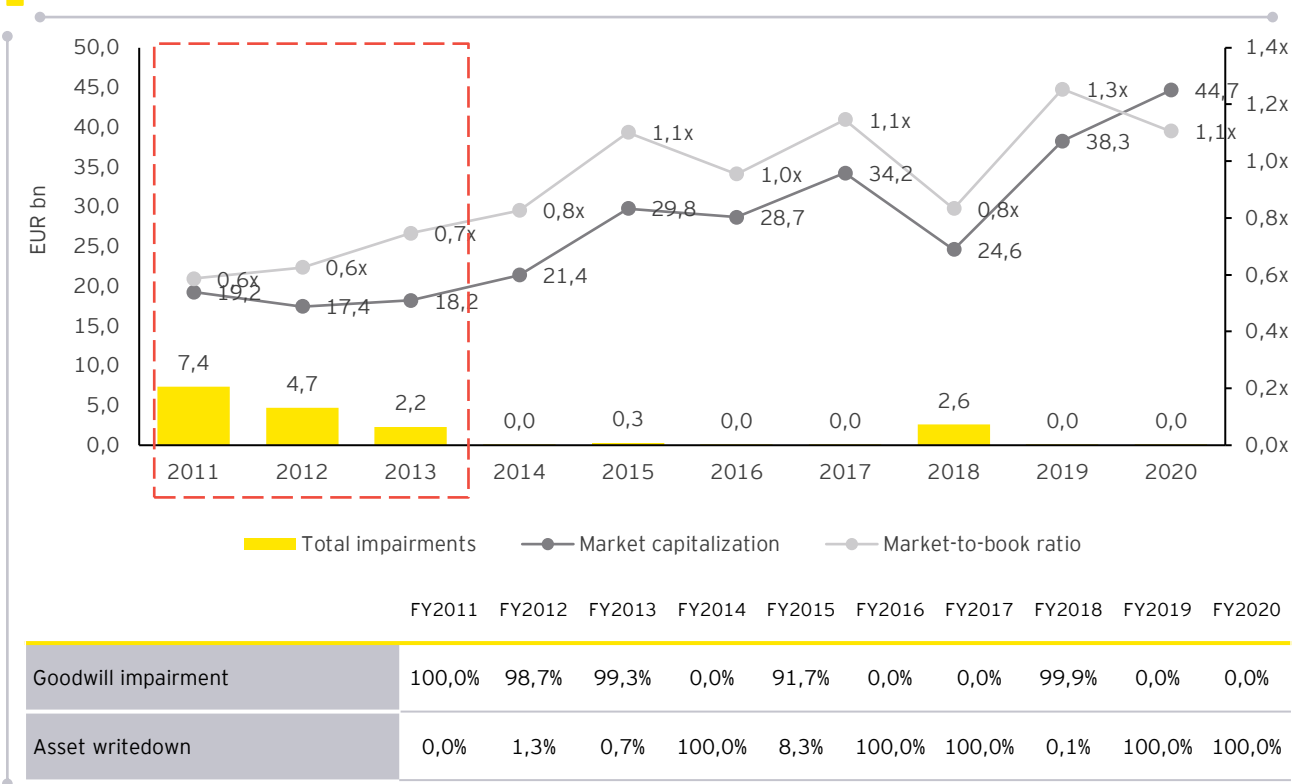
* FTSE MIB companies by sector covered as FTSE AIM companies reported negligible impairment

FTSE MIB TMT sector:

Increase in Impairment due to decline in financial markets



TMT sector impairment vs. Market cap. and Market-to-book



- ▶ Out of 3 TMT companies, one company has reported impairment throughout the whole period except for 2019
- ▶ This company reported goodwill impairment of EUR 7,4bn, EUR 4,1bn, and EUR 2,2bn in 2011, 2012 and 2013, respectively, due to decline in financial markets
- ▶ Market capitalization decreased from 2011 to 2012
 - ▶ After 2012, total impairment significantly declined; in 2020, total impairment was EUR 0,0bn
- ▶ Market capitalization and Market-to-book ratio declined in 2018, while total impairment significantly increased to EUR 2,6bn
- ▶ During 2020 Market capitalization increased and Market-to-book ratio decreased

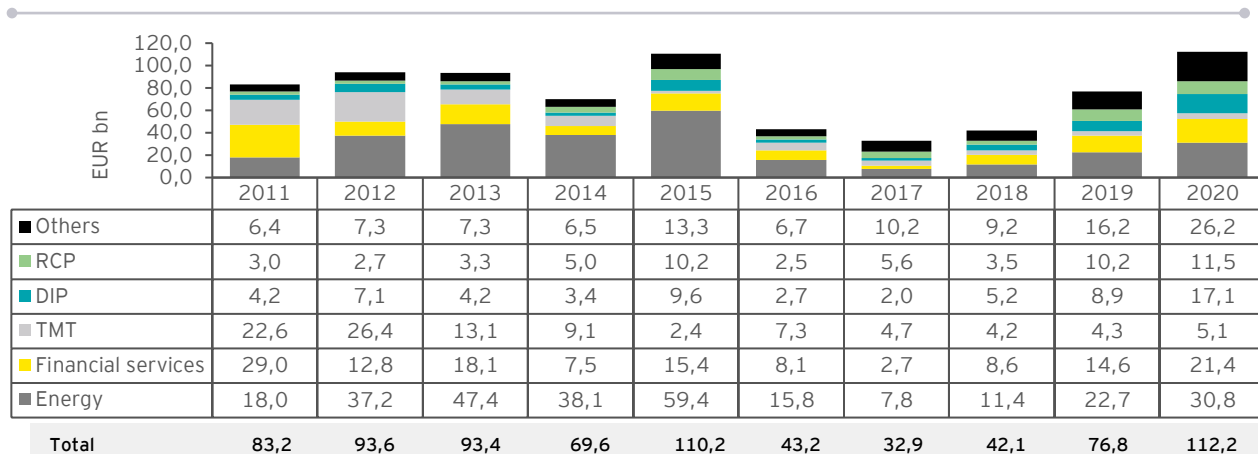
* FTSE MIB companies by sector covered as FTSE AIM companies reported negligible impairment

MSCI Europe impairment by sector:

Average 61,8% of total Impairment reported by Energy, Financial services and DIP sectors

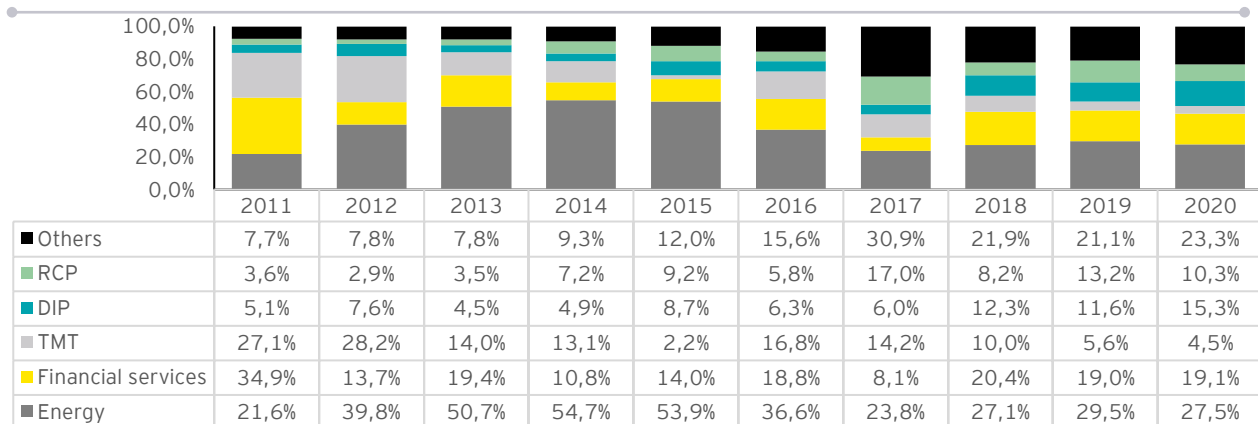


Total impairment by sector



- ▶ Energy sector reported highest impairment followed by Financial services from 2011 to 2020
- ▶ Energy sector reported highest impairment in 2015 due to decline in crude oil prices
- ▶ Financial services sector reported its highest impairment in 2011, due to the sovereign debt crisis
- ▶ 61,8% of total impairment in 2020 is reported by Energy, Financial services, and DIP sectors
 - ▶ Energy sector impairment was 27,5% of total impairment in 2020 with EUR 30,8bn
 - ▶ Financial services sector impairment was 19,1% of total impairment in 2020 with EUR 21,4bn
 - ▶ DIP sector impairment was 15,3% of total impairment in 2020 with EUR 17,1bn

Total impairment composition by sector



* FTSE MIB companies by sector covered as FTSE AIM companies reported negligible impairment

MSCI Europe impairment by sector:

% of companies reporting Impairment increased during 2011 to 2020 period in all sectors



% of companies reporting impairment by sector

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Automotive	37,5%	37,5%	50,0%	37,5%	37,5%	25,0%	37,5%	50,0%	37,5%	37,5%
DIP	53,0%	56,1%	57,6%	60,6%	51,5%	56,1%	51,5%	50,0%	53,0%	63,6%
Energy	65,0%	70,0%	72,5%	77,5%	70,0%	65,0%	72,5%	65,0%	72,5%	72,5%
Financial services	54,1%	55,4%	55,4%	52,7%	54,1%	58,1%	47,3%	48,6%	56,8%	63,5%
Healthcare	40,0%	44,4%	37,8%	35,6%	35,6%	42,2%	44,4%	35,6%	42,2%	55,6%
Infrastructure	34,1%	41,5%	43,9%	26,8%	41,5%	43,9%	43,9%	43,9%	58,5%	68,3%
Professional Services	30,3%	33,3%	30,3%	30,3%	39,4%	33,3%	39,4%	45,5%	51,5%	51,5%
RCP	43,9%	48,5%	45,5%	56,1%	53,0%	51,5%	48,5%	51,5%	54,5%	68,2%
TMT	44,2%	46,5%	62,8%	46,5%	48,8%	60,5%	41,9%	55,8%	53,5%	62,8%

- ▶ % of companies reporting impairment increased for all sectors during 2011 to 2020 period
 - ▶ % of automotive companies reporting impairment remained stable at 37,5% from 2011 to 2020
 - ▶ % of DIP companies reporting impairment increased from 53,0% in 2011 to 63,6% in 2020
 - ▶ % of Energy companies reporting impairment increased from 65,0% in 2011 to 72,5% in 2020
 - ▶ % of Financial services companies reporting impairment increased from 54,1% in 2011 to 63,5% in 2020
 - ▶ % of Healthcare companies reporting impairment increased from 40,0% in 2011 to 55,6% in 2020
 - ▶ % of Infrastructure companies reporting impairment increased from 34,1% in 2011 to 68,3% in 2020
 - ▶ % of Professional services companies reporting impairment increased from 30,3% in 2011 to 51,5% in 2020
 - ▶ % of RCP companies reporting impairment increased from 43,9% in 2011 to 68,2% in 2020
 - ▶ % of TMT companies reporting impairment increased from 44,2% in 2011 to 62,8% in 2020

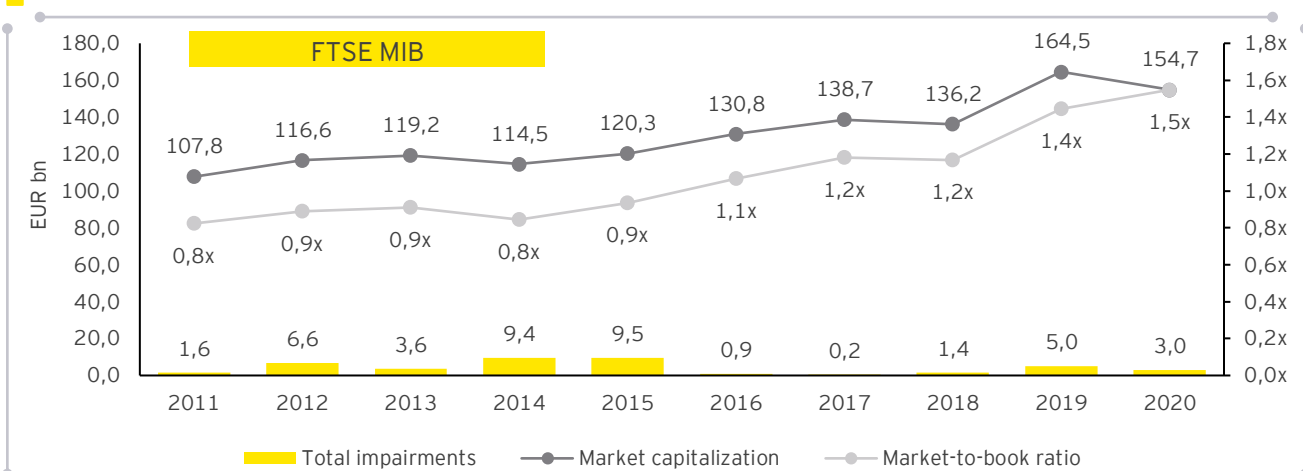
* FTSE MIB companies by sector covered as FTSE AIM companies reported negligible impairment

FTSE MIB vs. MSCI Europe (Energy sector):

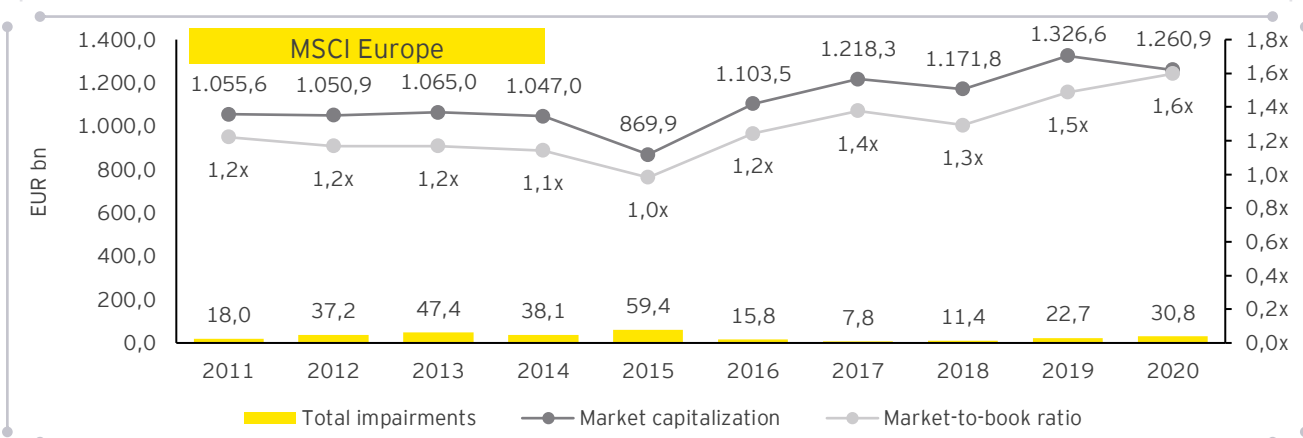
Decline in oil prices in 2015 increased the asset write-down by major upstream O&G companies



Energy sector impairment vs. Market cap. and Market-to-book



- ▶ In the last 10 years, more than 82,1% of impairment derived from asset write-down for MSCI Europe and 87,8% for FTSE MIB
- ▶ Due to the decline in oil prices in 2014, the O&G companies recorded increasing asset write-down
- ▶ Top 3 FTSE MIB energy companies reported highest total impairment in 2015;
- ▶ In 2020, in MSCI Europe, 44,5% of total impairment was recorded by top 3 companies
- ▶ In 2020, in FTSE MIB, 98,8% of total impairment was recorded by top 3 companies
- ▶ In 2020, Covid-19 crisis determined a decrease in market cap for both FTSE MIB and MSCI Europe Energy companies.



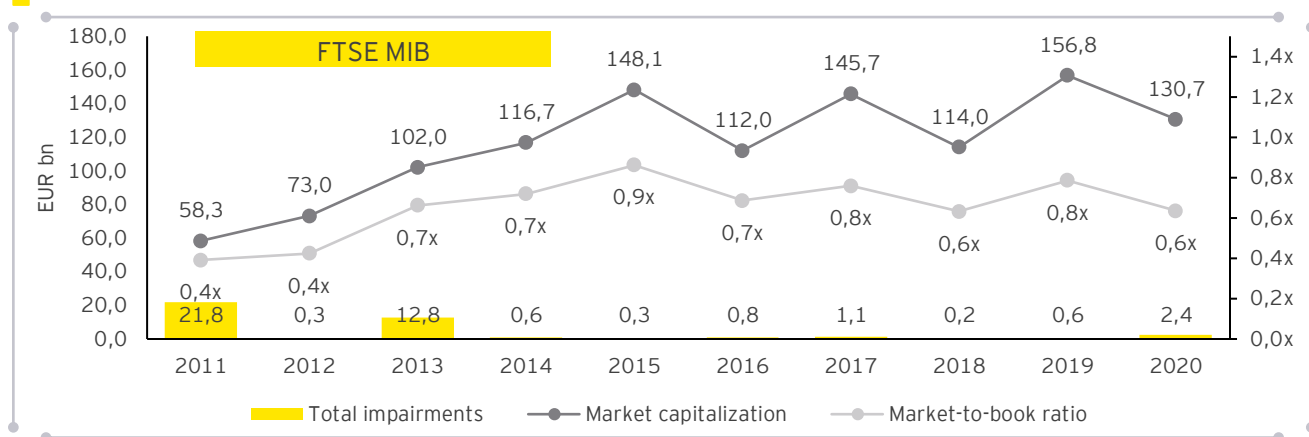
* FTSE MIB companies by sector compared with MSCI Europe as FTSE AIM companies reported negligible impairment

FTSE MIB vs. MSCI Europe (Financial sector):

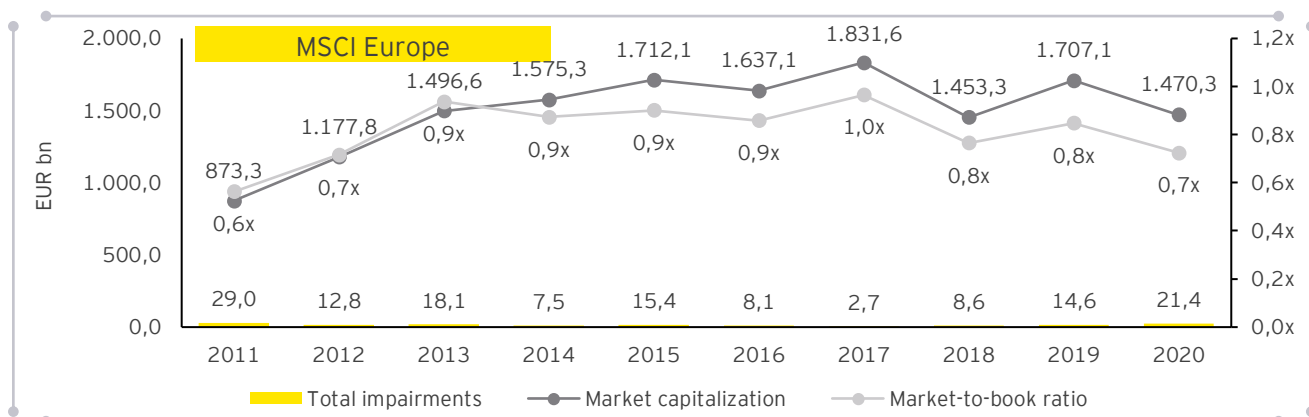
Impairment was high in 2011 due to financial market crisis and European debt crisis



Financial services sector impairment vs. Market cap. and Market-to-book



- ▶ For FTSE MIB, market capitalization and market-to-book ratio increased from a minimum of EUR 58,3bn and 0,4x, respectively in 2011 to EUR 130,7bn and 0,6x, respectively in 2020, while total impairment decreased from EUR 21,8bn in 2011 to EUR 2,4bn in 2020
- ▶ For MSCI Europe, total impairment was highest in 2011, with EUR 29,0bn, while both market capitalization and market-to-book ratio were the lowest of the last 10 years
- ▶ Top 3 financial companies reported significant total impairment in 2020;
 - ▶ In MSCI Europe, 61,4% of total impairment was recorded by top 3 companies
 - ▶ In FTSE MIB, 93,4% of total impairment was recorded by top 3 companies
- ▶ Both for MSCI Europe and FTSE MIB Financial services companies the impact of Covid-19 crisis lead to a decrease in Market capitalization and increase of total impairment between 2019 and 2020.



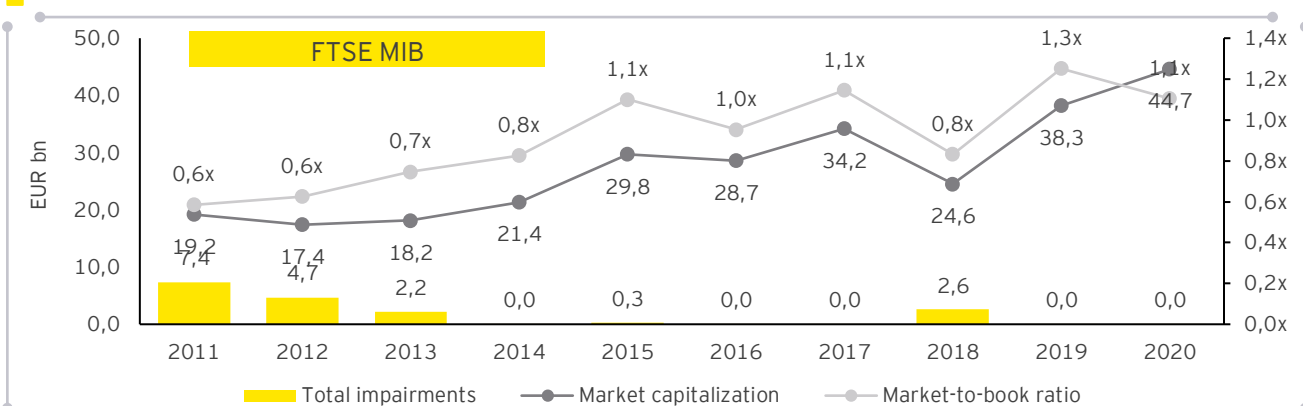
* FTSE MIB companies by sector compared with MSCI Europe as FTSE AIM companies reported negligible impairment

FTSE MIB vs. MSCI Europe (TMT sector):

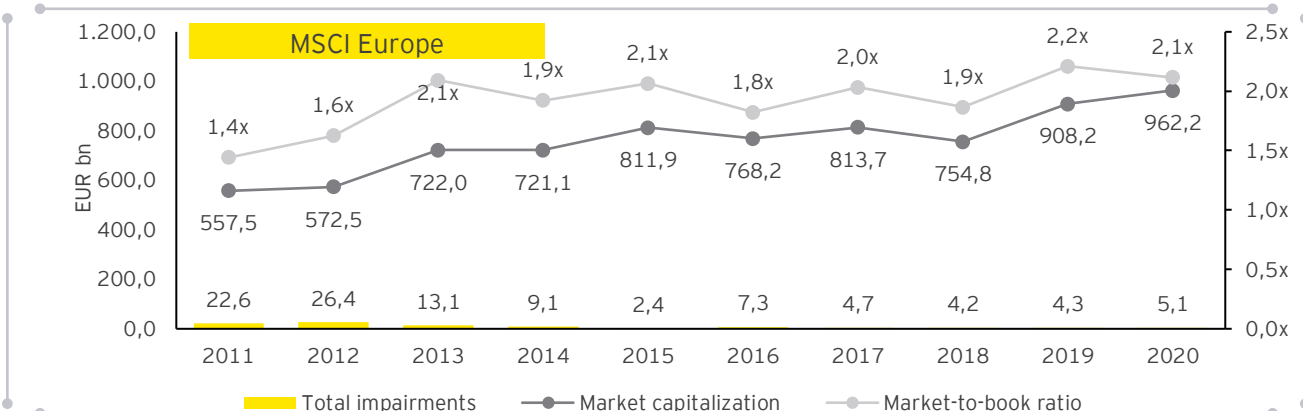
Major telecom companies reported impairment during 2011 to 2013, due to financial market crisis



TMT sector impairment vs. Market cap. and Market-to-book



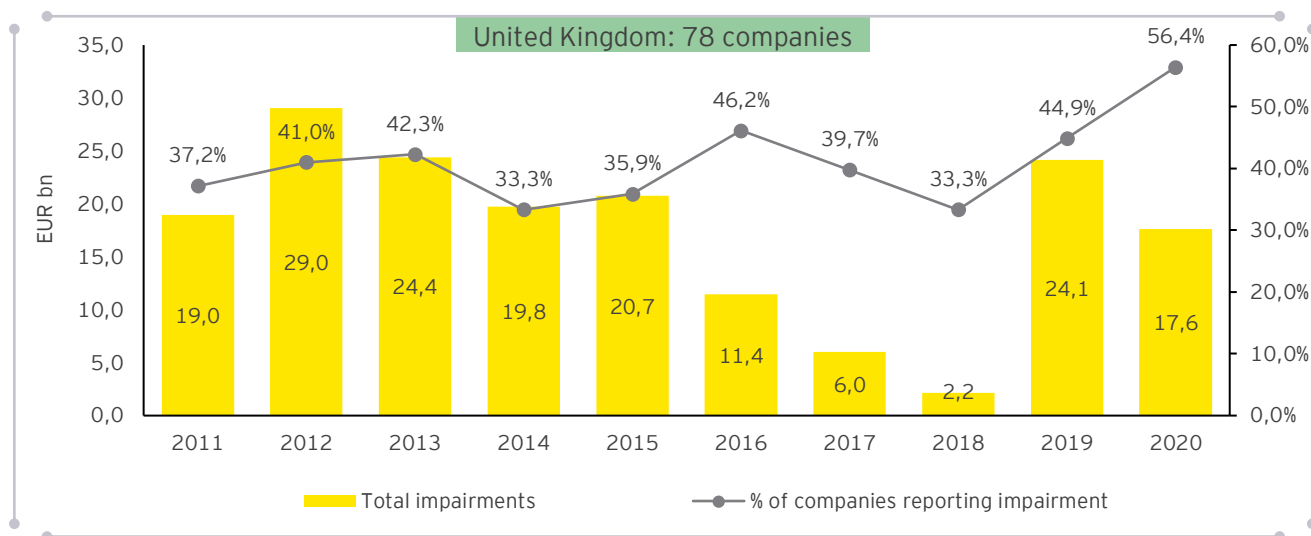
- ▶ One company of FTSE MIB has reported impairment throughout all the period except in 2019
- ▶ Due to financial market crisis, the total impairment for FTSE MIB and MSCI Europe was high from 2011 to 2013
- ▶ For MSCI Europe, total impairment during 2011- 2013 period was amongst highest due to the European debt market crisis
 - ▶ Total impairment was highest in 2012 being EUR 26.4bn
- ▶ Top 3 financial companies reported highest total impairment in 2020;
 - ▶ In MSCI Europe, 66,5% of total impairment was recorded by top 3 companies
 - ▶ In FTSE MIB, 100.0% of total impairment was recorded by top 3 companies
- ▶ Covid-19 crisis seems not to influence significantly impairment and market capitalization trend for both MSCI Europe and FTSE MIB TMT companies, although total impairment for MSCI Europe companies increased from 2019 to 2020



* FTSE MIB companies by sector compared with MSCI Europe as FTSE AIM companies reported negligible impairment

MSCI Europe by country: United Kingdom

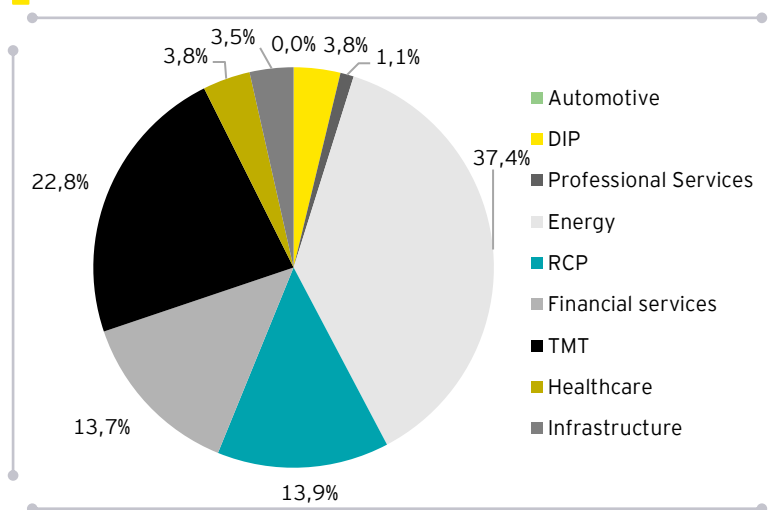
Average of 41,0% n° of UK companies reported impairment during 2011-2020, 56,4% in 2020



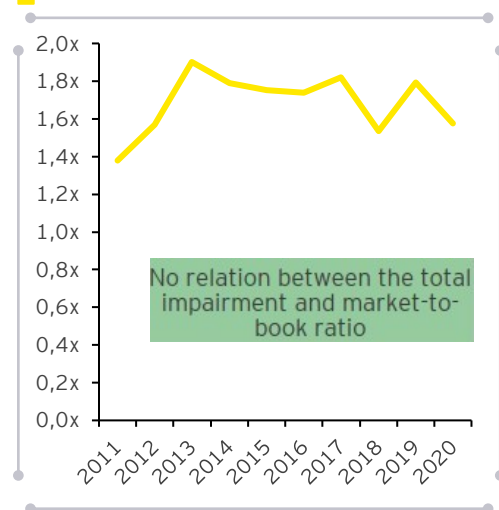
In 2020, top 3 companies based on total impairment reported 27,0% of total impairment of 2020 impairment

59,9% of total impairment reported by the top 3 companies during 2011-2020

2011 - 2020 total impairment by sector

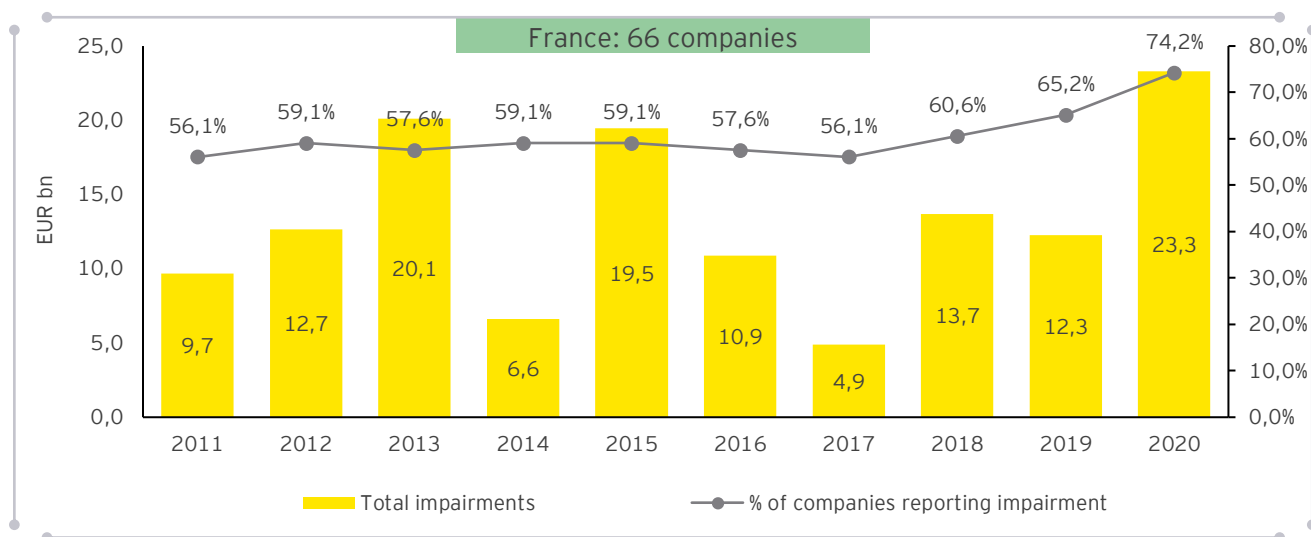
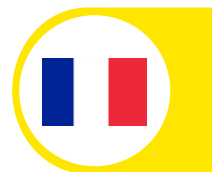


Market-to-book ratio



MSCI Europe by country: France

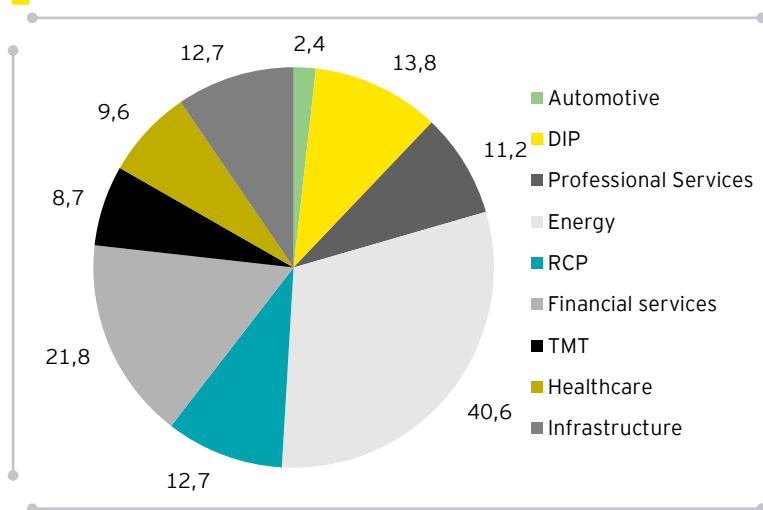
Average of 60.5% n° of French companies reported impairment during 2011-2020, 74,2% in 2020



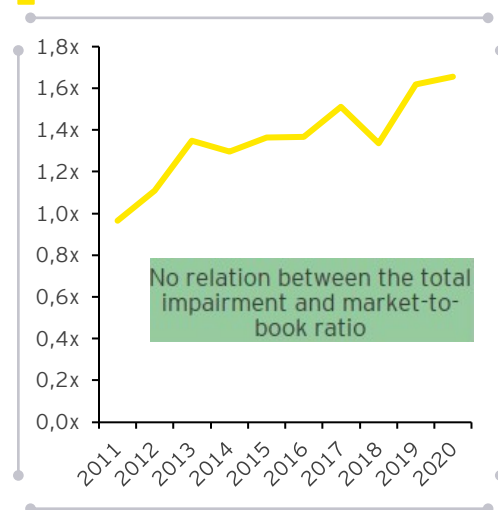
In 2020, top 3 companies based on total impairment reported 48,7% of total impairment of 2020 impairment

59,2% of total impairment reported by the top 3 companies during 2011-2020

2011 - 2020 total impairment by sector

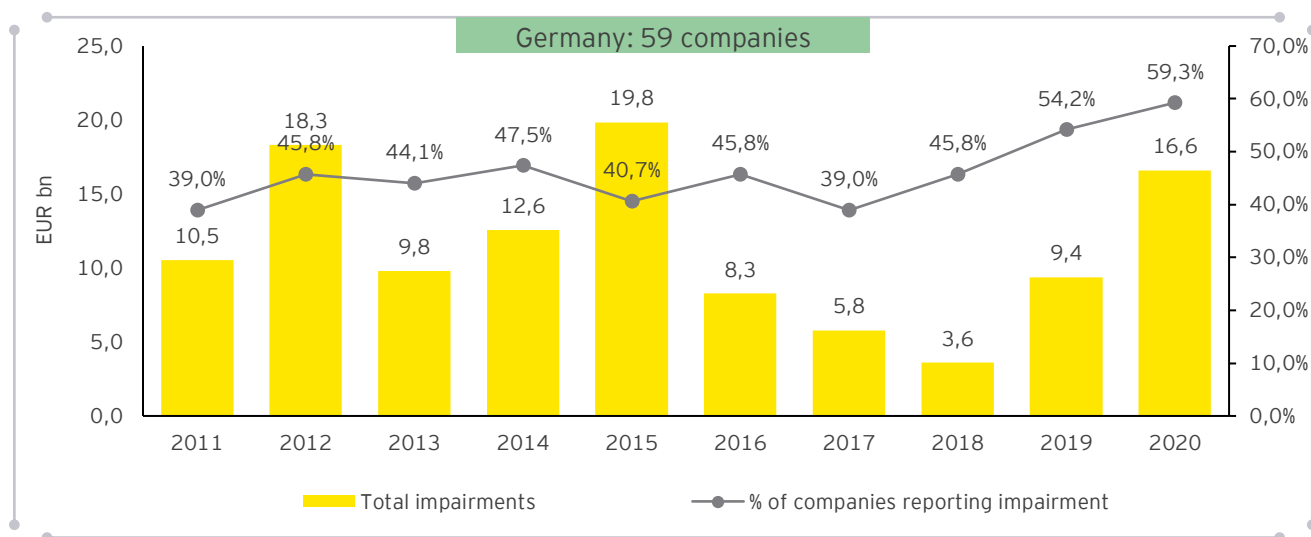


Market-to-book ratio



MSCI Europe by country: Germany

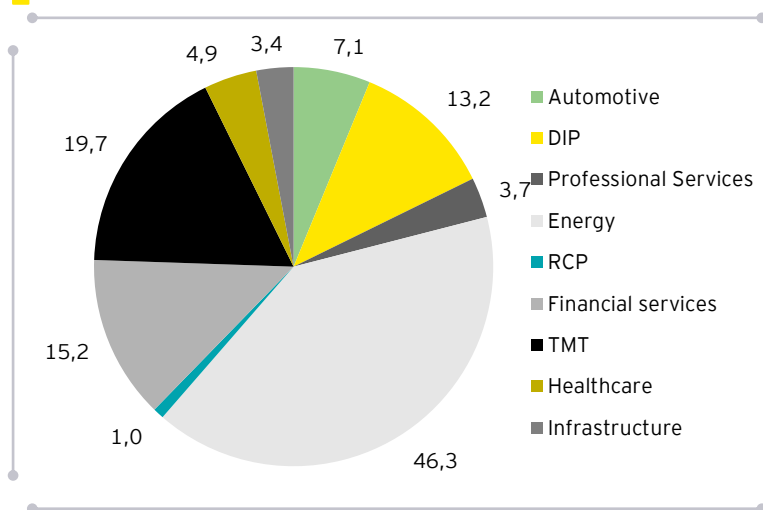
Average of 46,1% n° of German companies reported impairment during 2011-2020, 59,3% in 2020



In 2020, top 3 companies based on total impairment reported 48,8% of total impairment of 2020 impairment

70,9% of total impairment reported by the top 3 companies during 2011-2020

2011 - 2020 total impairment by sector

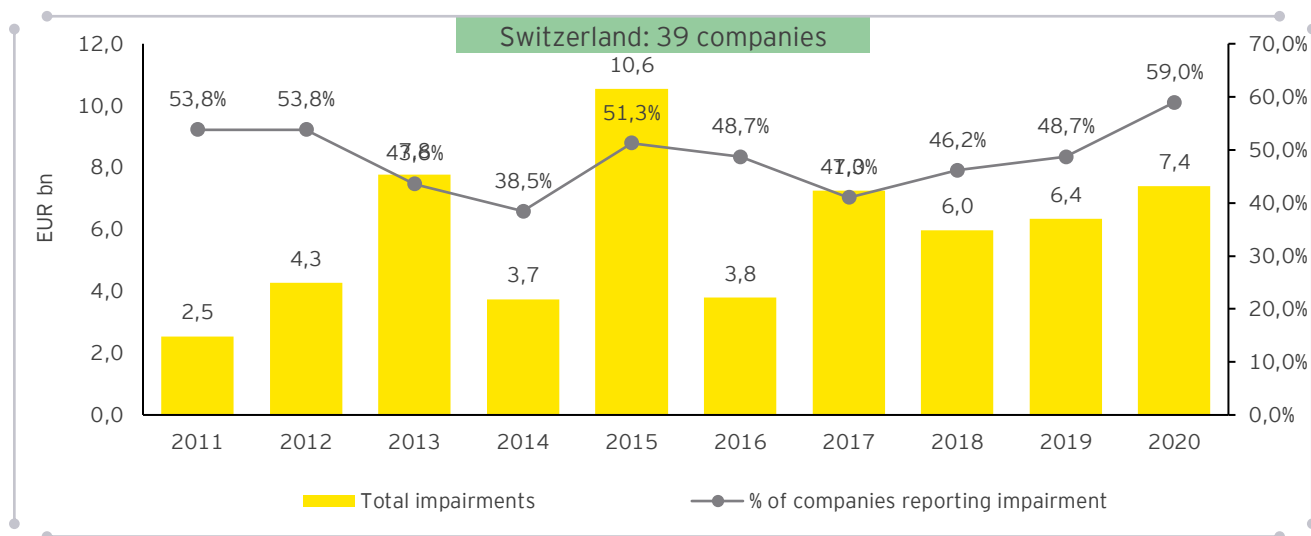


Market-to-book ratio



MSCI Europe by country: Switzerland

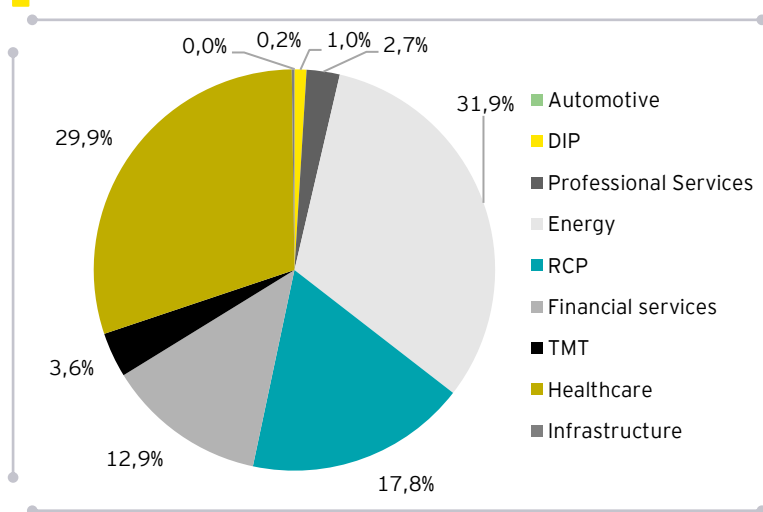
Average of 48,5% n° of Swiss companies reported impairment during 2011-2020, 59,0% in 2020



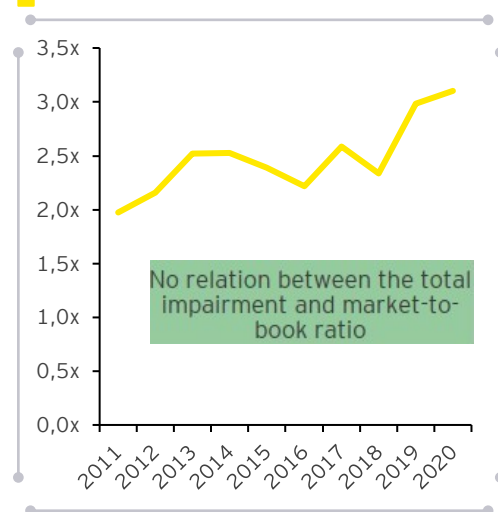
In 2020, top 3 companies based on total impairment reported 70,7% of total impairment of 2020 impairment

86,0% of total impairment reported by the top 3 companies during 2011-2020

2011 - 2020 total impairment by sector



Market-to-book ratio

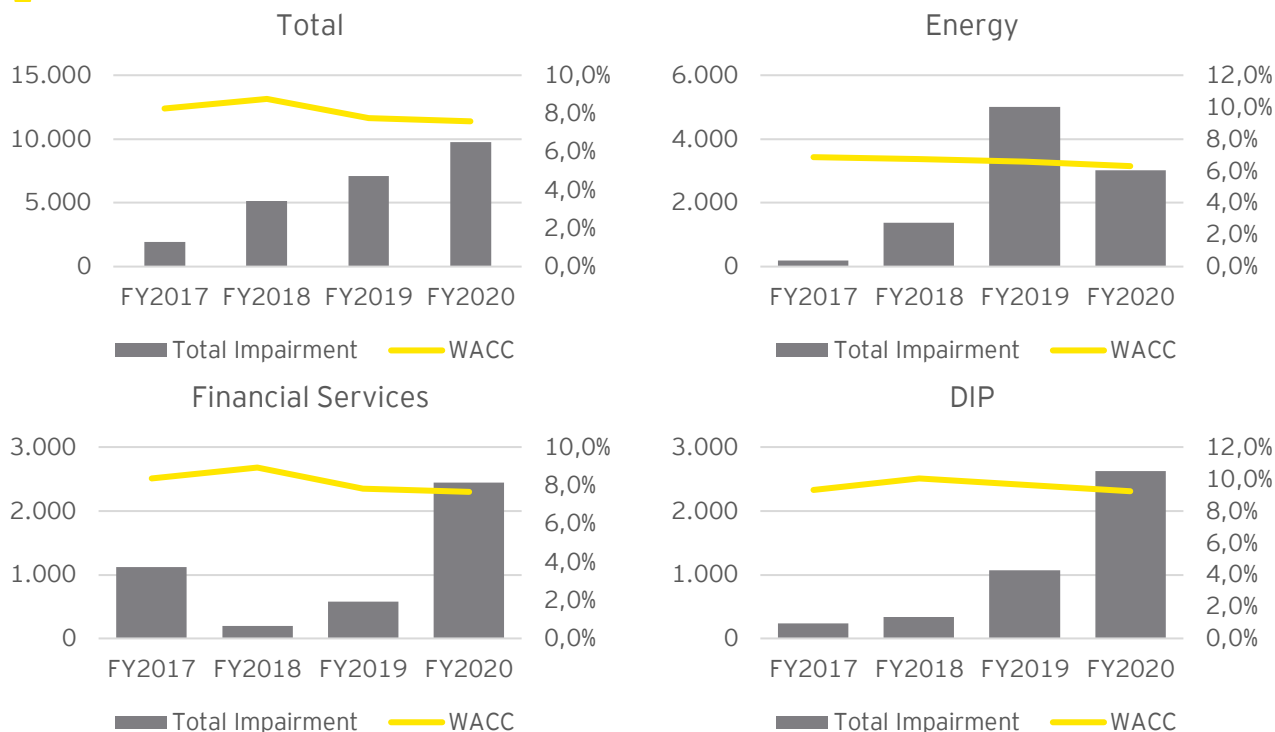


Covid-19 crisis impact:

Most of the companies of FTSE MIB have opted for a conservative plan rather than using additional premium to manage the impacts of Covid-19



Total impairment and WACC by top impaired FTSE MIB sectors in 2020



- ▶ In late 2019, but especially in 2020, Covid-19 pandemic generated a crisis that influenced most of the regions and countries all over the world. In Italy, the consequences of Covid-19 crisis are also reflected in the total impairments recorded by FTSE MIB companies
- ▶ Between 2019 and 2020 Total impairment in FTSE MIB firms increased of 37,8%. In the tables above are reported the sectors of FTSE MIB companies that recorded higher total impairment in 2020
- ▶ From the graph above, it can be seen that the energy sector has experienced a different trend in terms of total impairment: the total impairment in 2020 (EUR 3.021 m) is significantly lower than that recorded in 2019 (EUR 5.014 m). This difference is mainly due to the fact that in 2019, one of the company with the most influence on the energy sector recorded a peak in Total impairment due to a particular situation.
- ▶ Overall, the WACC of the companies, decreased between 2018 and 2020
- ▶ The different trends of Total Impairment and WACC mean that most of the companies have opted for a conservative plan rather than using additional premium to manage the impacts of Covid-19

Glossary



000	Thousands
Avg	Average
CAGR	Compound annual growth rate
CGU	Cash Generating Unit
DIP	Diversified Industrial Products
EUR mln	Euro Million
EUR bn	Euro Billion
EBT	Earnings Before Taxes
Excl	Excluded
FY	Financial Year
IAS	International Accounting Standard
Market cap	Market capitalization
Max	Maximum
Min	Minimum
n°	Number
O&G	Oil and Gas
RCP	Retail Consumer Products
TMT	Technology Media and Telecommunications
Total Impairment	Impairment of both Assets and Goodwill
vs.	Versus
Yrs	Years
WACC	Weighted Average Cost of Capital
#	Number



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