

A close-up photograph of a person's hands using a traditional red abacus. The abacus has multiple rows of red beads on wooden rods. The person's fingers are positioned over the beads, suggesting they are in the process of calculating. The background is a blurred grey surface.

# Impairment analysis of listed Italian companies

December 2022

The EY logo, consisting of the letters 'EY' in a bold, white, sans-serif font. A yellow diagonal line is positioned above the 'Y'.

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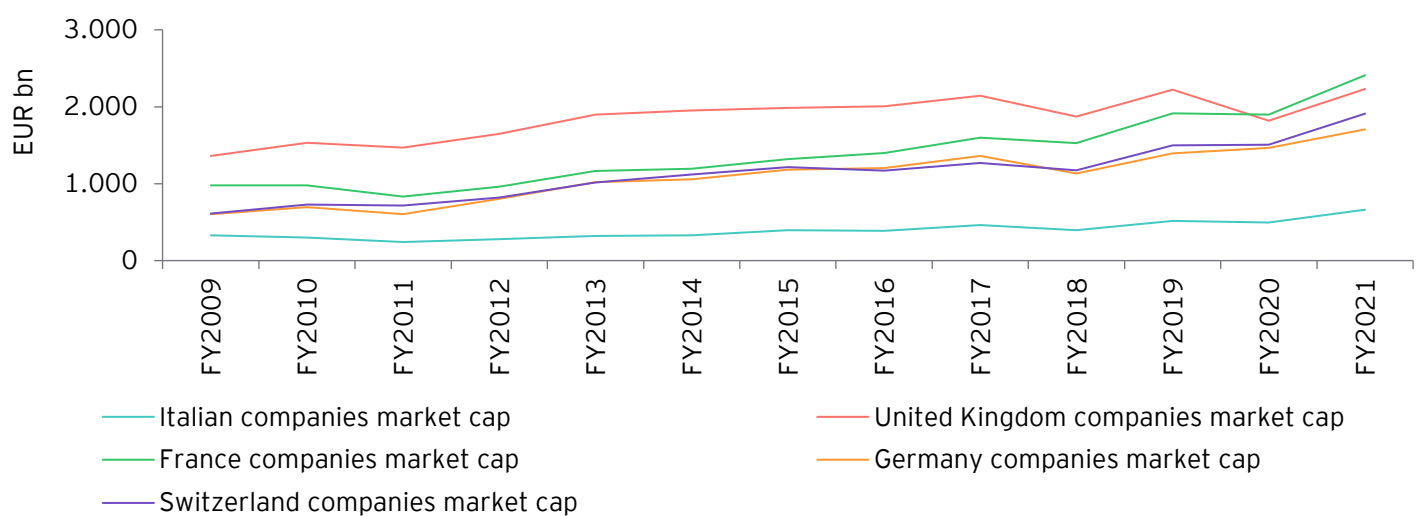
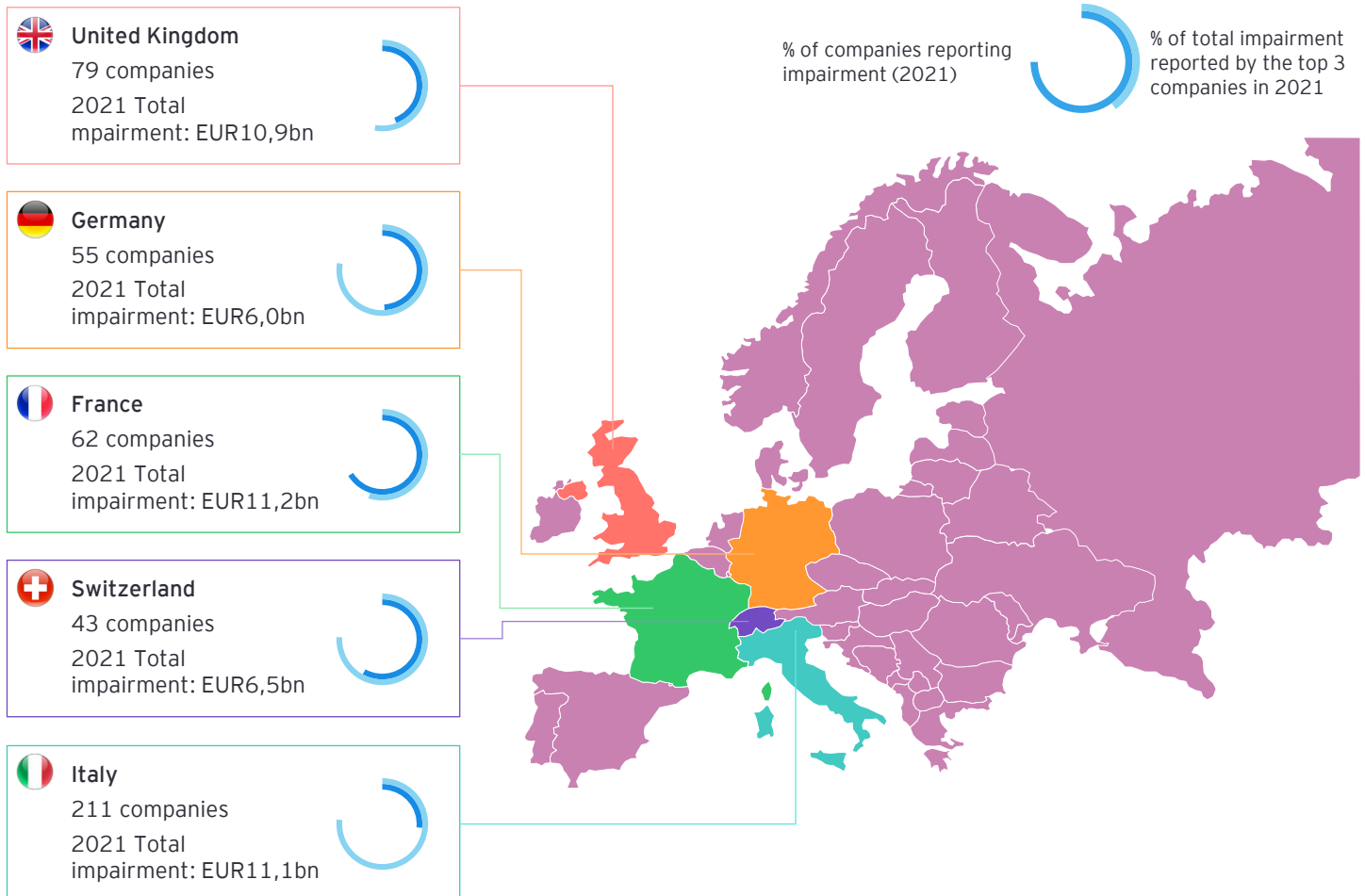
# 01.

## Executive summary

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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, 2012-2021)

FTSE MIB	Year	Energy	Financial services	TMT	DIP	Infrastructure	Others	Total
n° of companies	2021	7	13	3	7	2	8	40
Total impairment (EUR bn)	2021	4,4	0,9	4,1	0,1	1,3	0,2	11,1
	5 yrs Average	3,1	1,1	1,4	0,8	0,6	0,2	7,2
	10 yrs Average	4,6	2,0	1,4	0,7	0,6	0,5	9,7
% of companies reporting impairment	2021	100,0%	76,9%	66,7%	85,7%	100,0%	62,5%	80,0%
	5 yrs Average	100,0%	56,9%	53,3%	71,4%	80,0%	57,5%	68,0%
	10 yrs Average	90,0%	56,9%	66,7%	75,7%	80,0%	51,3%	66,8%
Market capitalization (EUR bn)	2021	162,0	175,5	58,7	75,5	16,1	163,4	651,2
	5 yrs Average	151,2	144,5	40,1	60,2	19,0	85,4	500,4
	10 yrs Average	135,7	127,4	31,6	52,7	20,4	51,4	419,2
Market-to-book ratio	2021	1,5x	0,8x	1,7x	1,3x	1,0x	2,3x	1,3x
	5 yrs Average	1,4x	0,7x	1,2x	1,0x	1,1x	2,1x	1,1x
	10 yrs Average	1,1x	0,7x	1,0x	1,0x	1,4x	1,5x	1,0x

- ▶ In 2021, Energy sector reported highest total impairment with EUR 4,4bn followed by TMT sector with EUR 4,1bn
  - ▶ As per 5 years average total impairment, Energy sector reported highest impairment with EUR 3,1bn followed by TMT sector (EUR 1,4bn)
  - ▶ As per 10 years average total impairment, Energy sector reported highest impairment with EUR 4,6bn followed by Financial services sector (EUR 2,0bn)
- ▶ In 2021, % of companies reporting impairment was 80,0% for FTSE MIB, while all Energy and Infrastructure sectors companies reported impairment
  - ▶ Over the last 5/10 years, a strong majority of companies in Energy sector recorded impairments
- ▶ In 2021, TMT sector reported the highest market-to-book-ratio – equal to 1,7x – whereas Energy and DIP sectors reported 1,5x and 1,3x, respectively. The lowest market-to-book ratio in 2021 belongs to the Financial Service industry (0,8x)
  - ▶ As per 5 years average market-to-book-ratio, Energy and TMT sectors reported highest ratio – respectively 1,4x and 1,2x – followed by Infrastructure sector with a ratio equal 1,1x. The Infrastructure sector shows the highest 10 years average ratio (1,4x) followed by Energy sector with a ratio of 1,1x. 'Others' are excluded from the analysis

# Executive summary

MSCI Europe impairment analysis for top 5 sectors  
(based on average of 10 years total impairment, 2012-2021)

MSCI Europe	Year	Energy	Financial services	TMT	RCP	DIP	Others	Total
n° of companies	2021	39	72	43	64	72	132	422
Total impairment (EUR bn)	2021	15,8	4,1	9,2	5,1	2,0	17,4	53,6
	5 yrs Average	21,2	7,5	5,4	7,2	6,5	16,6	64,4
	10 yrs Average	31,1	9,8	8,5	6,0	5,8	12,9	74,0
% of companies reporting impairment	2021	69,2%	52,8%	44,2%	62,5%	47,2%	50,8%	53,3%
	5 yrs Average	71,3%	53,6%	50,7%	56,3%	52,8%	46,8%	53,1%
	10 yrs Average	71,5%	54,6%	51,4%	54,2%	54,2%	41,4%	51,6%
Market capitalization (EUR bn)	2021	1.377,9	1.925,2	1.240,4	2.893,4	1.743,0	3.776,8	12.956,8
	5 yrs Average	1.248,9	1.657,3	928,6	2.223,3	1.513,4	2.151,8	10.290,3
	10 yrs Average	1.129,5	1.558,8	816,4	1.834,9	1.194,6	1.801,3	8.908,6
Market-to-book ratio	2021	1,5x	0,9x	2,4x	4,0x	2,6x	2,3x	2,0x
	5 yrs Average	1,4x	0,9x	2,1x	3,4x	2,4x	2,1x	1,7x
	10 yrs Average	1,2x	0,9x	2,0x	3,4x	2,3x	2,0x	1,7x

- ▶ In 2021, Energy sector reported the highest total impairment with EUR 15,8bn followed by TMT sector with EUR 9,2bn
  - ▶ As per 5 and 10 years average total impairment, Energy sector reported the highest impairment (EUR 21,2bn and EUR 31,1bn respectively), Financial Service sector was the second higher
- ▶ In 2021, % of companies reporting impairment was 53,3% for MSCI Europe, while the highest % of companies reporting impairment was recorded by the Energy sector (69,2%)
- ▶ In 2021, RCP sector reported the highest market-to-book-ratio (equal to 4,0x), whereas, DIP and TMT sectors reported 2,6x and 2,4x
- ▶ As per 5 and 10 years average market-to-book-ratio, RCP sector reported the highest values (3,4x for both averages), followed by DIP sector (2,4x and 2,3x respectively)



# 02.

## Introduction

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### Impairment testing (IAS – 36)

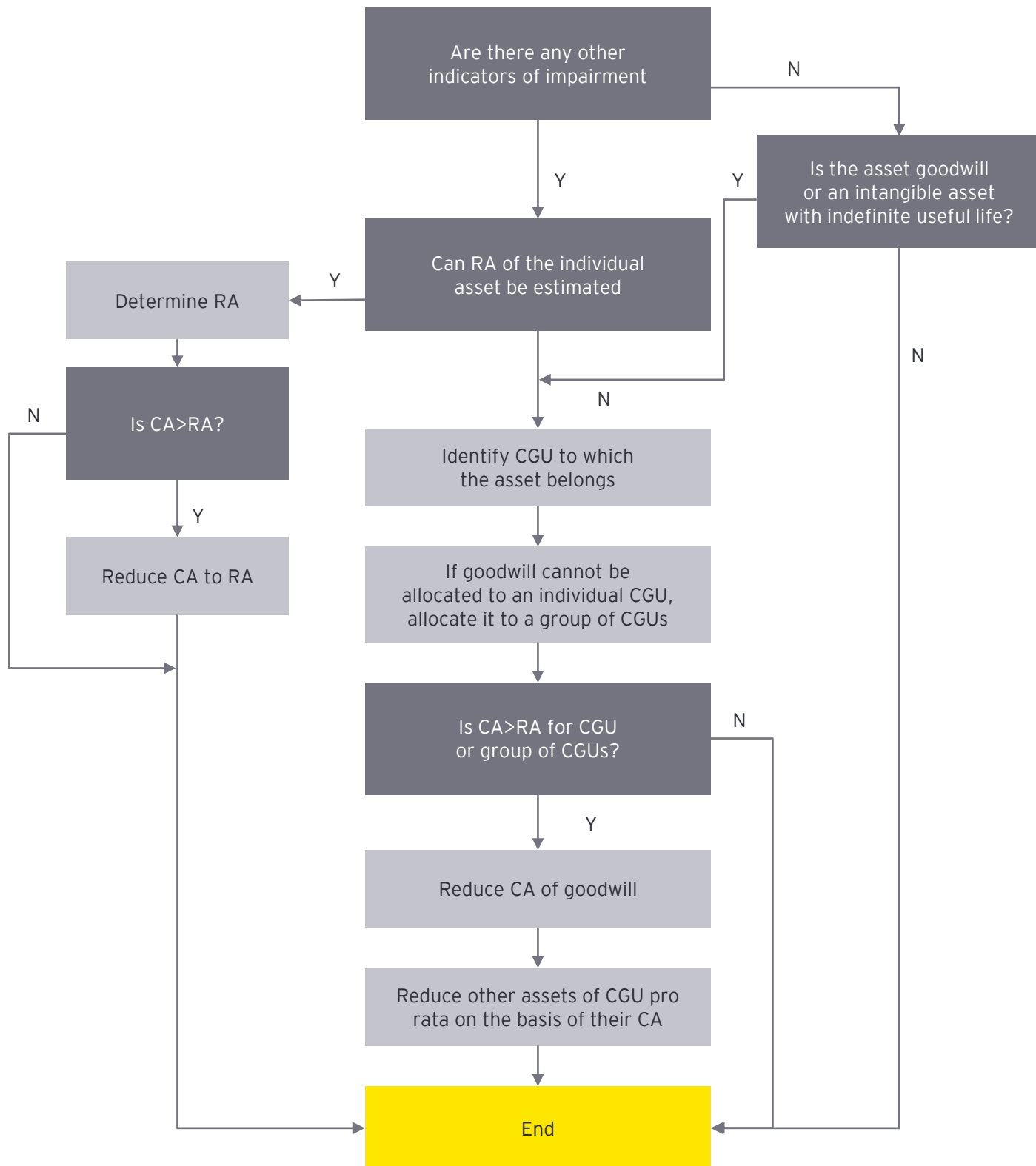
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- ▶ IAS 36 specifies that the assets are to be carried at no more than their Recoverable Amount (RA). The companies test for impairment for its assets
- ▶ IAS 36 requires an entity to assess, at each reporting date if an asset may be impaired
- ▶ To 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 2014-2021

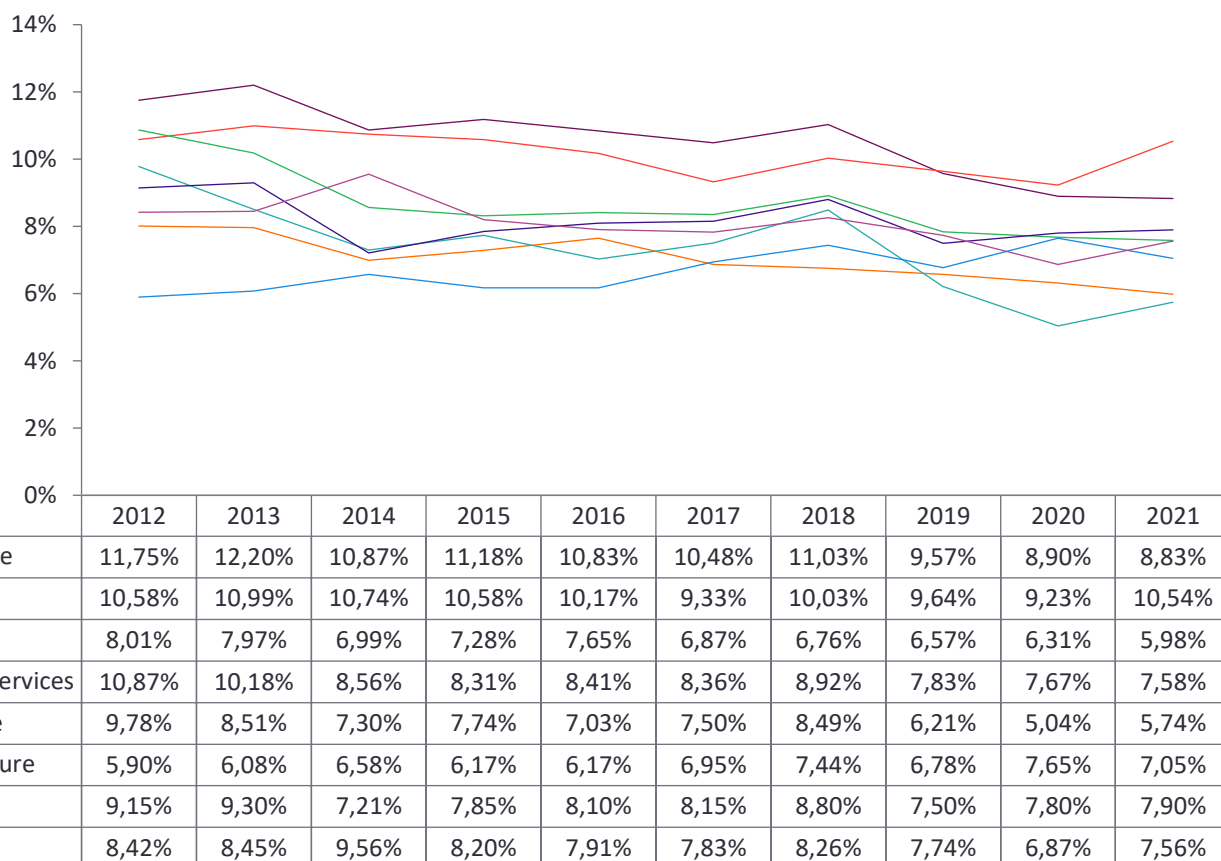
Industry	Company Name	DCF (Discounted Cash Flows)	OPM (Options Pricing Model)	DDM (Dividend Discount Model)	GGM (Gordon Growth Model)	Comparable Approach
DIP	Company A	✓				✓
	Company B	✓				
Energy	Company C	✓				
	Company D	✓				
Financial Services	Company E	✓	✓			✓
	Company F	✓		✓		
	Company G	✓				✓
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 2014-2021
  - ▶ 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

# 2012-2021 Industry WACC

## Declining WACC for FTSE MIB companies from 2012 to 2021

### 2012-2021 WACC of FTSE MIB companies as per industry classification

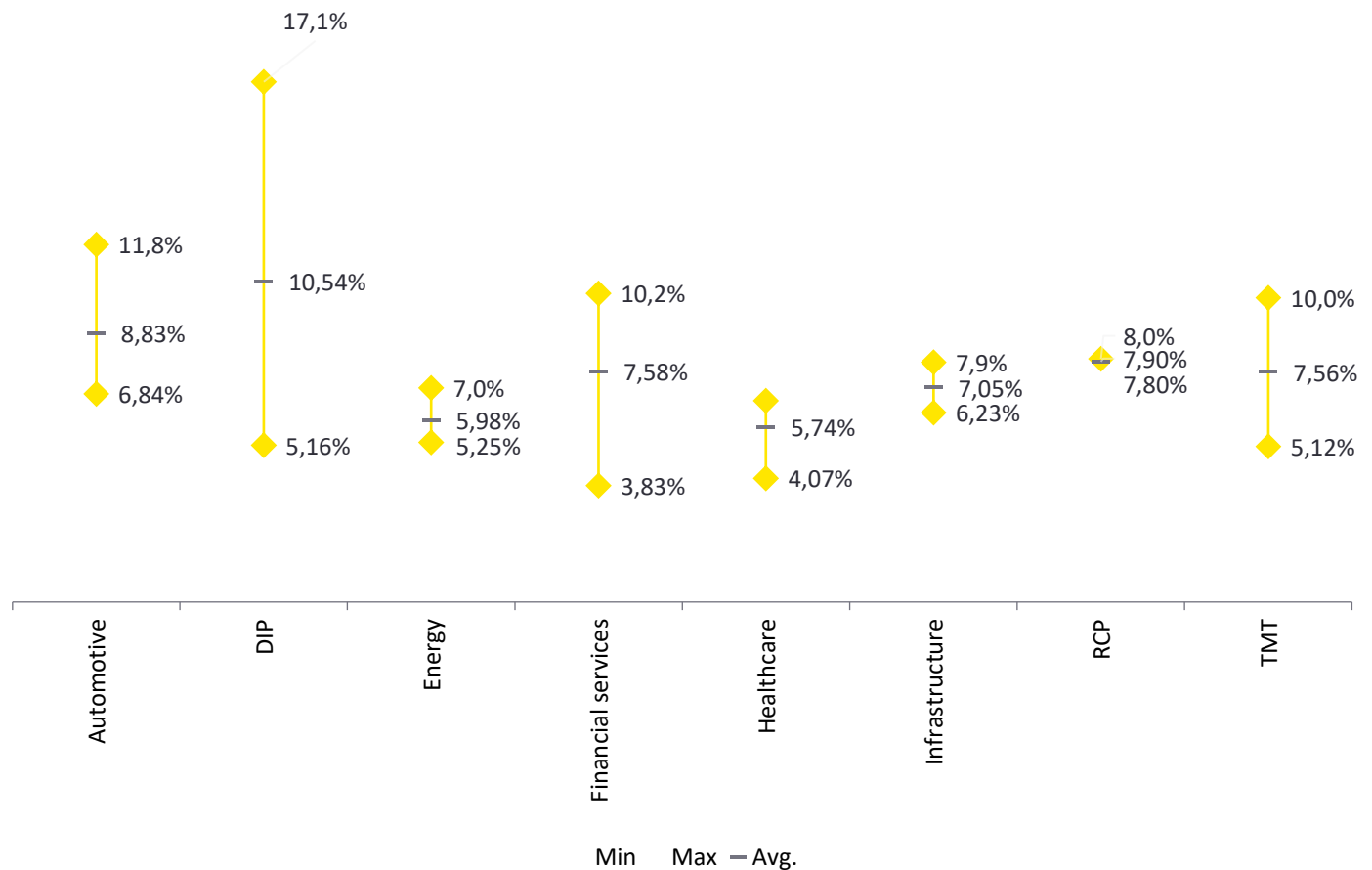


- ▶ Industry WACC shows low correlation among industries between 2012 and 2021
- ▶ Automotive WACC reached a peak in 2013, however, the WACC of this sector decreased reaching a minimum of 8,83% in 2021
- ▶ Over the period 2012-2016, the Infrastructure sector showed the lowest WACCs, while in 2017 and 2018 the minimum was recorded by the Energy sector and over the period 2019-2021 by Healthcare (6,21%, 5,04% and 5,74% respectively)
- ▶ Overall, 2021 WACC was lower compared to that of 2012 for almost all industries

# 2021 Industry WACC

DIP companies had highest average WACC followed by Automotive and RCP

## 2021 WACC\* of FTSE MIB companies as per industry classification



- ▶ In 2021, the DIP industry recorded the highest maximum WACC, (compared to the WACCs analysed for 2021 of FTSE MIB companies) with a value of 17,10% followed by Automotive companies with maximum WACC of 11,75% and 10,15% for Financial services
- ▶ Average WACC for DIP industry was the highest (10,54%) followed by Automotive with 8,83% and RCP with 7,8%, whereas Healthcare industry had the lowest average WACC, equal to 5,74%
- ▶ FTSE MIB average WACC is 7,78%

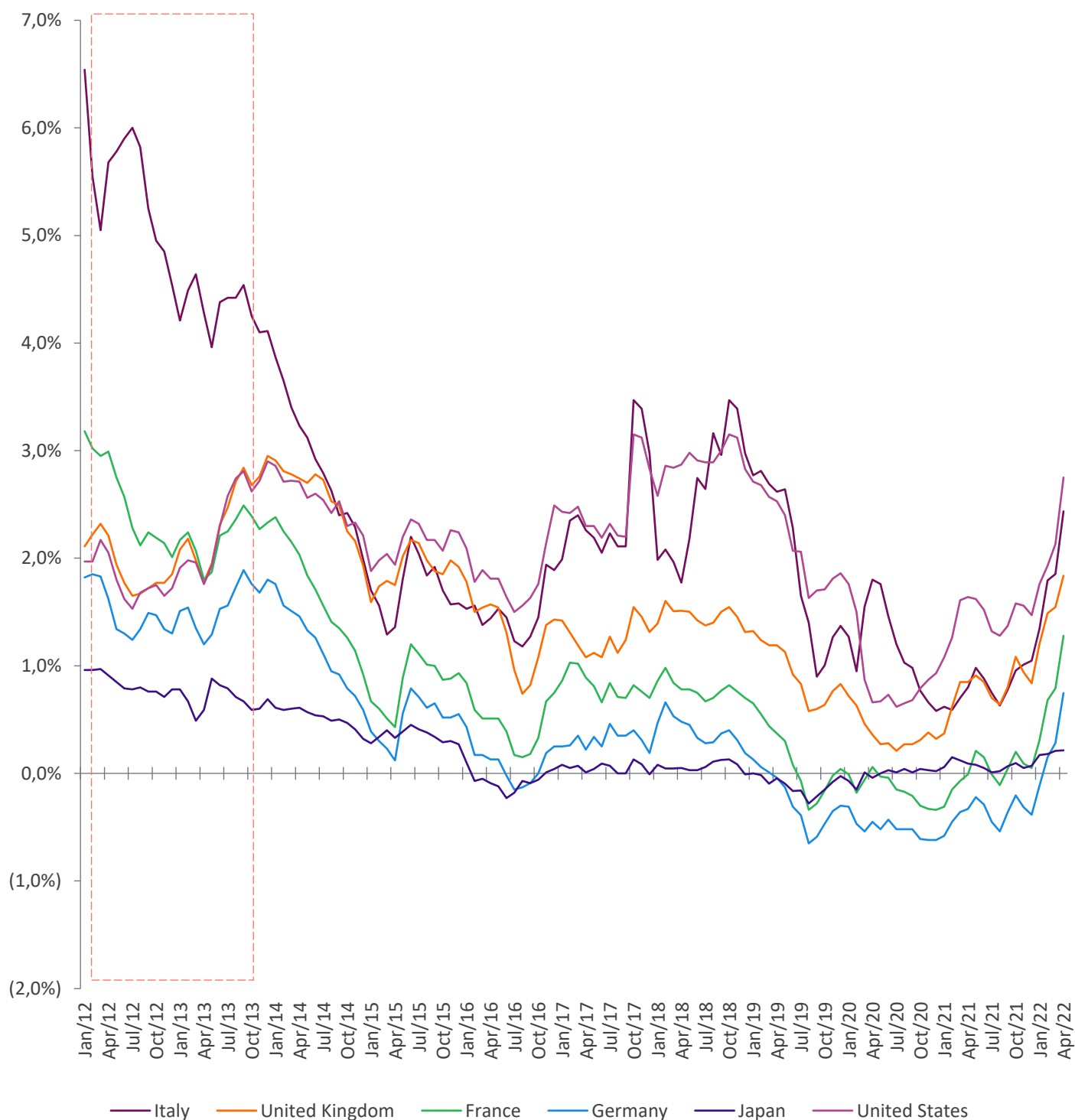
\* Rates can be pre and post taxes. In cases where companies had more than one WACC for different CGUs, an average was made in order to define the WACC for the selected year.



# 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





# 03.

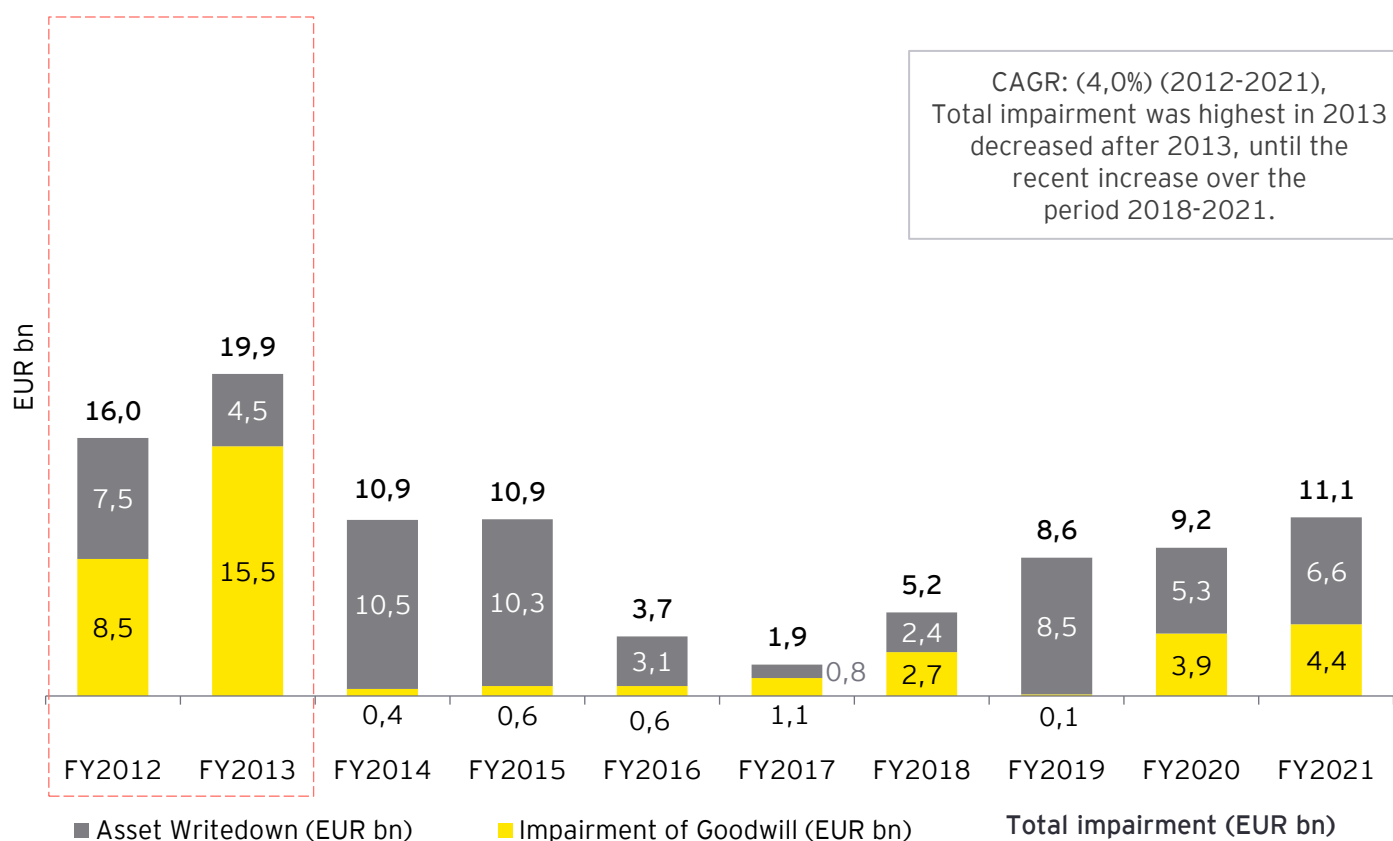
## Total impairment

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# Total impairment

Significant decrease in Total impairment by Italian firms especially financial companies after 2012-2013, and over the period 2020-2021 increase in goodwill impairment

## Total impairment of Italian companies\*



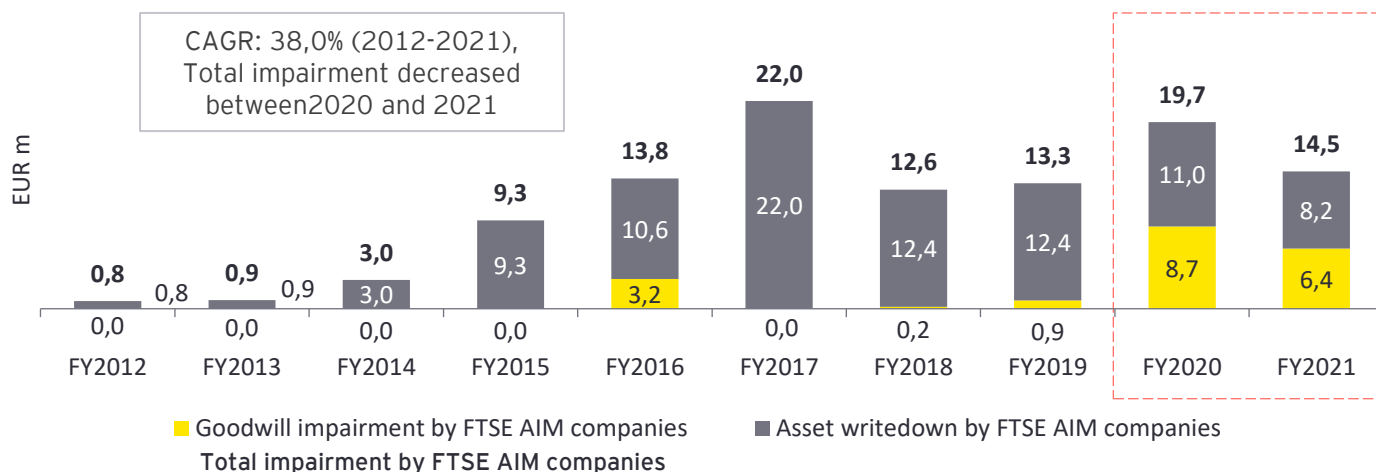
- ▶ Total impairment recorded by Italian companies decreased at a (4,0%) 2012-2021 CAGR, reaching EUR 11,1bn in 2021 from EUR 16,0bn in 2012
  - ▶ The highest goodwill impairment was recorded in 2013 (EUR 15,5bn), and decreased reaching a minimum of EUR 0,1bn in 2019, and raised in 2020 and 2021 by respectively EUR 3,9bn and EUR 4,4bn
  - ▶ The assets write down decreased at CAGR 2012-2021 of (1,3%) reaching EUR 6,6bn in 2021 from EUR 7,5bn in 2012
- ▶ Total impairment showed the highest value in 2013, with EUR 19,9bn, due to the impact of the financial crisis on financial services and energy companies
- ▶ Total impairment showed an increasing trend from 2017 to 2021
- ▶ Covid-19 crisis caused the significant increase of impairment of Goodwill in 2020 and 2021

\* Italian companies include FTSE AIM and FTSE MIB companies

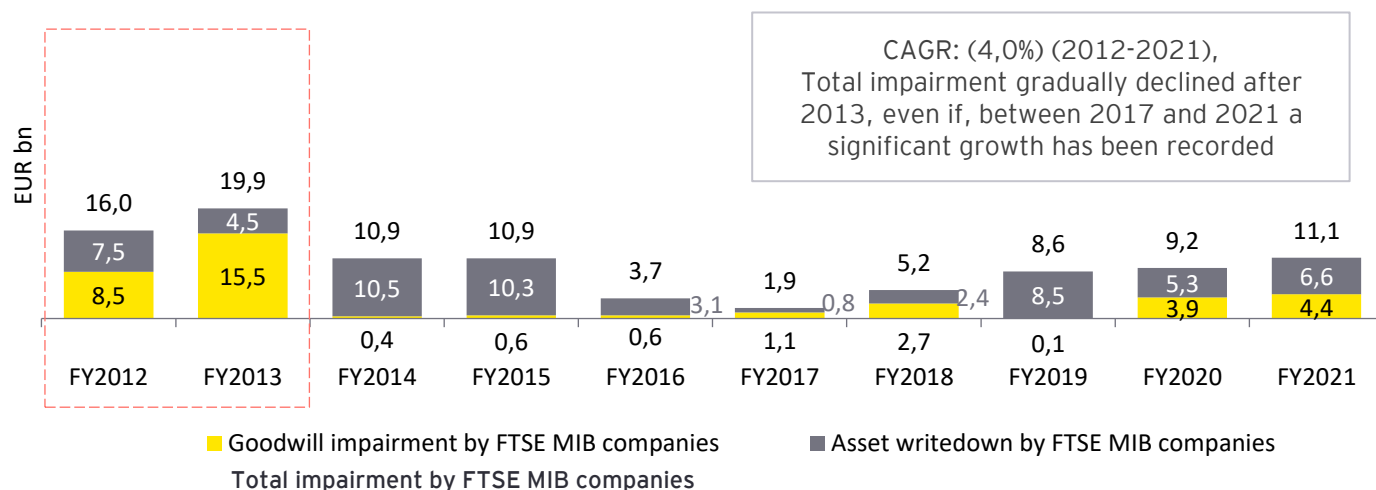
# Total impairment

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)



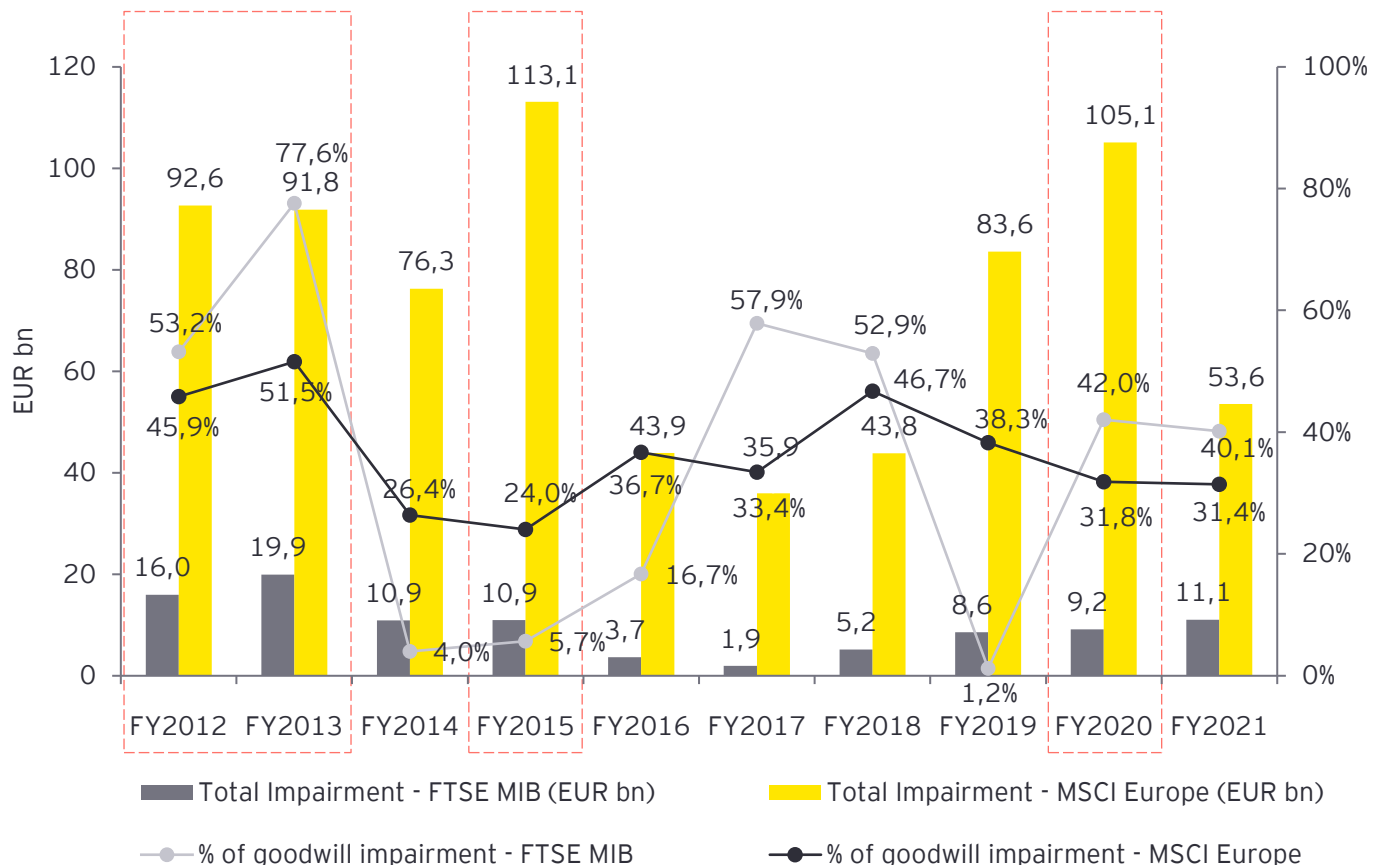
- ▶ Total impairment of FTSE MIB decreased at a CAGR of (4,0%) overt the period 2012-2021, while FTSE AIM showed an increasing trend with a 38,0% CAGR during the same period
  - ▶ Total impairment of FTSE AIM companies increased between 2012 and 2017, reaching a peak of EUR 22,0m in 2017. In 2018 and 2019 total impairment decreased at EUR 13,3m and grew again in 2020 and 2021 due to Covid-19 crisis
  - ▶ Total impairment of FTSE MIB companies was highest in 2013 (EUR 19,9bn) and decreased gradually until 2017, afterwards it started increasing yearly reaching an amount of EUR 11,1bn in 2021



# Total impairment

MSCI Europe registered highest impairment in 2015

## Total impairment of FTSE MIB vs. MSCI Europe companies



- ▶ Total impairment for MSCI Europe companies decreased at a 2012-2021 CAGR of (5,9%) and in the same way decreased for FTSE MIB companies at a CAGR (4,0%) during 2012-2021 period
- ▶ For MSCI Europe companies, total impairment reached a peak in 2015 (EUR 113,1bn), followed by the value registered in 2020 (EUR 105,1bn) due to Covid-19 crisis
- ▶ The % of goodwill impairment for MSCI Europe companies decreased from 45,9% in 2012 to 24,0% in 2015 and then increased reaching 31,4% in 2021
- ▶ The % of goodwill impairment for FTSE MIB companies decreased from 77,6% in 2013 to a minimum of 1,2% in 2019 and then increased in 2021 reaching 40,1%



# 04.

## Reporting of impairment

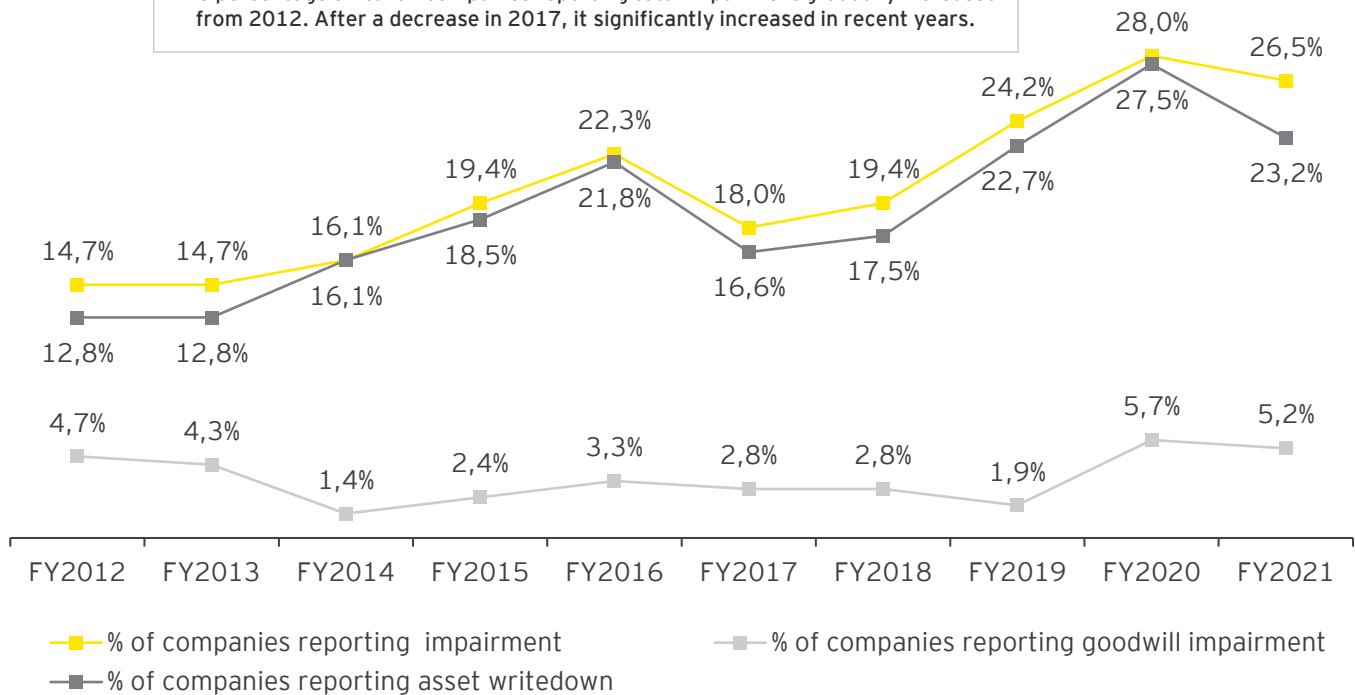
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# % of Companies reporting impairment

Companies reporting total impairment (asset write down and goodwill impairment) increased between 2020 and 2021

## Percentage of Italian companies\* reporting impairment

The percentage of Italian companies reporting total impairment gradually increased from 2012. After a decrease in 2017, it significantly increased in recent years.



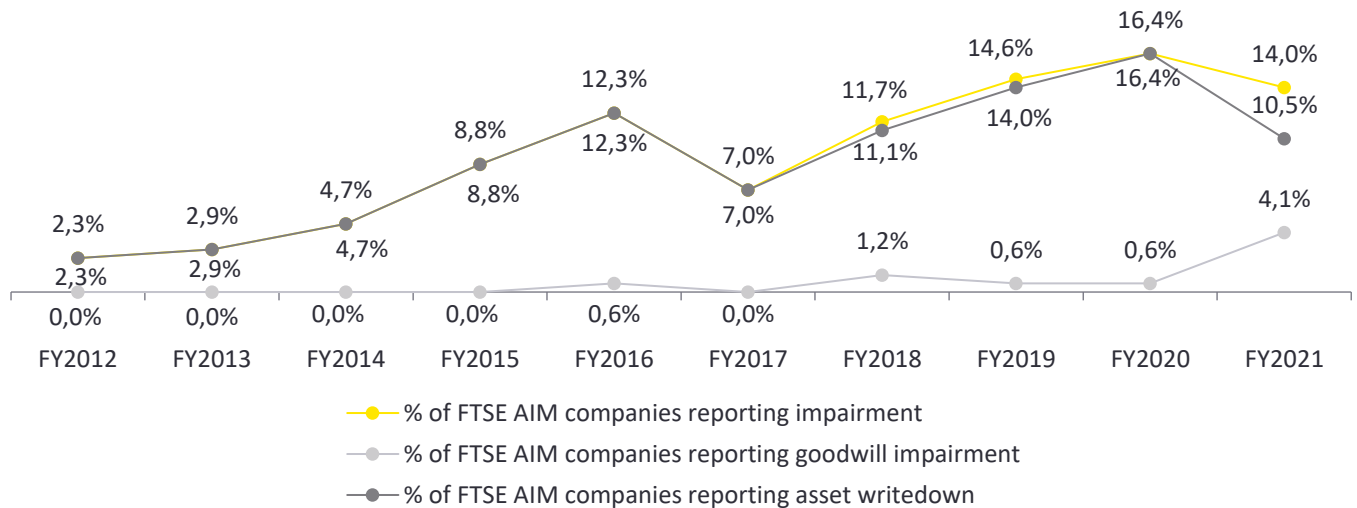
- ▶ The percentage of Italian companies reporting total impairment increased from 14,7% in 2012 to 26,5% in 2021, primarily due to increase in reporting of asset write-down by the Italian companies since 2012
  - ▶ The percentage of companies reporting goodwill impairment increased from 4,7% in 2012 to 5,2% in 2021, with minimum value reached in 2014 (1,4%) and maximum value in 2020 (5,7%)
  - ▶ The percentage of companies reporting asset write-down increased from a minimum of 12,8% in 2012 to the maximum of 27,5% in 2020
- ▶ Over the past 10 years, on average, only 3,5% of the companies reported goodwill impairment, as compared to an average of 19,0% for asset write-down over the same period (2012-2021)
  - ▶ In 2012, companies reporting impairment of goodwill and asset write-down were 4,7% and 12,8%, respectively
  - ▶ In 2021, companies reporting impairment of goodwill and asset write-down were 5,2% and 23,2%, respectively

\* Italian companies include FTSE AIM and FTSE MIB companies

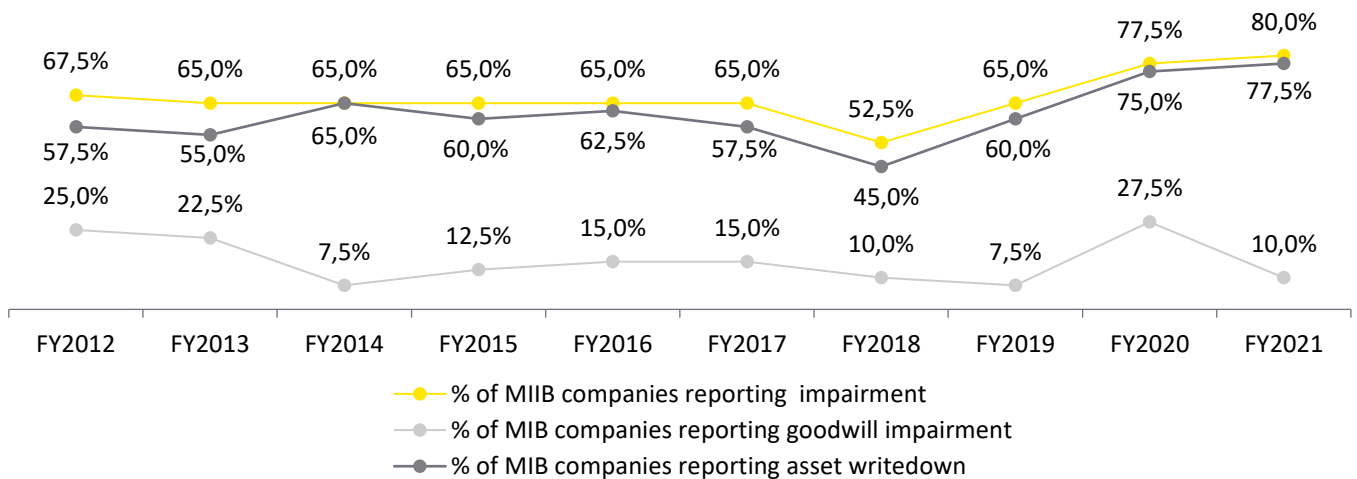
# % of Companies reporting impairment

In 2021 alone, 80,0% of FTSE MIB listed companies and 14,0% of FTSE AIM listed companies recorded total impairment

## Percentage of FTSE AIM companies reporting impairment



## Percentage of FTSE MIB companies reporting impairment



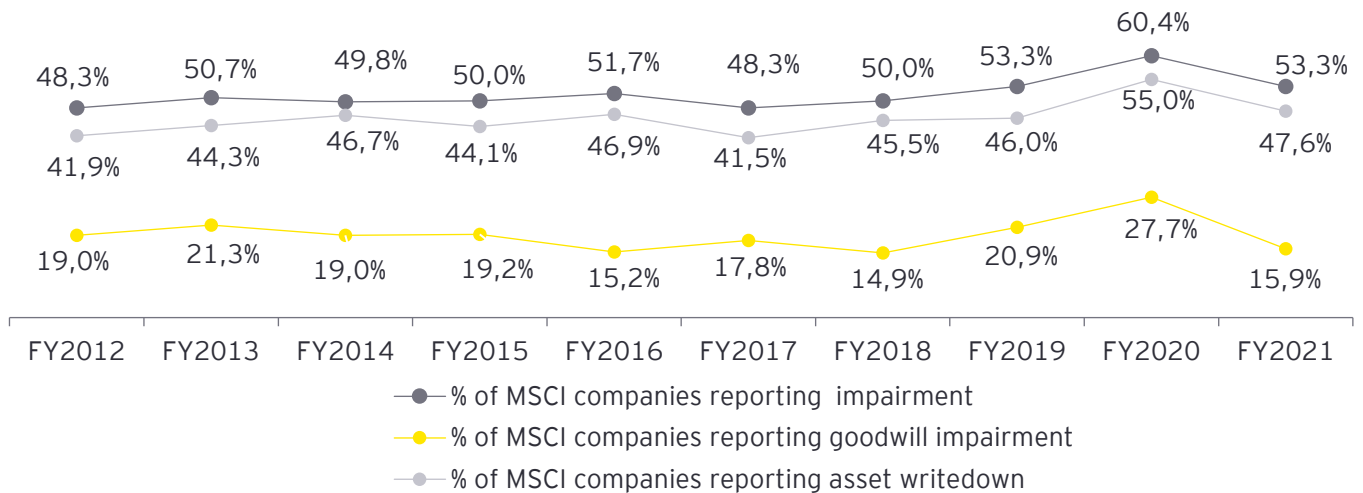
- ▶ In 2021, reporting of total impairment increased for FTSE MIB and decreased for FTSE AIM companies
  - ▶ 80,0% of FTSE MIB companies reported total impairment in 2021 vs. 77,5% in 2020
  - ▶ 14,0% of FTSE AIM companies reported total impairment in 2021 vs. 16,4% in 2020
- ▶ Reporting of goodwill impairment was comparatively lower than asset write-down across companies over the past 10 years (2012-2021)
  - ▶ FTSE AIM companies reported an average of 0,7% for goodwill impairment against 9,0% for asset write-down
  - ▶ FTSE MIB companies reported an average of 15,3% for goodwill impairment against 61,5% for asset writedown
- ▶ No goodwill was impaired by FTSE AIM companies during 2012-2015 and even in 2017, the figures are negligible as these companies are too small and inactive in M&A space



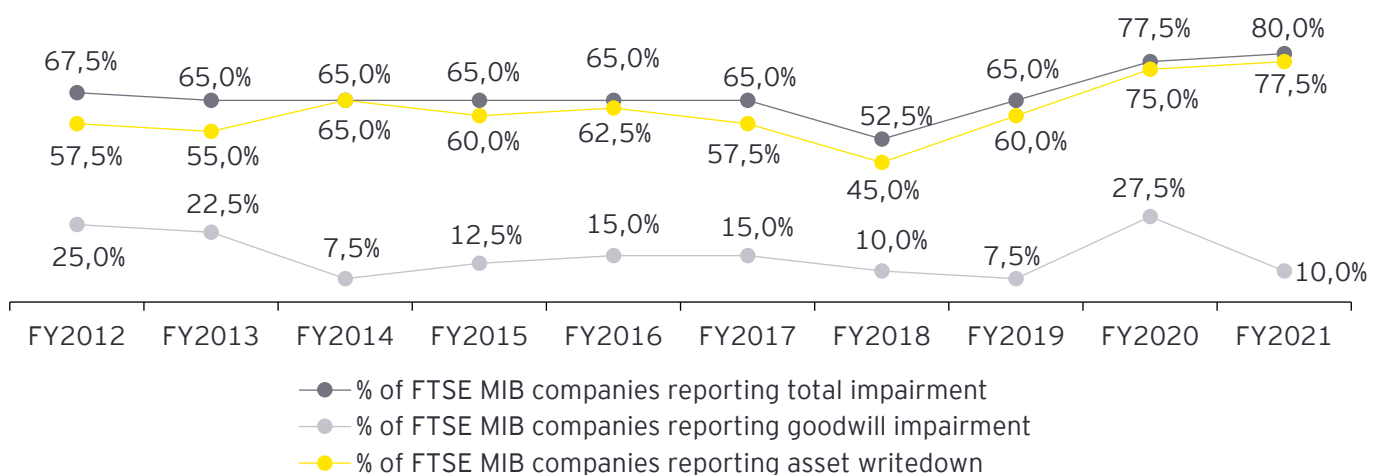
## % of Companies reporting impairment

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, 218 companies did not report impairment in 2012 as compared to 197 companies in 2021
  - ▶ In 2021, 53,3% of MSCI Europe companies and 80,0% of FTSE MIB companies reported impairment
- ▶ Reporting of goodwill impairment was comparatively lower than asset write-down
  - ▶ For MSCI Europe, 15,9% of companies reported goodwill impairment vs. 10,0% of FTSE MIB companies in 2021
- ▶ On average, 51,6% of MSCI Europe companies reported a total impairment, against 66,8% of FTSE MIB companies between 2012 and 2021
  - ▶ For same period, on average, % of companies reporting goodwill impairment was 19,1% for MSCI Europe and 15,3% for FTSE MIB, while % of companies reporting asset write-down was 45,9% and 61,5% respectively



# 05.

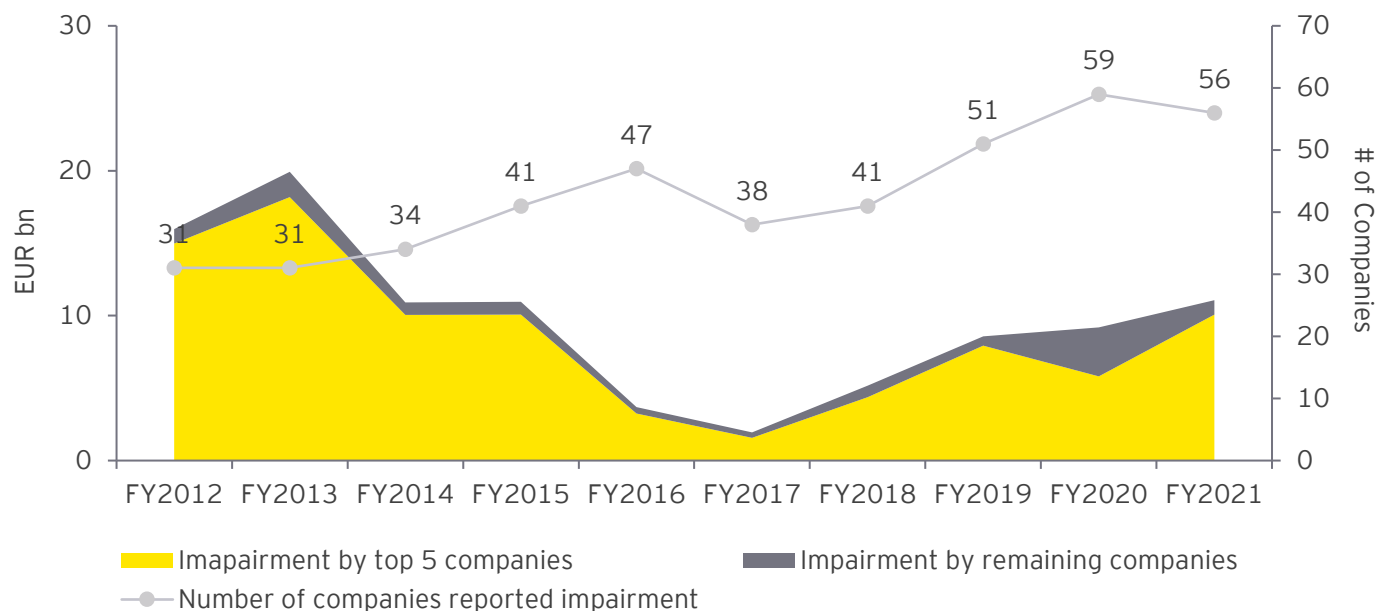
## Concentration of impairment

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# Concentration of impairment

Total impairment was highly concentrated among top 5 companies

## Concentration of impairment for Italian companies\*



	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Total companies	211	211	211	211	211	211	211	211	211	211
Companies that reported impairment	31	31	34	41	47	38	41	51	59	56
% of companies reported impairment	14,7%	14,7%	16,1%	19,4%	22,3%	18,0%	19,4%	24,2%	28,0%	26,5%
% of impairment recognized by top 5 companies	93,8%	91,2%	92,1%	92,0%	87,9%	79,7%	84,4%	92,4%	63,1%	90,9%

Impairment was highly concentrated in the top 5 companies between 2012 and 2021

- ▶ Since 2012, the concentration of impairment in the top 5 companies decreased, reaching a minimum in 2020
- ▶ From 2012 to 2021, on average, 86,8% of the impairment was reported by the top 5 companies

\* Italian companies include FTSE AIM and FTSE MIB companies

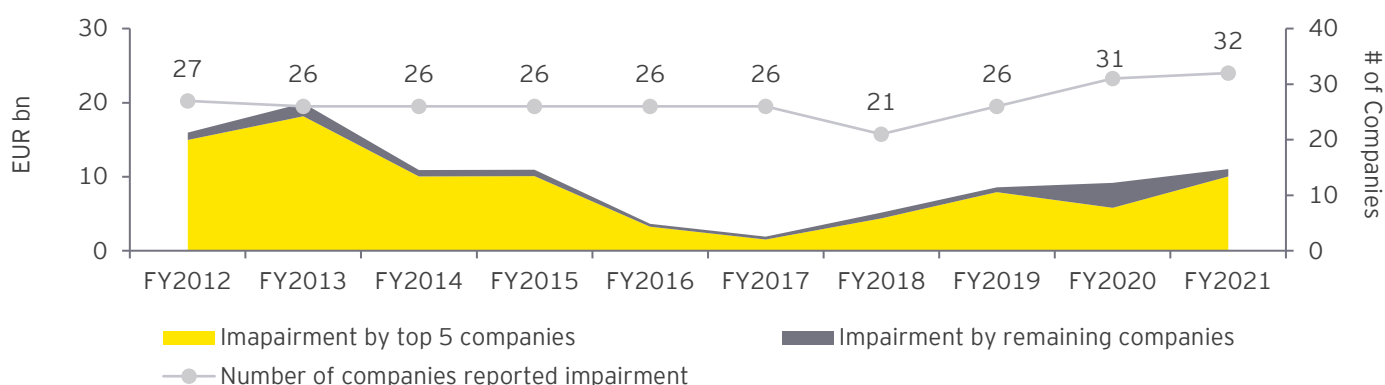
# Concentration of impairment

In 2021 71,5% and 91,1% of total impairment was reported by top 5 companies in FTSE AIM and FTSE MIB, respectively

## Concentration of impairment of FTSE AIM companies

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Total companies	171	171	171	171	171	171	171	171	171	171
Companies that reported impairment	4	5	8	15	21	12	20	25	28	24
% of companies reported impairment	2,3%	2,9%	4,7%	8,8%	12,3%	7,0%	11,7%	14,6%	16,4%	14,0%
% of impairment recognized by top 5 companies (by value)	100,0%	100,0%	97,8%	81,7%	92,6%	96,4%	86,0%	61,7%	85,6%	71,5%

## Concentration of impairment of FTSE MIB companies



	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Total companies	40	40	40	40	40	40	40	40	40	40
Companies that reported impairment	27	26	26	26	26	26	21	26	31	32
% of companies reported impairment	67,5%	65,0%	65,0%	65,0%	65,0%	65,0%	52,5%	65,0%	77,5%	80,0%
% of impairment recognized by top 5 companies (by value)	93,8%	91,2%	92,1%	92,0%	88,3%	80,6%	84,6%	92,5%	63,3%	91,1%

- ▶ 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 2012 to 2013, and as more companies reported total impairment over the years, concentration decreased, reaching 71,5% in 2021
  - ▶ FTSE MIB: the concentration of impairment by top 5 companies decreased until 2017 and then increased in 2018 and 2019, dropped significantly in 2020, also due to an increase in the number of companies reporting impairment and then increased reaching 91,1% in 2021



# Concentration of impairment

% of impairment recognized by top 5 companies decreased for FTSE MIB and MSCI Europe companies between 2012 and 2021

## Concentration of impairment of MSCI Europe companies

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Total companies	422	422	422	422	422	422	422	422	422	422
Companies that reported impairment	204	214	210	211	218	204	211	225	255	225
% of companies reported impairment	48,3%	50,7%	49,8%	50,0%	51,7%	48,3%	50,0%	53,3%	60,4%	53,5%
% of impairment recognized by top 5 companies	38,9%	46,7%	40,0%	30,1%	34,1%	38,4%	41,7%	32,5%	26,5%	31,3%
% of impairment recognized by top 10 companies	57,3%	64,1%	59,3%	53,1%	50,9%	52,7%	55,9%	50,9%	37,9%	47,6%

## Concentration of impairment of FTSE MIB companies

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Total companies	40	40	40	40	40	40	40	40	40	40
Companies that reported impairment	27	26	26	26	26	26	21	26	31	32
% of companies reported impairment	67,5%	65,0%	65,0%	65,0%	65,0%	65,0%	52,5%	65,0%	77,5%	80,0%
% of impairment recognized by top 5 companies	93,8%	91,2%	92,1%	92,0%	88,3%	80,6%	84,6%	92,5%	63,3%	91,1%
% of impairment recognized by top 10 companies	98,8%	99,0%	97,5%	98,3%	96,5%	91,4%	95,4%	97,4%	91,3%	96,4%

- ▶ 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 38,9% in 2012 to 31,3% in 2021, probably due to the change in the n° of companies reporting impairment
  - ▶ FTSE MIB: impairment recorded by top 5 companies decreased from 93,8% in 2012 to 91,1% in 2021
- ▶ Total impairment concentrated in the top 10 companies increased for both MSCI Europe and FTSE MIB companies from 2020 to 2021



# 06.

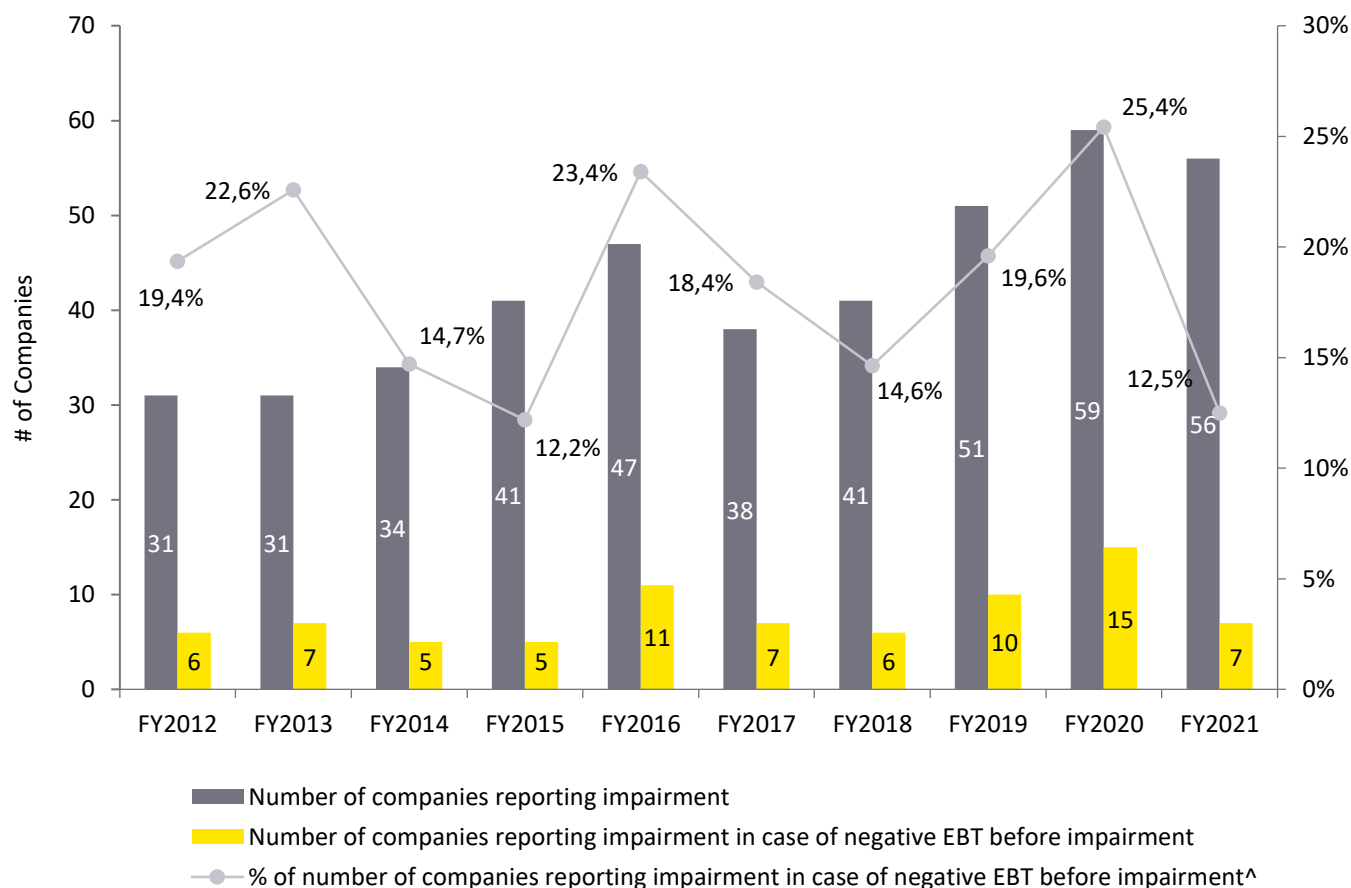
## Timing of impairment

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# Timing of impairment

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

## Timing of impairment for Italian companies\*



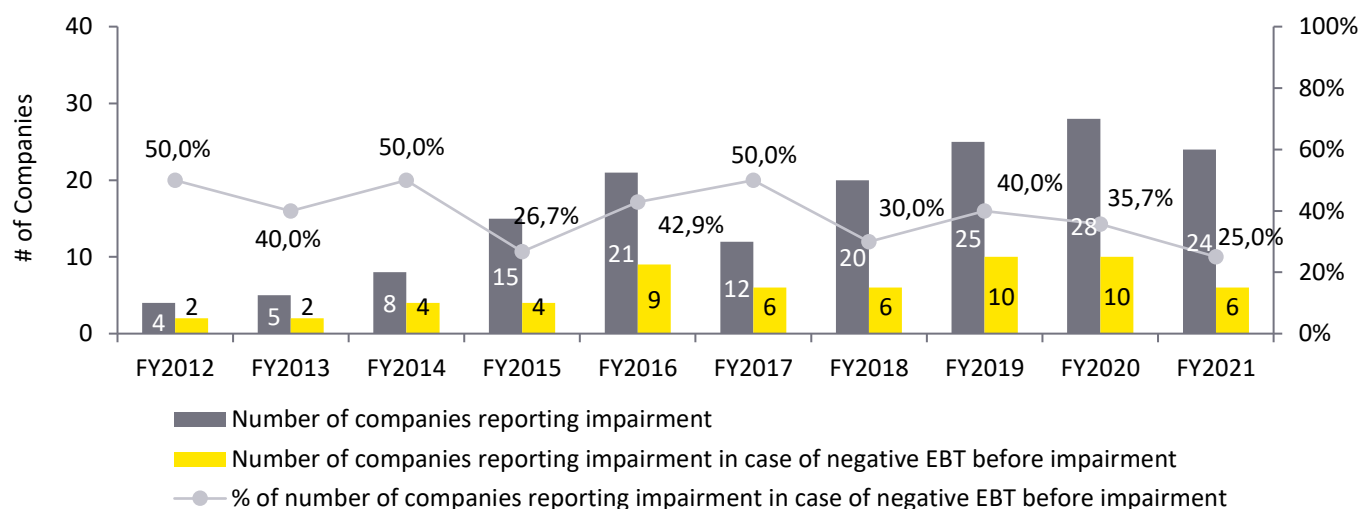
- ▶ The above chart indicates the companies recognizing impairment when they reported negative EBT before impairment
  - ▶ From 2012 to 2021, on average, 18,3% of the Italian companies reported impairment
  - ▶ The chart shows that the majority of the companies reported impairment when they recorded positive EBT before impairment
- ▶ Number of companies reporting impairment in case of negative EBT (before impairment) over the last 10 years period (2012-2021) was on average 8, with a peak of 15 companies in 2020 and a minimum both in 2014 and 2015 with five companies
- ▶ % of number of companies reporting impairment in case of negative EBT (before impairment) over the last 10 years period (2012-2021) was on average 18,3%. The highest figure was reached in 2020 (25,4%) and the lowest in 2015 (12,2%)

\* Italian companies include FTSE AIM and FTSE MIB companies

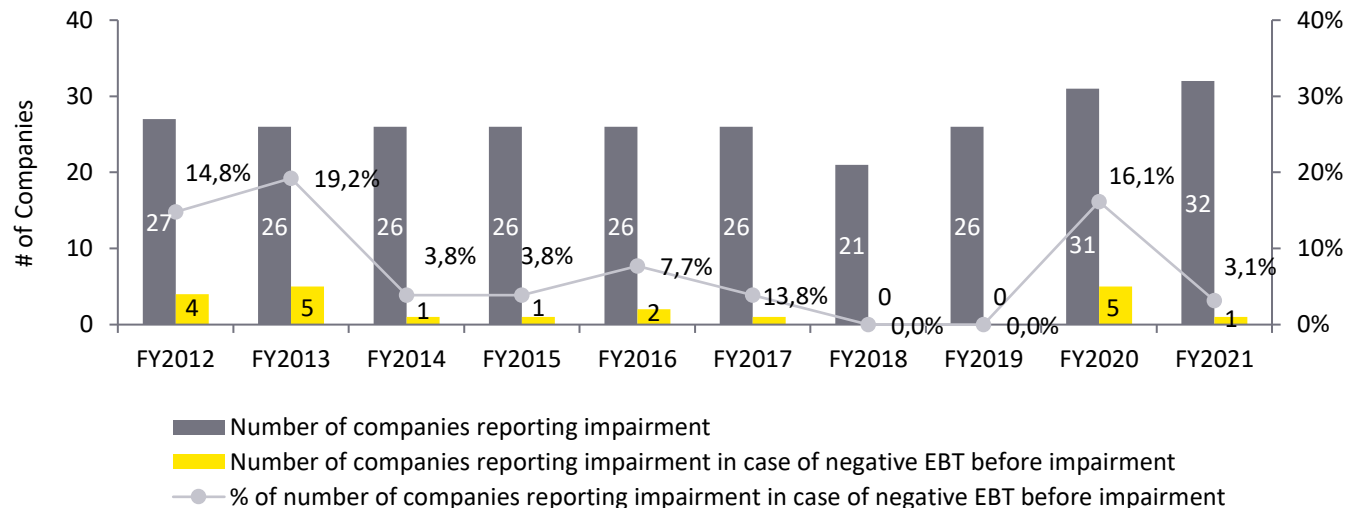
# Timing of impairment

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

## Timing of impairment (FTSE AIM)



## Timing of impairment (FTSE MIB)

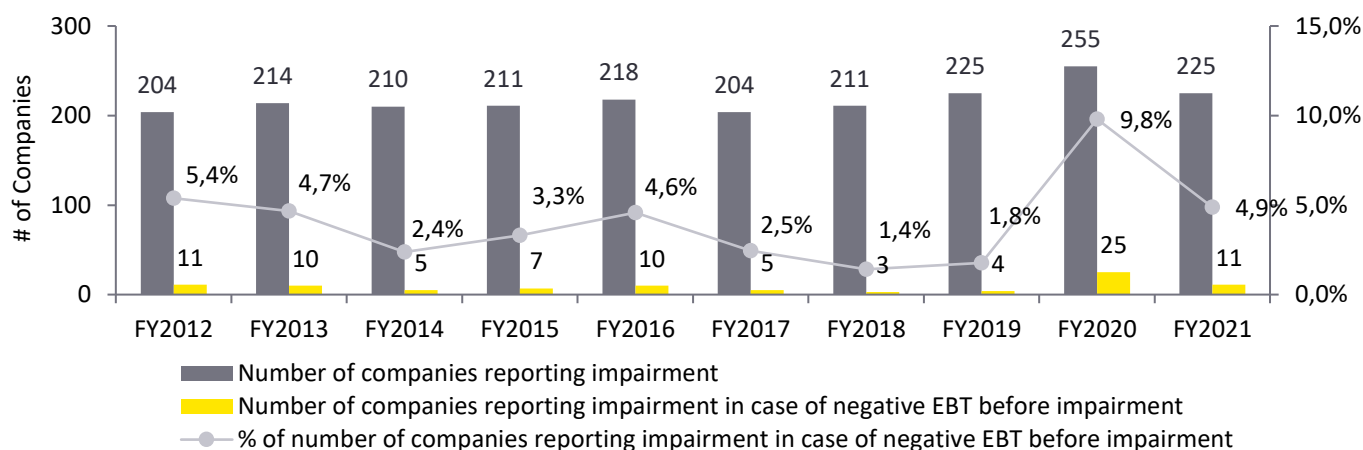


- ▶ Number of FTSE AIM companies reporting impairment in case of negative EBT before impairment increased from 2 in 2012 to 6 in 2021
  - ▶ On average, 39,0% of the companies reported impairment in case of negative EBT before impairment over the last 10 years period (2012-2021)
- ▶ Number of FTSE MIB companies reporting impairment in case of negative EBT before impairment increased in 2020 due to Covid-19 crisis and decreased in 2021 (1,0)
  - ▶ On average, 7,3% of the companies reported impairment in case of negative EBT before impairment over the last 10 years period (2012-2021)

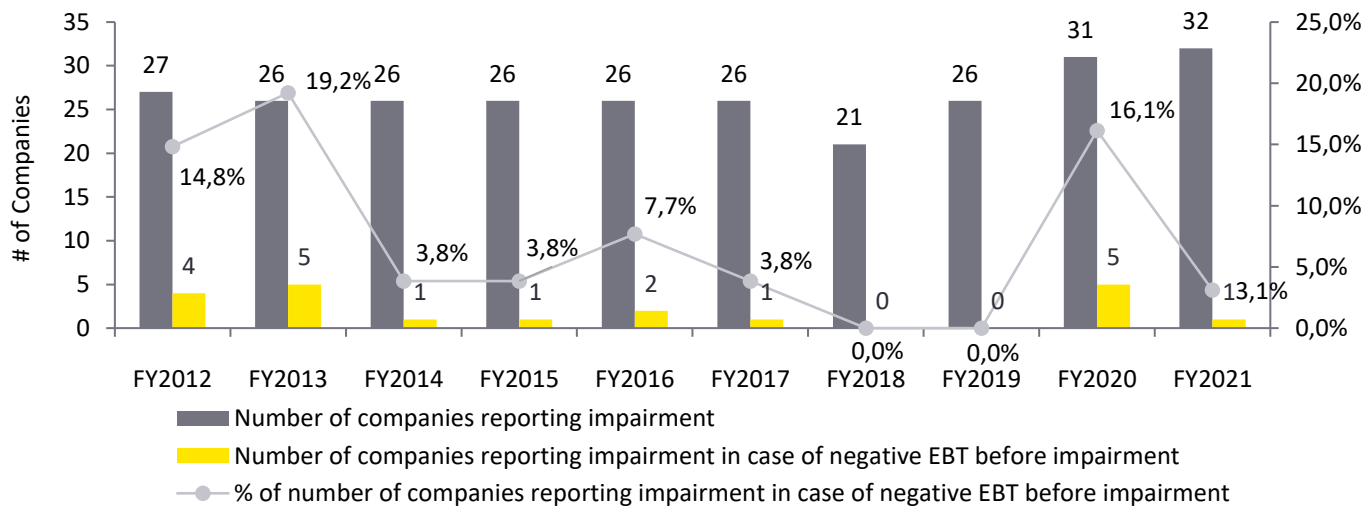
# Timing of impairment

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)



- ▶ The number of MSCI Europe companies reporting impairments in the case of negative EBT before impairment increased significantly in 2020, and in 2021 the value dropped again to the same level as in 2012
  - ▶ 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 9,8% respectively)
- ▶ Number of FTSE MIB companies reporting impairment in case of negative EBT before impairment declined after 2013, until 2020 when 16,1% of the companies reported impairment with negative EBT before impairment and in 2021 the value decreased again





# 07.

## Intensity of impairment

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# Intensity of impairment

Majority of companies reported Impairment between EUR 0-5m

## Distribution of Italian companies\* by the amount of impairment reported

# of Companies	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
No impairment	180	180	177	170	164	173	170	160	152	155
0m-5m	13	12	13	20	28	15	22	30	33	31
5m-10m	1	2	2	2	5	5	4	4	4	5
10m-20m	2	2	4	6	0	6	1	2	4	3
20m-50m	6	5	4	4	6	6	2	5	2	4
50m-100m	3	0	3	1	2	3	5	4	3	5
100m-200m	0	3	4	1	1	1	3	2	3	3
200m-500m	0	1	2	5	3	1	2	1	1	1
>500m	6	6	2	2	2	1	2	3	9	4
<b>Total Impaired</b>	<b>31</b>	<b>31</b>	<b>34</b>	<b>41</b>	<b>47</b>	<b>38</b>	<b>41</b>	<b>51</b>	<b>59</b>	<b>56</b>
<b>Total</b>	<b>211</b>	<b>211</b>	<b>211</b>	<b>211</b>	<b>211</b>	<b>211</b>	<b>211</b>	<b>211</b>	<b>211</b>	<b>211</b>

- ▶ Highest number of companies reported impairment between EUR 0-5m
  - ▶ In 2021, 26,5% of total companies reported an impairment
  - ▶ On average, 20,3% of the companies reported impairment during 2012-2021, with a peak of 28,0% in 2020 and a minimum of 14,7% in 2012
- ▶ From 2012 to 2013 and in 2021, a sizeable number of companies reported an impairment greater than EUR 500m
- ▶ Number of companies reporting no impairment was significantly high with an average 79,7% over the period 2012-2021, with a peak of 85,3% in 2012 and 2013 and a minimum of 72,0% in 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	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
No impairment	167	166	163	156	150	159	151	146	143	147
0m-5m	4	5	8	15	20	10	19	25	27	24
5m-10m	0	0	0	0	1	2	1	0	1	0
>10m	0	0	0	0	0	0	0	0	0	0
Total Impaired	4	5	8	15	21	12	20	25	28	24
Total	171	171	171	171	171	171	171	171	171	171

## Distribution of FTSE MIB companies by the amount of impairment

# of Companies	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
No impairment	13	14	14	14	14	14	19	14	9	8
0m-5m	9	7	5	5	8	5	3	5	6	7
5m-10m	1	2	2	2	4	3	3	4	3	5
10m-20m	2	2	4	6	0	6	1	2	4	3
20m-50m	6	5	4	4	6	6	2	5	2	4
50m-100m	3	0	3	1	2	3	5	4	3	5
100m-200m	0	3	4	1	1	1	3	2	3	3
200m-500m	0	1	2	5	3	1	2	1	1	1
>500m	6	6	2	2	2	1	2	3	9	4
Total Impaired	27	26	26	26	26	26	21	26	31	32
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 2012 to 2021
- ▶ FTSE MIB: The companies reporting impairment greater than EUR 5m increased from 18 in 2012 to 25 in 2021
- ▶ The companies reporting impairment between EUR 5-100m increased from 12 in 2012 to 17 in 2021; from 44,4% to 53,1% respectively of total companies reporting impairment
- ▶ In 2021, 4 companies reported impairment higher than 500m

# Intensity of impairment

MSCI Europe companies reporting impairment >EUR 500m from 30 companies in 2012 to 28 companies in 2021

## Distribution of MSCI Europe companies by the amount of impairment

# of Companies	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
No impairment	218	208	212	211	204	218	211	197	167	197
0m-5m	42	53	46	40	49	54	46	41	32	38
5m-10m	18	12	16	22	25	19	24	25	17	23
10m-20m	18	27	22	24	23	21	25	16	23	29
20m-50m	31	23	38	31	40	36	38	38	30	28
50m-100m	22	24	24	25	17	22	19	38	37	35
100m-200m	22	28	19	14	26	16	23	16	28	26
200m-500m	21	15	17	13	15	16	12	15	33	18
500m-1,000m	9	14	9	21	10	13	15	14	26	12
>1,000m	21	18	19	21	13	7	9	22	29	16
<b>Total Impaired</b>	<b>204</b>	<b>214</b>	<b>210</b>	<b>211</b>	<b>218</b>	<b>204</b>	<b>211</b>	<b>225</b>	<b>255</b>	<b>225</b>
<b>Total</b>	<b>422</b>	<b>422</b>	<b>422</b>	<b>422</b>	<b>422</b>	<b>422</b>	<b>422</b>	<b>422</b>	<b>422</b>	<b>422</b>

## Distribution of FTSE MIB companies by the amount of impairment

# of Companies	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
No impairment	13	14	14	14	14	14	19	14	9	8
0m-5m	9	7	5	5	8	5	3	5	6	7
5m-10m	1	2	2	2	4	3	3	4	3	5
10m-20m	2	2	4	6	0	6	1	2	4	3
20m-50m	6	5	4	4	6	6	2	5	2	4
50m-100m	3	0	3	1	2	3	5	4	3	5
100m-200m	0	3	4	1	1	1	3	2	3	3
200m-500m	0	1	2	5	3	1	2	1	1	1
>500m	6	6	2	2	2	1	2	3	9	4
<b>Total Impaired</b>	<b>27</b>	<b>26</b>	<b>26</b>	<b>26</b>	<b>26</b>	<b>26</b>	<b>21</b>	<b>26</b>	<b>31</b>	<b>32</b>
<b>Total</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>

- ▶ 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, the maximum n° of companies reported impairment was in 2020 EUR >500m, in 2018 between EUR 50m-100m, in 2016 and 2017 between EUR 20-50m and in 2015 and 2017 between EUR 10-20m
- ▶ MSCI Europe: n° of companies reporting impairment higher than EUR 500m reached a peak in 2020 (55 companies) from 30 companies in 2012, possibly related to Covid-19 crisis



# 08.

## Impairment vs. Market cap.

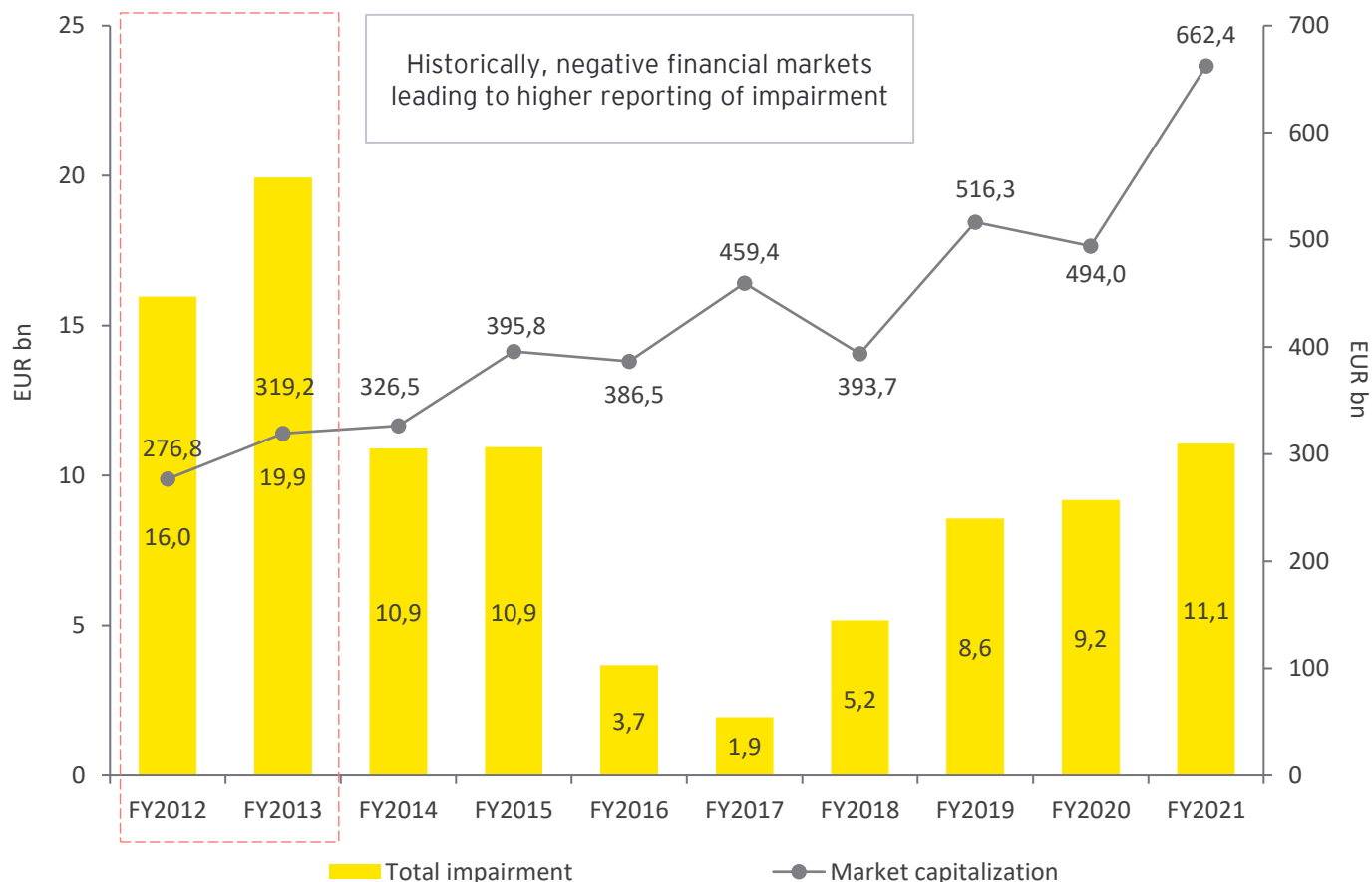
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# Impairment vs. Market cap.

The total impairment tends to be higher when financial markets are negative and lower when they are positive with an exception in 2021

## Italian companies\* evolution of impairment vs. market cap.



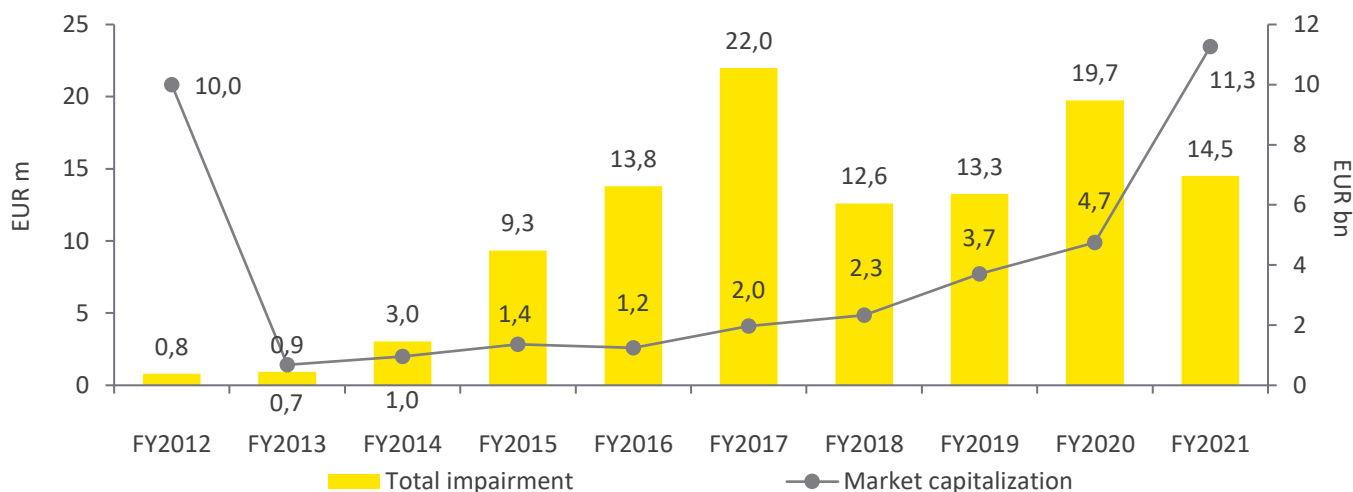
- ▶ After 2012, the total impairment decreased gradually as the financial markets improved, while from 2018 onwards it started to increase again
- ▶ In 2021, companies reported a total impairment of EUR 11,1bn with a market cap of EUR 662,4bn
- ▶ Market capital grew at a CAGR of 10,2% over the past 10 years to reach EUR 662,4bn in 2021 from EUR 276,8bn in 2012
- ▶ Generally, total impairment and market capitalization seems to be inversely related during the period 2014-2018, anyway the 2012, 2013, 2019 and 2021 values do not follow this trend because both Total impairment and Market capitalization increased due to a 'one off' specific situation not related to covid that impacted the amount of impairments

\* Italian companies include FTSE AIM and FTSE MIB companies

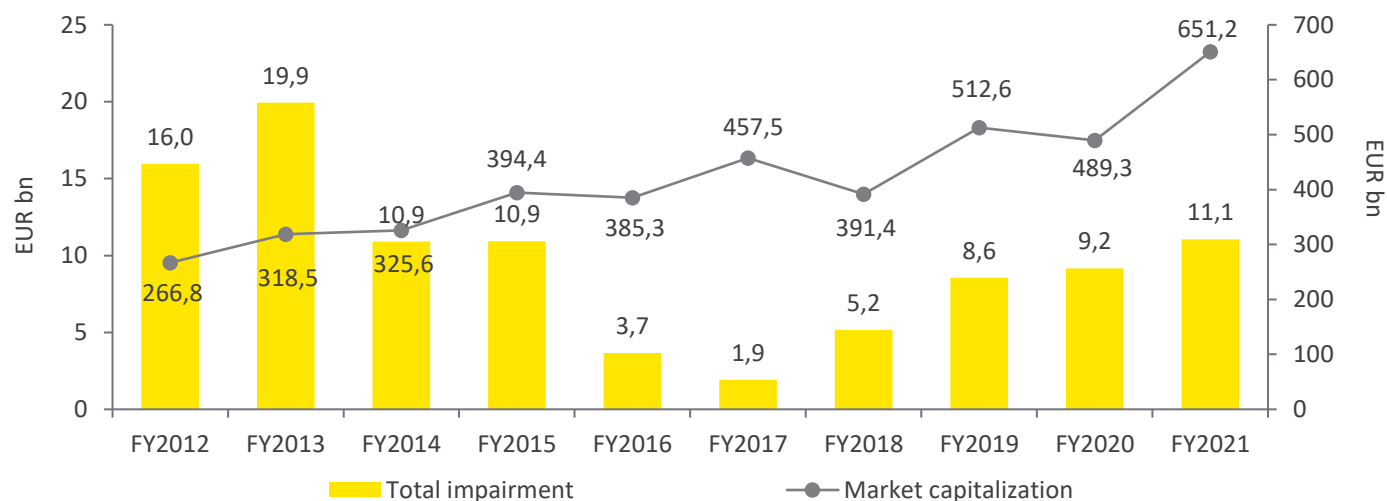
# Impairment vs. Market cap.

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)

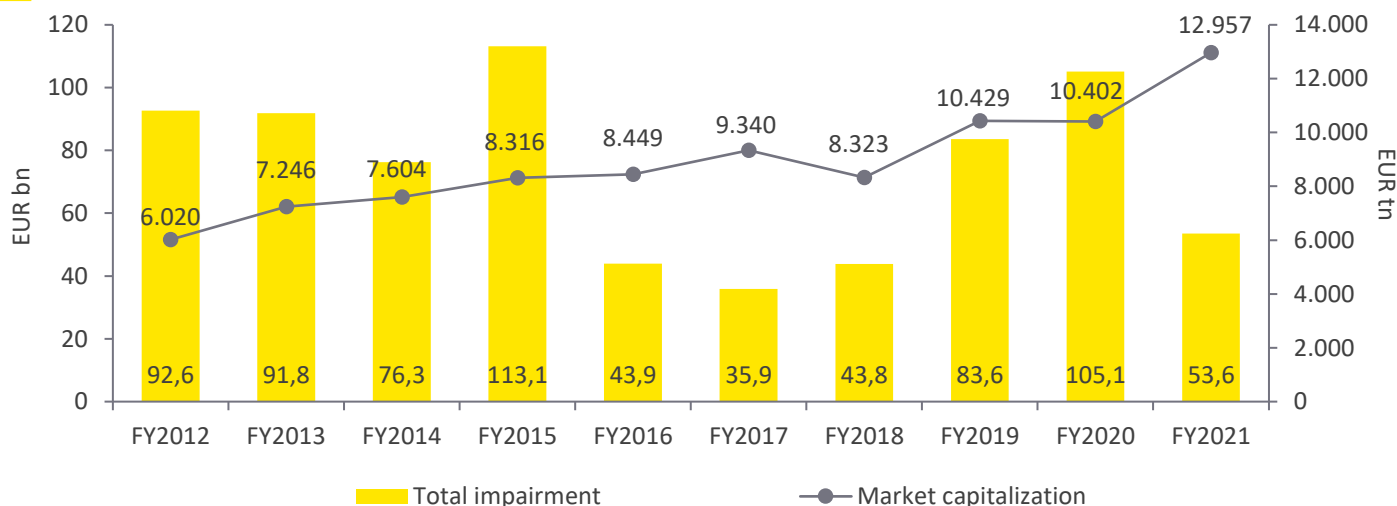


- ▶ FTSE MIB companies: total impairment tends to be higher when the market capitalization of the companies is lower; this indicates that the companies tend to report higher impairments when the financial markets are negative and lower when financial markets are positive. Anyway, the 2019 and 2021 values do not follow this trend because both Total impairment and Market capitalization increased
- ▶ 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

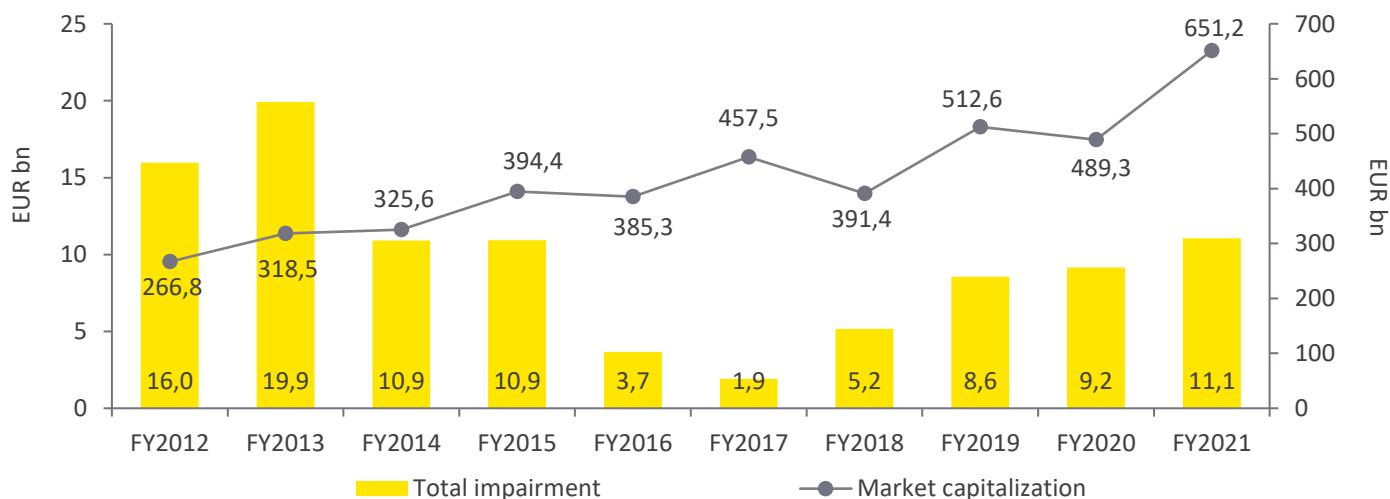
# Impairment vs. Market cap.

In 2021, MSCI EUROPE companies' total impairment recorded its peak, for FTSE MIB it happened in 2012

## Evolution of impairment vs. market capitalization (MSCI Europe)



## Evolution of impairment vs. market capitalization (FTSE MIB)



- ▶ MSCI Europe companies:
  - ▶ The market capitalization increased between 2012 and 2021, with only one year of significant decreasing trend in 2018
  - ▶ The market capitalization increased at a CAGR of 8,9% during 2012-2021 period, reaching a peak in 2021 of 12.957bn
  - ▶ In terms of total impairment, MSCI Europe companies recorded a total impairment peaks of EUR 113,1bn in 2015 and EUR 105,1 in 2020, with a EUR 53,6bn in 2021
- ▶ FTSE MIB companies: Market capitalization increased at a CAGR of 10,4% during 2012-2021, with a maximum in 2021 (EUR 651,2bn)



# 09.

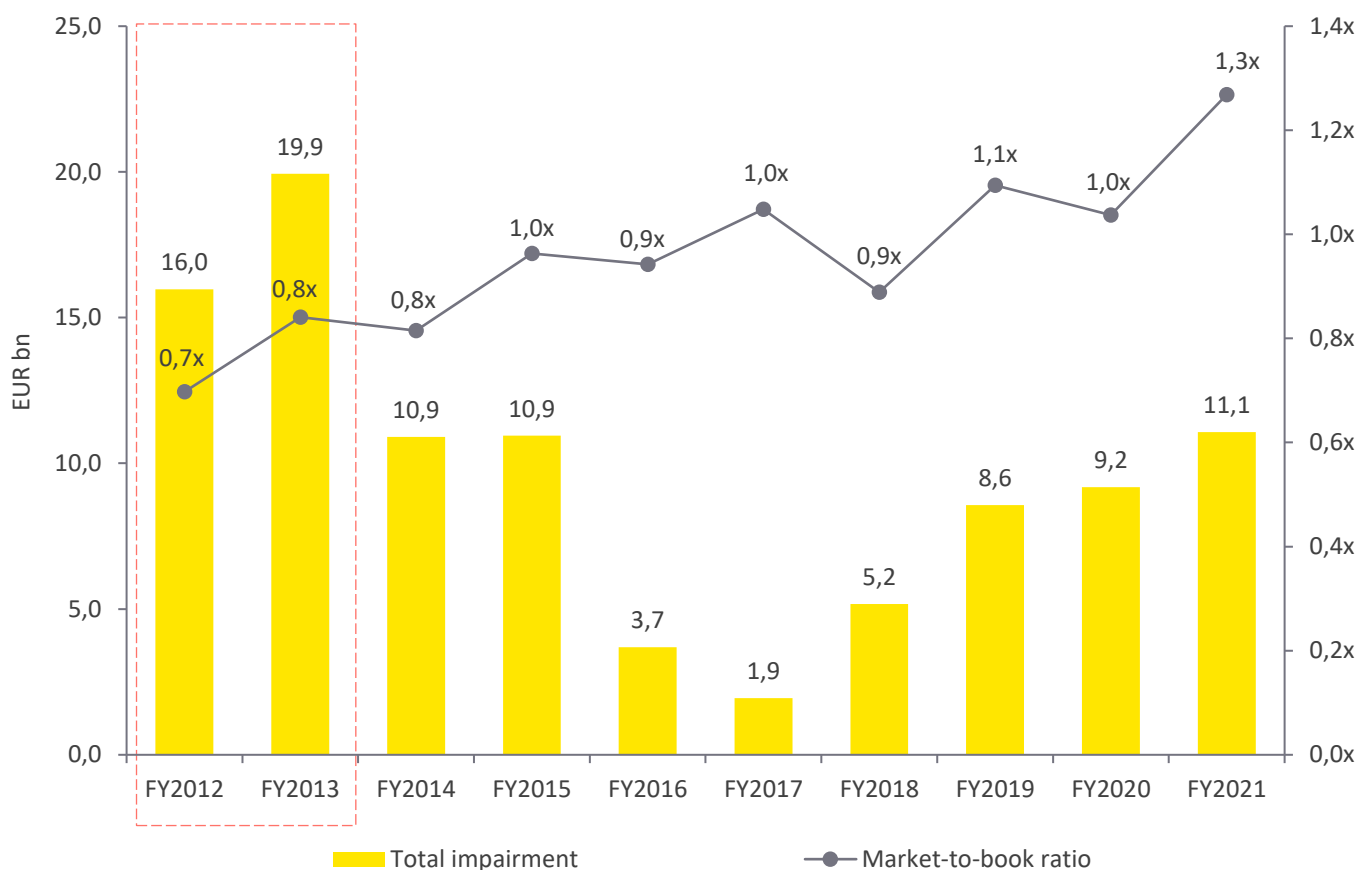
## Market-to-book ratio vs. Impairment

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# Market-to-book ratio vs. Impairment

In 2012 and 2013, market to book ratio was lowest, in 2021 was the highest

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



- ▶ In 2012 and 2013, the market-to-book ratio was at the lowest levels of last 10 years (respectively 0,7x and 0,8x) as compared to the highest total impairment levels (EUR 16,0bn and EUR 19,9bn), primarily due to decrease in market capitalization in following years
  - ▶ As financial markets recovered, the ratio improved and total impairment started declining
- ▶ In 2021, the market-to-book value ratio reached a peak (1,3x)
- ▶ From 2012 to 2021, Net assets increased at a CAGR of 3,1%
  - ▶ Total impairment decreased at a CAGR of (4,0%) during the same period
  - ▶ Average Market to book ratio was 1,0x over the last 10 years (2012-2021)

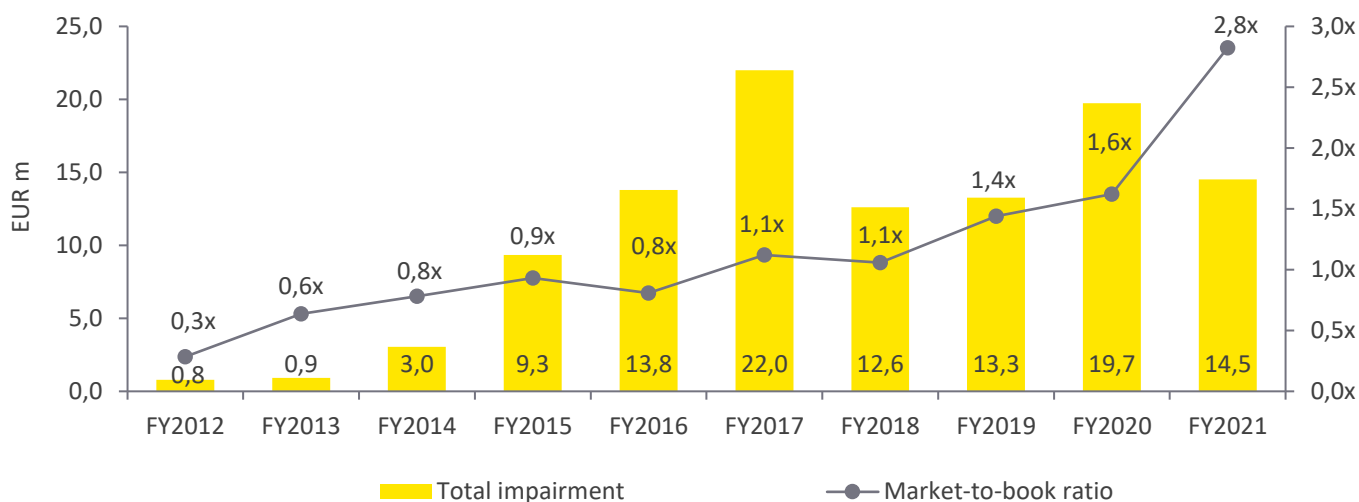
\* Italian companies include FTSE AIM and FTSE MIB companies



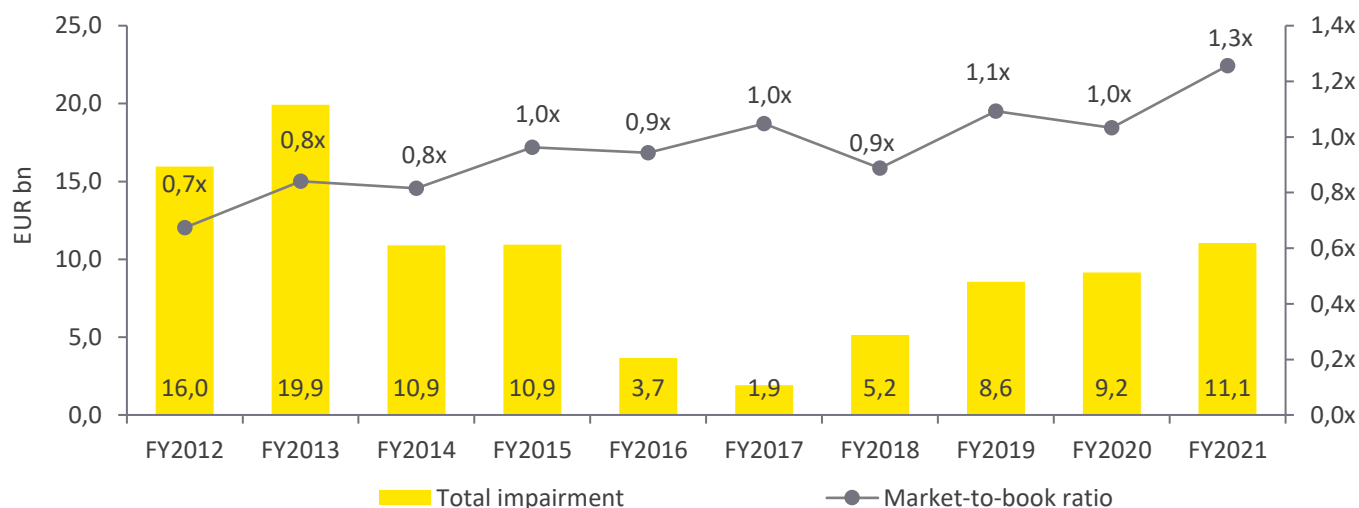
# Market-to-book ratio vs. Impairment

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)

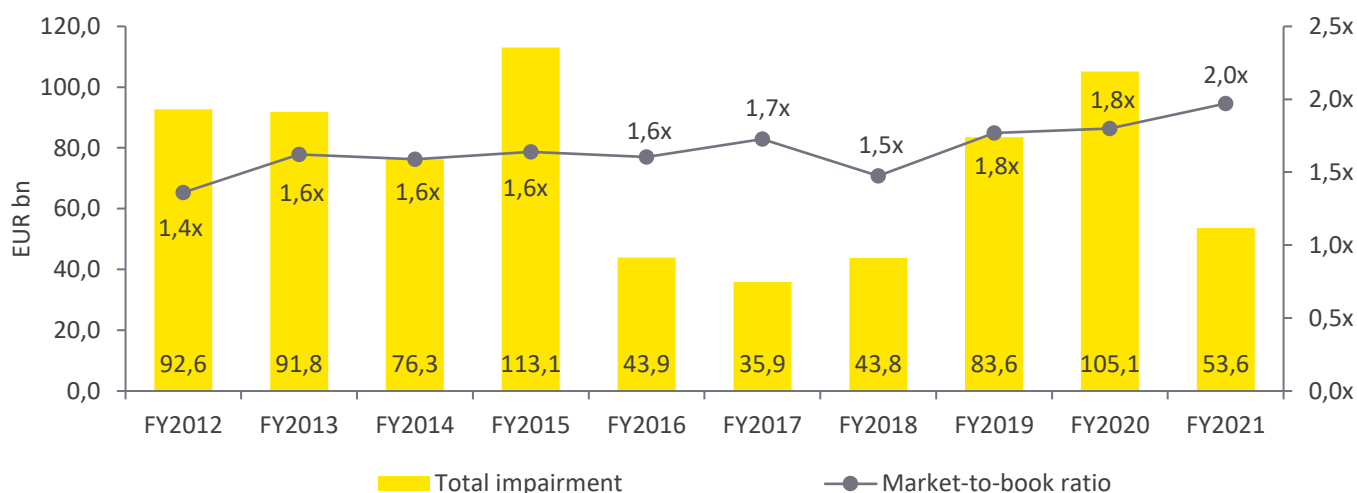


- ▶ Market-to-book ratio of FTSE MIB increased from 0,7x in 2012 to 1,3x in 2021, for FTSE AIM companies it was 0,3x in 2012 and 2,8x in 2021
- ▶ Net assets increased at a CAGR of 17,8% for FTSE AIM and of 3,0% for FTSE MIB companies
- ▶ For FTSE AIM, Market-to-book ratio increased yearly, while total 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, before decreasing again in 2021

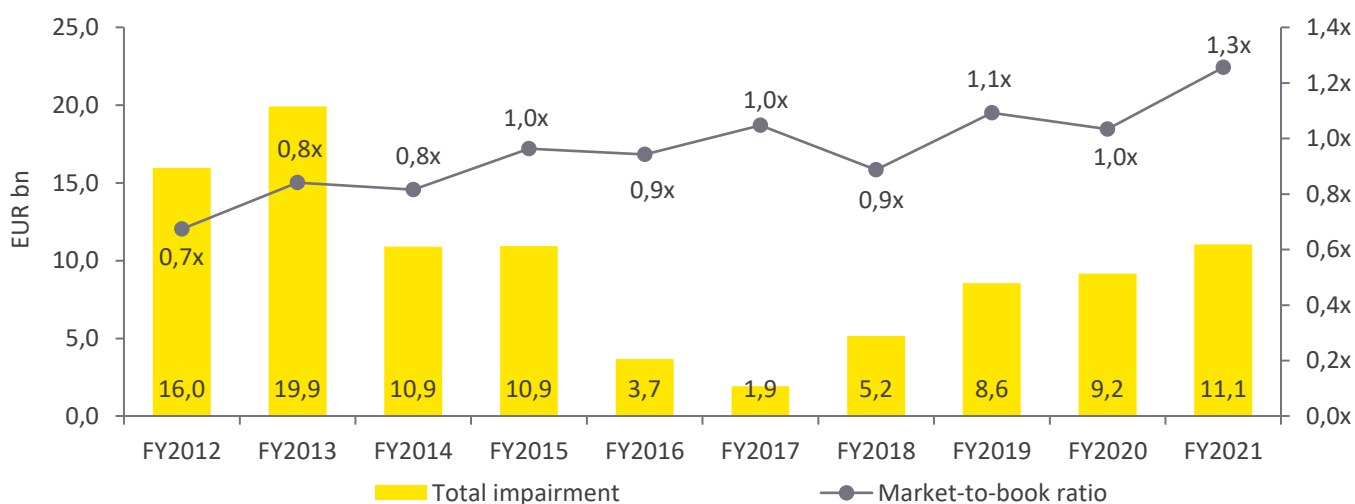
# Market-to-book ratio vs. Impairment

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 1,4x in 2012 to 2,0x in 2021, while for FTSE MIB companies, it increased from 0,7x in 2012 to 1,3x in 2021
- ▶ 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 2012 (1,4x), whereas total impairment reached a peak in 2015 (EUR 113,1bn)
- ▶ FTSE MIB: In 2012, Market-to-book ratio was lowest being 0,7x, with total impairment reaching a maximum of EUR 19,9bn in 2013



# 10.

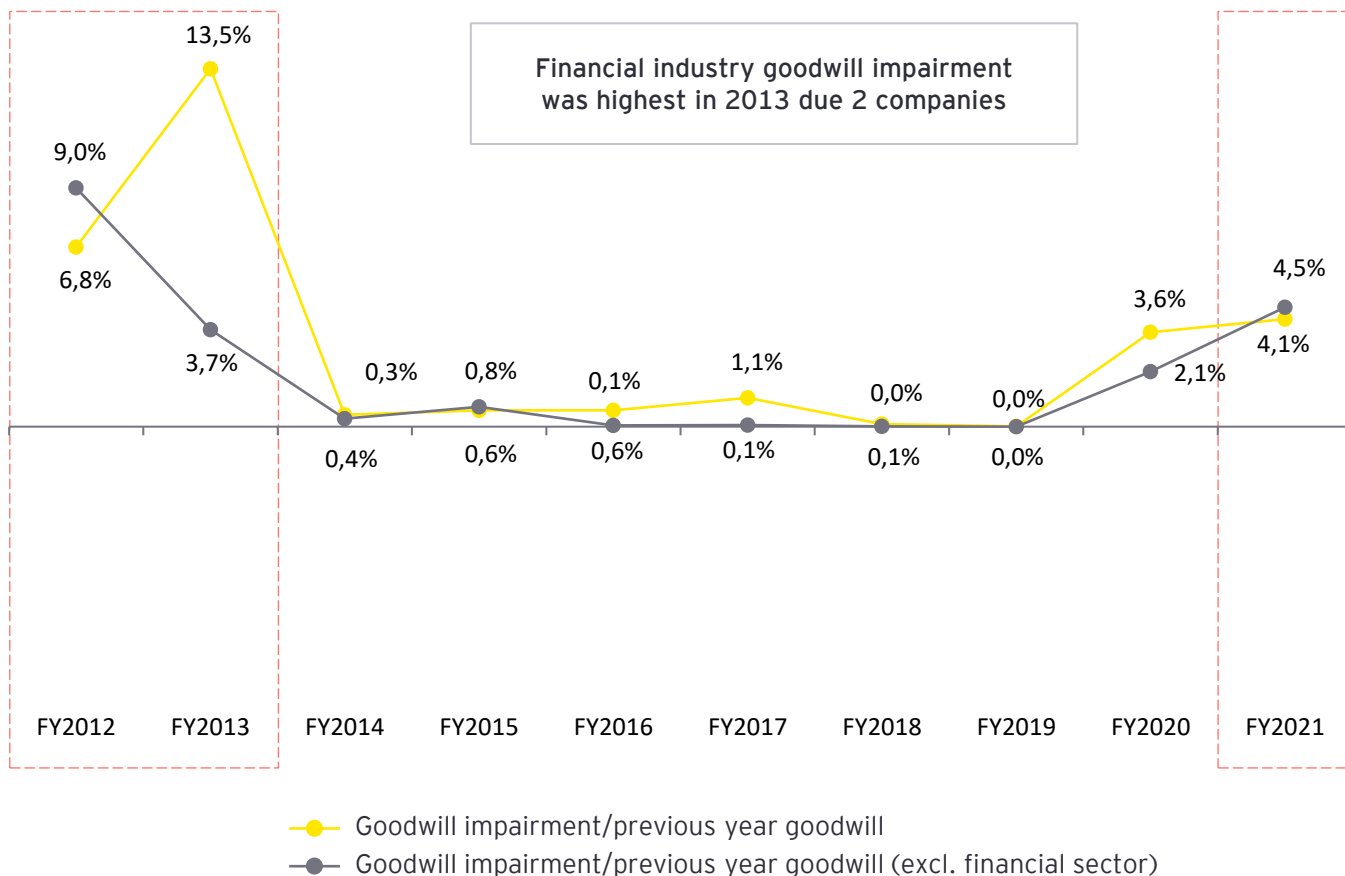
## Goodwill impairment

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# Goodwill impairment over prior year goodwill

Significant % of goodwill impaired by financial services companies during 2012-2013

## Goodwill impairment over prior year goodwill for Italian companies\*



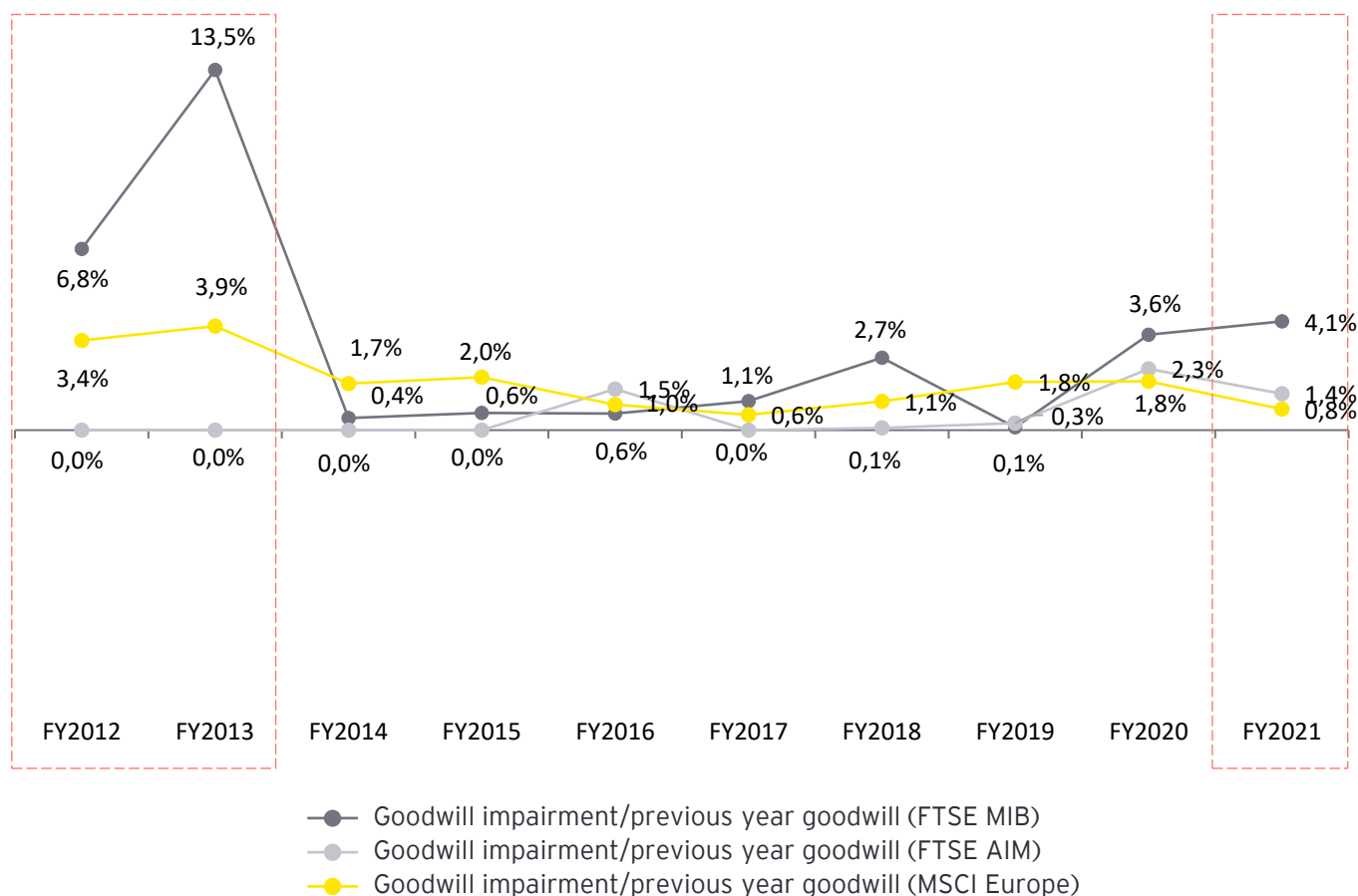
- ▶ Goodwill impairment/previous year goodwill ratio, refers to the intensity of impairment as the ratio of impairment charged in a period over the opening balance of goodwill
- ▶ Goodwill impairment/previous year goodwill ratio decreased from 6,8% in 2012 to 4,1% in 2021, with highest figures reached during 2012-2013 period and the lowest in 2019, before Covid-19 crisis
- ▶ Companies recognized goodwill impairment/ previous goodwill ratio on an average of 3,1% during 2012-2021 period, however if we exclude 2012-2013 period then the average drops at 1,3%
- ▶ Goodwill impairment/previous year goodwill (Excl. Financial Sector) decreased from 9,0% in 2012 to 4,5% in 2021, with highest figures showed on 2012
- ▶ Companies recognized goodwill impairment/ previous goodwill (Excl. Financial Sector) ratio on an average of 2,0% during 2012-2021 period, however, if we exclude 2012-2013 period then the average drops at 1,0%
- ▶ In 2012, 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 2012-2013 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, even if in 2022 and 2021 values significantly increased
- ▶ FTSE MIB: Companies recognized goodwill impairment/previous goodwill ratio on an average of 3,4% during 2012-2021 period, however if we exclude 2012-2013 period, the average decreases at 1,7%
- ▶ MSCI Europe: Goodwill impairment/previous year goodwill ratio changed from 3,4% in 2012 to 0,8% in 2021, with highest ratio during 2012-2013 period
  - ▶ Companies recognized goodwill impairment/previous goodwill ratio on an average of 1,8% between 2012 and 2021, however if we exclude 2012-2013 period then average decreases at only 1,3%





# 11.

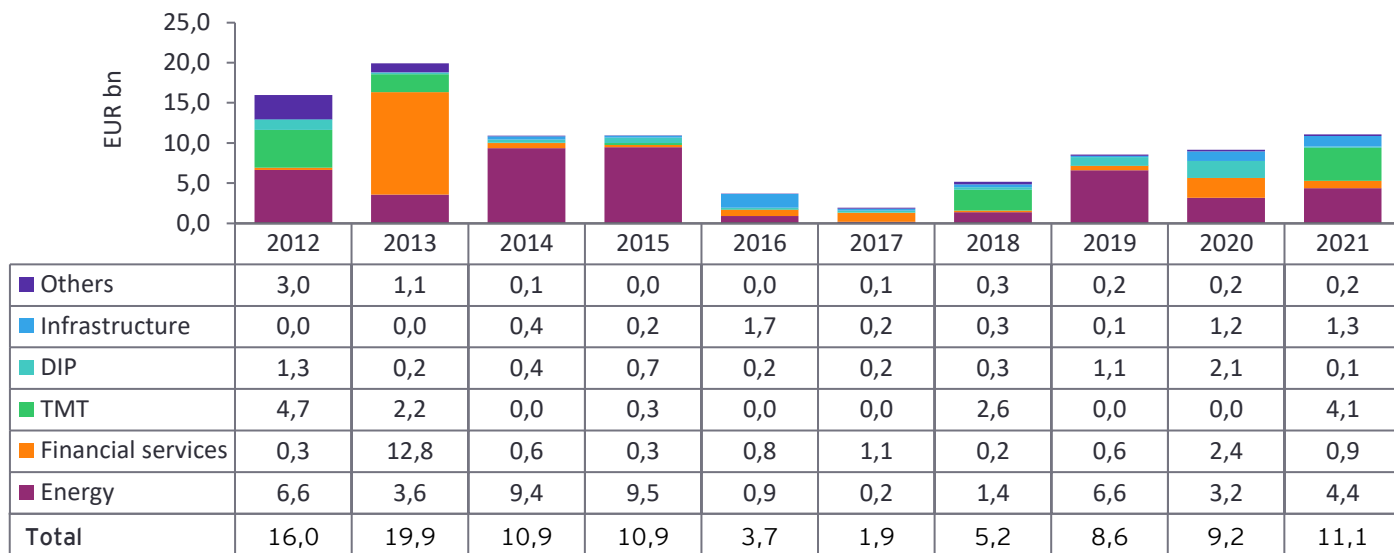
## FTSE MIB impairment by sector

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# FTSE MIB impairment by sector

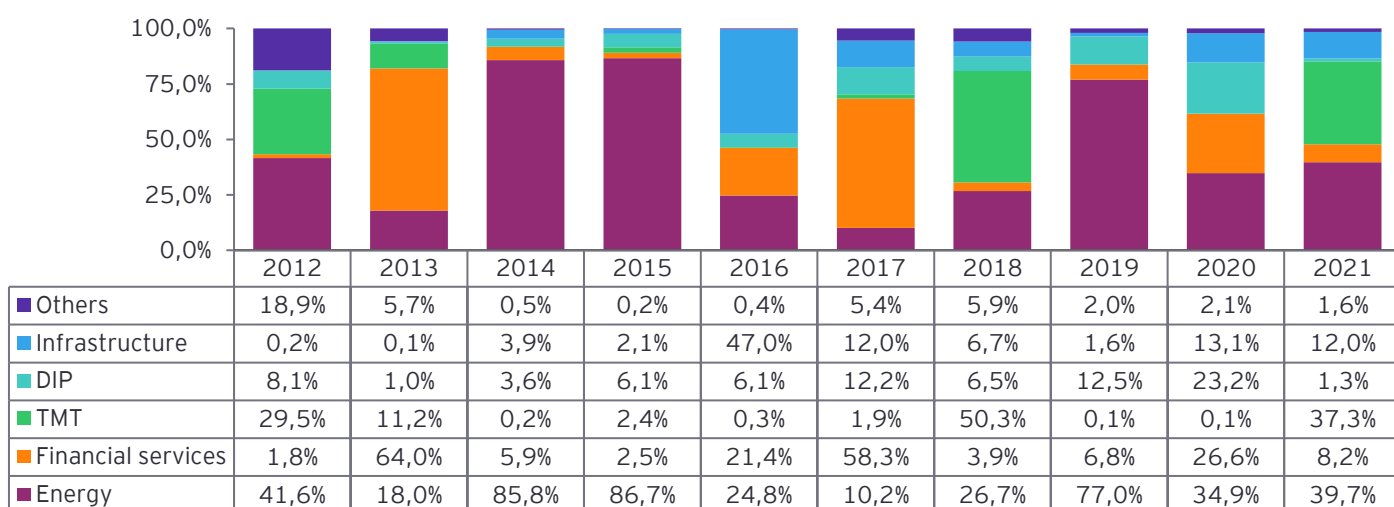
77,8% of total impairment reported by Financial services, Energy and TMT sectors over the 2012-2021 period

## Total impairment by sector



- ▶ Financial services sector reported its highest impairment in 2013 due to the financial debt crisis, whereas Energy sector reported its highest impairment in 2014-2015 period due to decline in oil prices and TMT in 2012 and 2021 due to Covid-19 crisis
- ▶ In 2021, 85,2% of total impairment is reported by Financial services, Energy and TMT sectors
  - ▶ Financial services sector provided the highest contribution in terms of total impairment in 2013
  - ▶ Energy sector contributed highest % of total impairment, except for 2013, 2017 and 2018
  - ▶ Total impairment of TMT sector strongly increased in 2021

## 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 2012 to 2021 in all the sectors

## % of companies reporting impairment by sector

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Automotive	33,3%	33,3%	33,3%	33,3%	0,0%	66,7%	33,3%	66,7%	66,7%	66,7%
DIP	71,4%	85,7%	85,7%	85,7%	71,4%	71,4%	57,1%	57,1%	85,7%	85,7%
Energy	100,0%	71,4%	71,4%	85,7%	71,4%	100,0%	100,0%	100,0%	100,0%	100,0%
Financial services	61,5%	61,5%	53,8%	46,2%	61,5%	53,8%	30,8%	53,8%	69,2%	76,9%
Healthcare	66,7%	66,7%	66,7%	33,3%	66,7%	66,7%	33,3%	66,7%	66,7%	66,7%
Infrastructure	50,0%	50,0%	100,0%	100,0%	100,0%	50,0%	50,0%	100,0%	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	66,7%	66,7%	66,7%	100,0%	100,0%	33,3%	66,7%	33,3%	66,7%	66,7%

% of companies reporting impairment increased for all sectors

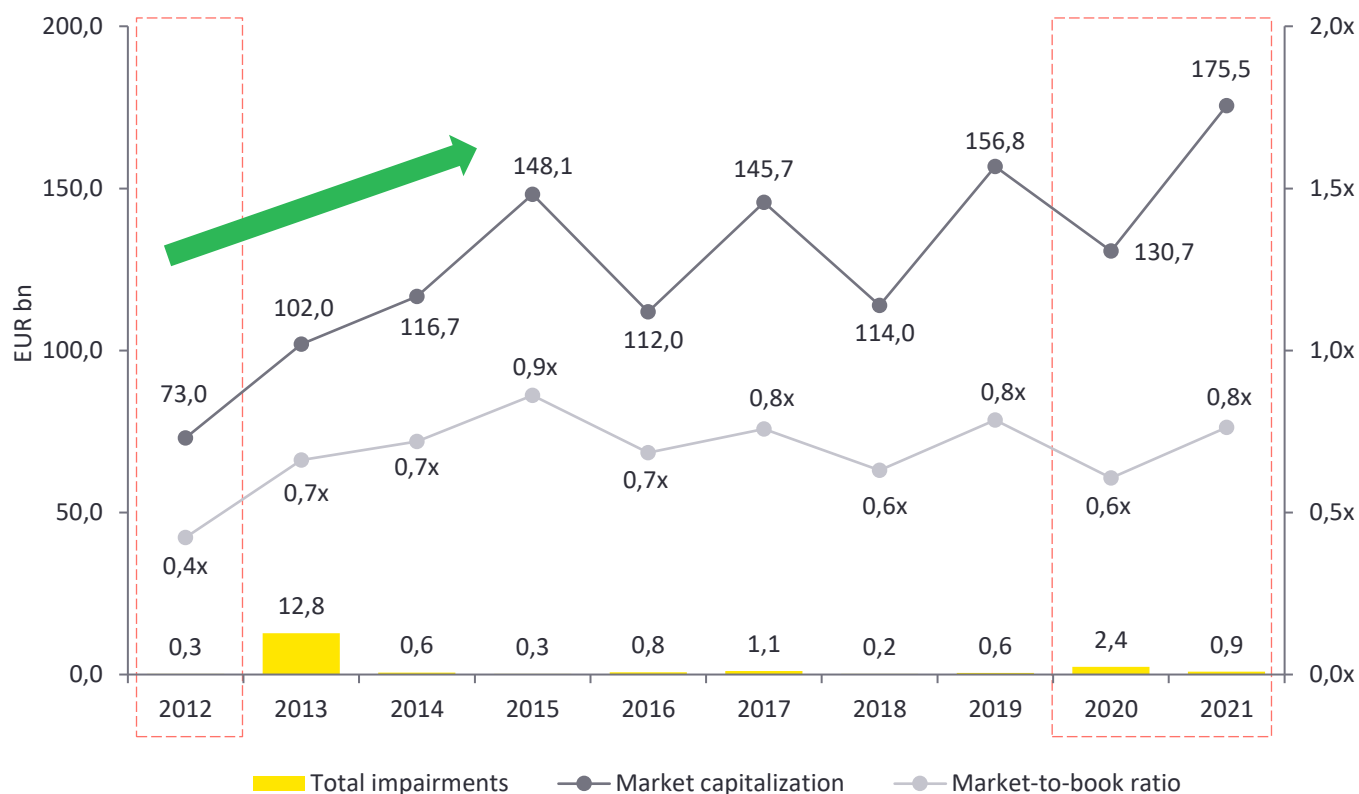
- ▶ % of Automotive companies reporting impairment increased from 33,3% in 2012 to 66,7% in 2021
- ▶ % of DIP companies reporting impairment increased from 71,4% in 2012 to 85,7% in 2021
- ▶ % of Energy companies reporting impairment remained stable from 100,0% in 2012 to 100,0% in 2021
- ▶ % of Financial services companies reporting impairment increased from 61,5% in 2012 to 76,9% in 2021
- ▶ % of Healthcare companies reporting impairment remained stable from 66,7% in 2012 to 66,7% in 2021
- ▶ % of Infrastructure companies reporting impairment increased from 50,0% in 2012 to 100,0% in 2021
- ▶ % of RCP companies reporting impairment remained stable at 50,0% from 2012 to 2021
- ▶ % of TMT companies reporting impairment was 66,7% in 2012 and 66,7% in 2021 with variations during the period

\* 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 European debt crisis, consequent increase in 2020 and 2021 related to Covid-19 crisis

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



	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Goodwill impairment	39,0%	97,6%	30,9%	4,5%	72,9%	94,7%	47,1%	2,9%	81,5%	32,3%
Asset writedown	61,0%	2,4%	69,1%	95,5%	27,1%	5,3%	52,9%	97,1%	18,5%	67,7%

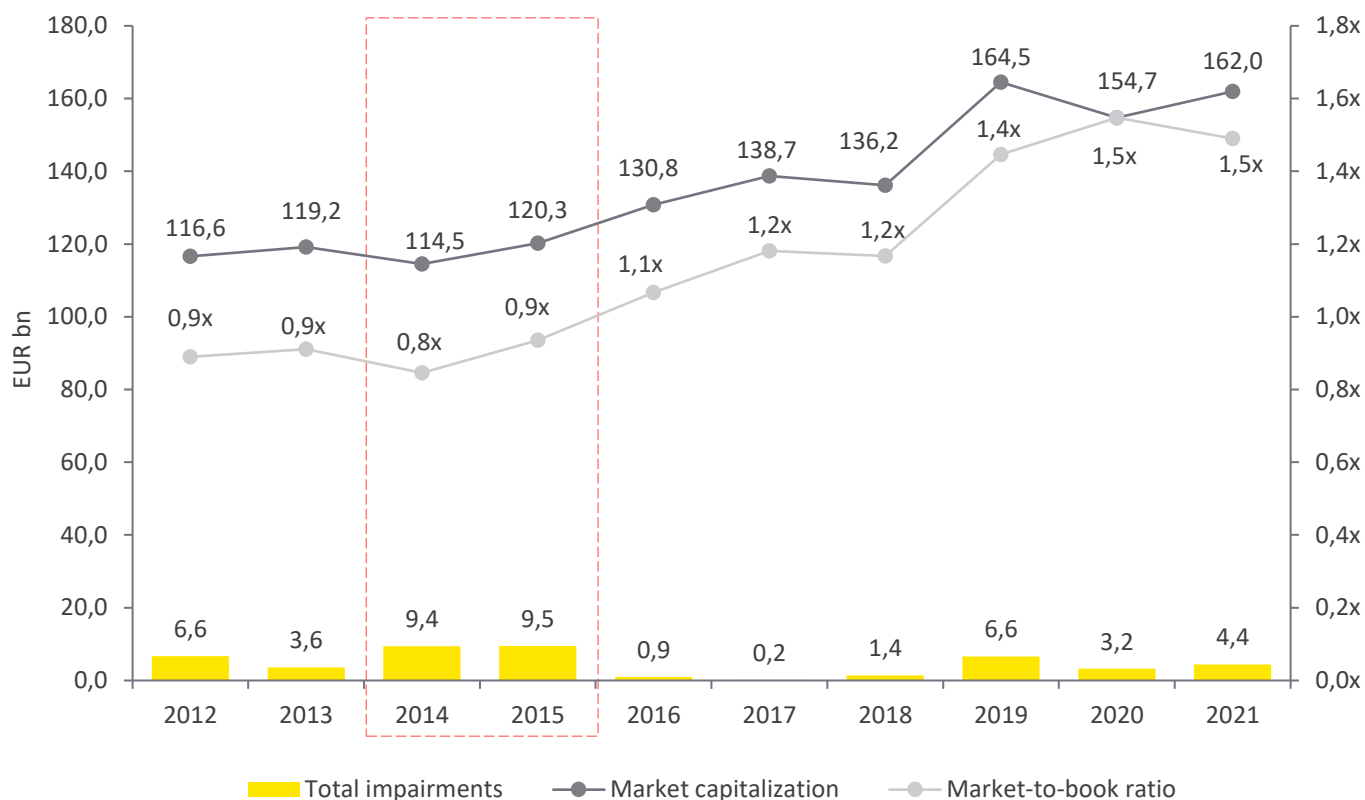
- ▶ Financial services sector was significantly impacted due to the European debt crisis, resulting in the increase in reporting of total impairment
  - ▶ In between 2012 and 2013, market capitalization (EUR 73,0bn and EUR 102,0bn) and market-to-book ratio (0,4x and 0,7x) reached a minimum, while impairment was at its peak on 2013 at EUR 12,8bn
- ▶ Goodwill impairment reported by Financial companies, which decreased after the financial crisis 2011-2013, increased from 2,9% in 2019 to 81,5% 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



	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Goodwill impairment	38,9%	20,8%	2,1%	0,0%	3,8%	23,7%	3,2%	1,3%	9,3%	0,5%
Asset writedown	61,1%	79,2%	97,9%	100,0%	96,2%	76,3%	96,8%	98,7%	90,7%	99,5%

- ▶ 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, 89,6% 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 decreased to EUR 4,4bn in 2021 from EUR 1,6bn in 2012

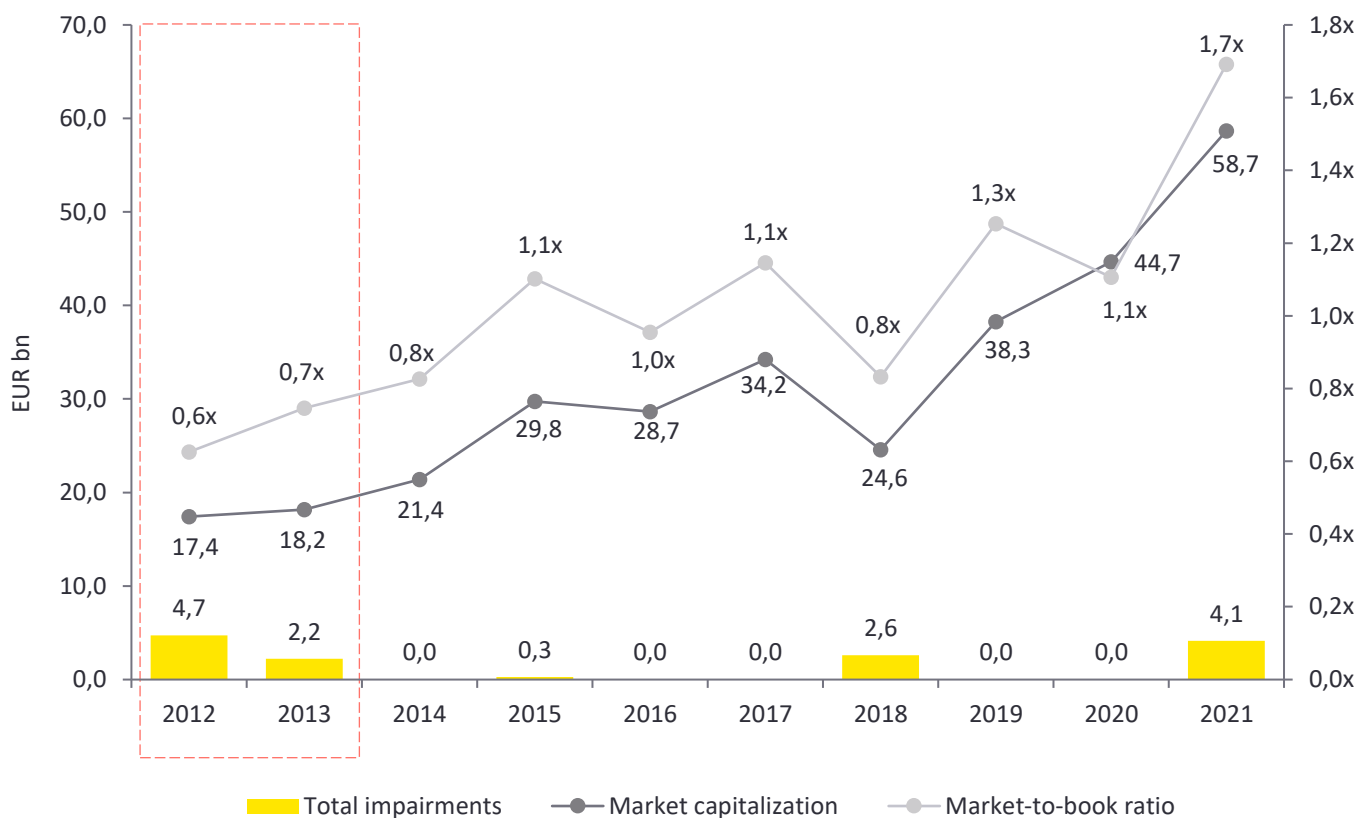
\* FTSE MIB companies by sector covered as FTSE AIM companies reported negligible impairment



# FTSE MIB TMT sector

Increase in impairment due to decline in financial markets

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



	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Goodwill impairment	98,7%	99,3%	0,0%	91,7%	0,0%	0,0%	99,9%	0,0%	0,0%	100,0%
Asset writedown	1,3%	0,7%	100,0%	8,3%	100,0%	100,0%	0,1%	100,0%	100,0%	0,0%

- ▶ Out of 3 TMT companies, one company has reported impairment throughout the whole period except for 2019
- ▶ Market capitalization increased between 2012 and 2021,
  - ▶ With exception of 2018, in the recent years the market cap increased from EUR 24,6bn of 2018 to EUR 58,7bn in 2021
- ▶ Market capitalization and Market-to-book ratio declined in 2018, and increased again in recent years, with a 2021 Market-to-book ratio of 1,7x

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



# 12.

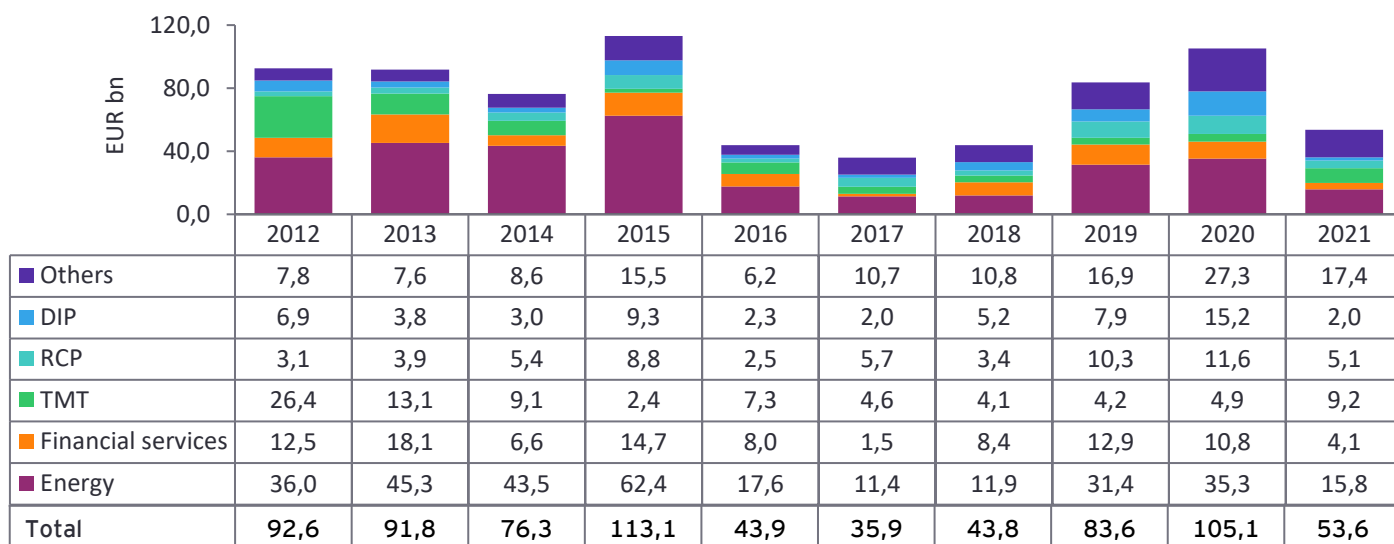
## MSCI Europe impairment by sector

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# MSCI Europe impairment by sector

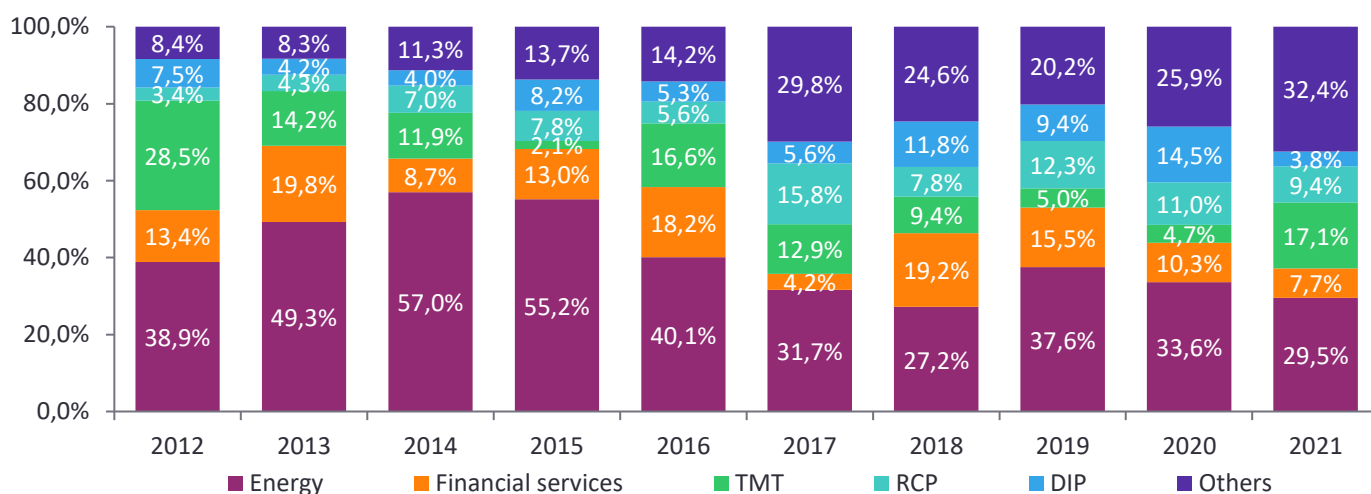
Average 61,8% of total impairment reported by energy, financial services and DIP sectors

## Total impairment by sector



- ▶ Energy sector reported highest impairment followed by Financial services from 2012 to 2021
- ▶ Energy sector reported highest impairment in 2015 due to decline in crude oil prices while Financial services sector reported its highest impairment in 2013 and TMT Sector in 2012, due to the sovereign debt crisis
- ▶ 54,3% of total impairment in 2021 is reported by Energy, Financial services, and TMT sectors
  - ▶ Energy sector impairment was 29,5% of total impairment in 2021 with EUR 15,8bn
  - ▶ Financial services sector impairment was 7,7% of total impairment in 2021 with EUR 4,1bn
  - ▶ TMT sector impairment was 17,1% of total impairment in 2021 with EUR 9,2bn

## Total impairment composition by sector



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

# MSCI Europe impairment by sector

On average % of companies reporting impairment increased during 2012 to 2021 period

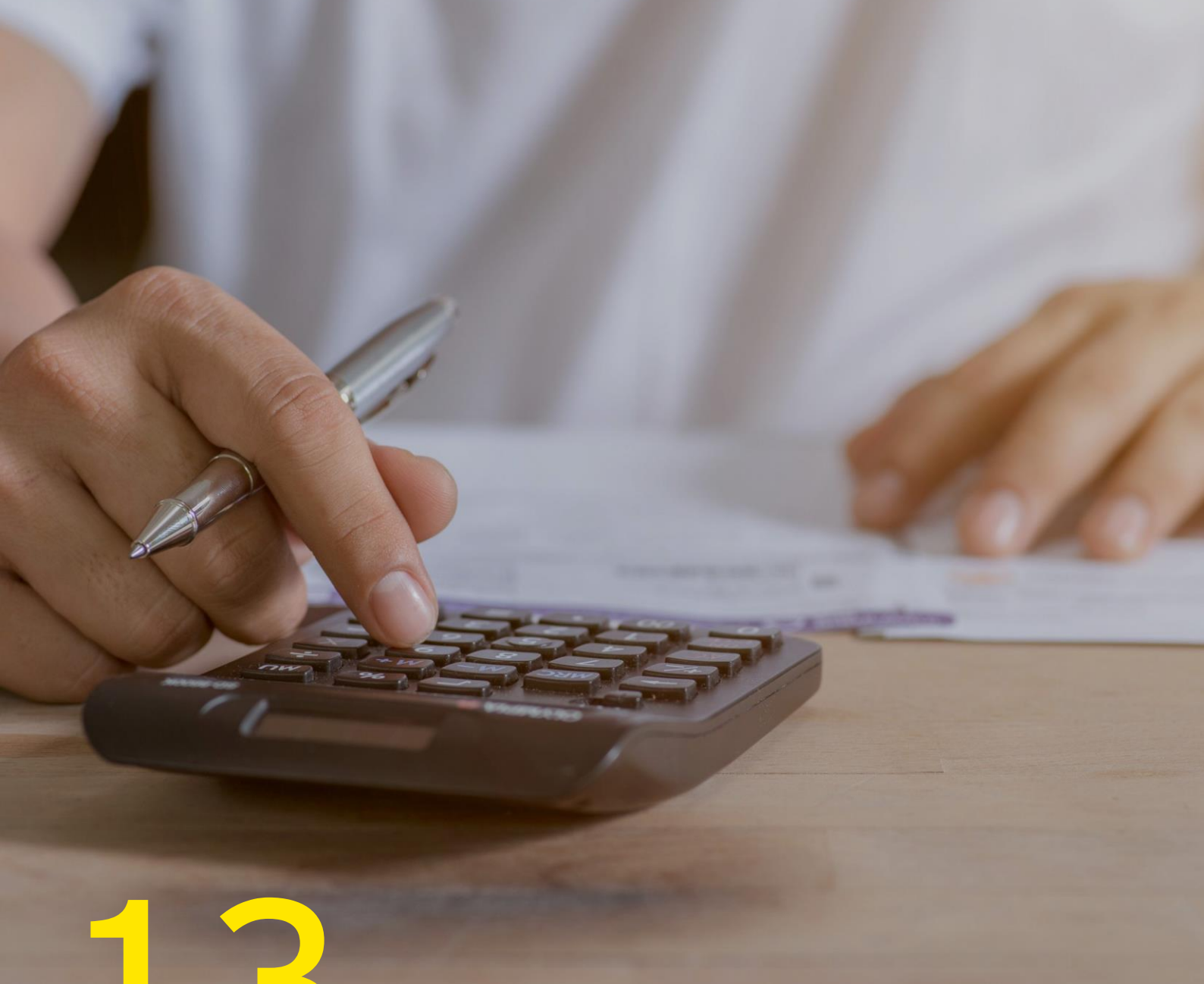
## % of companies reporting impairment by sector

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Automotive	30,0%	50,0%	30,0%	30,0%	20,0%	30,0%	40,0%	30,0%	30,0%	40,0%
DIP	51,4%	55,6%	59,7%	54,2%	56,9%	51,4%	51,4%	52,8%	61,1%	47,2%
Energy	69,2%	71,8%	76,9%	71,8%	69,2%	74,4%	69,2%	71,8%	71,8%	69,2%
Financial services	54,2%	55,6%	54,2%	55,6%	58,3%	47,2%	50,0%	56,9%	61,1%	52,8%
Healthcare	40,9%	38,6%	34,1%	36,4%	45,5%	47,7%	40,9%	43,2%	56,8%	54,5%
Infrastructure	37,5%	37,5%	27,5%	35,0%	37,5%	35,0%	37,5%	52,5%	60,0%	42,5%
Professional Services	36,8%	31,6%	31,6%	39,5%	34,2%	42,1%	44,7%	50,0%	52,6%	57,9%
RCP	51,6%	48,4%	56,3%	54,7%	50,0%	48,4%	51,6%	53,1%	65,6%	62,5%
TMT	41,9%	60,5%	48,8%	48,8%	60,5%	44,2%	55,8%	51,2%	58,1%	44,2%

% of companies reporting impairment increased for all sectors during 2012 to 2021 period

- ▶ % of automotive companies reporting impairment remained increased from 30,0% in 2012 to 40,0% in 2021
- ▶ % of DIP companies reporting impairment decreased from 51,4% in 2012 to 47,2% in 2021
- ▶ % of Energy companies reporting impairment remain stable of 69,2% in 2012 and 2021
- ▶ % of Financial services companies reporting impairment decreased from 54,2% in 2012 to 52,8% in 2021
- ▶ % of Healthcare companies reporting impairment increased from 40,9% in 2012 to 54,5% in 2021
- ▶ % of Infrastructure companies reporting impairment increased from 37,1% in 2012 to 42,5% in 2021
- ▶ % of Professional services companies reporting impairment increased from 36,8% in 2012 to 57,9% in 2021
- ▶ % of RCP companies reporting impairment increased from 51,6% in 2012 to 62,5% in 2021
- ▶ % of TMT companies reporting impairment decreased from 41,9% in 2012 to 44,2% in 2021

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



# 13.

## FTSE MIB vs. MSCI Europe by sector

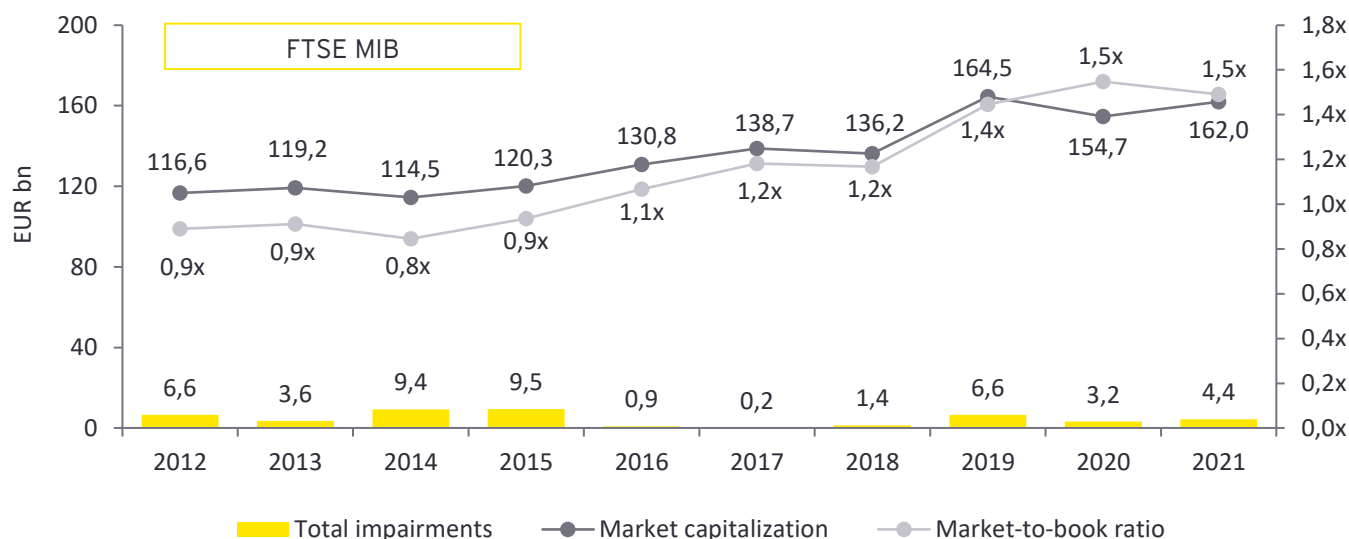
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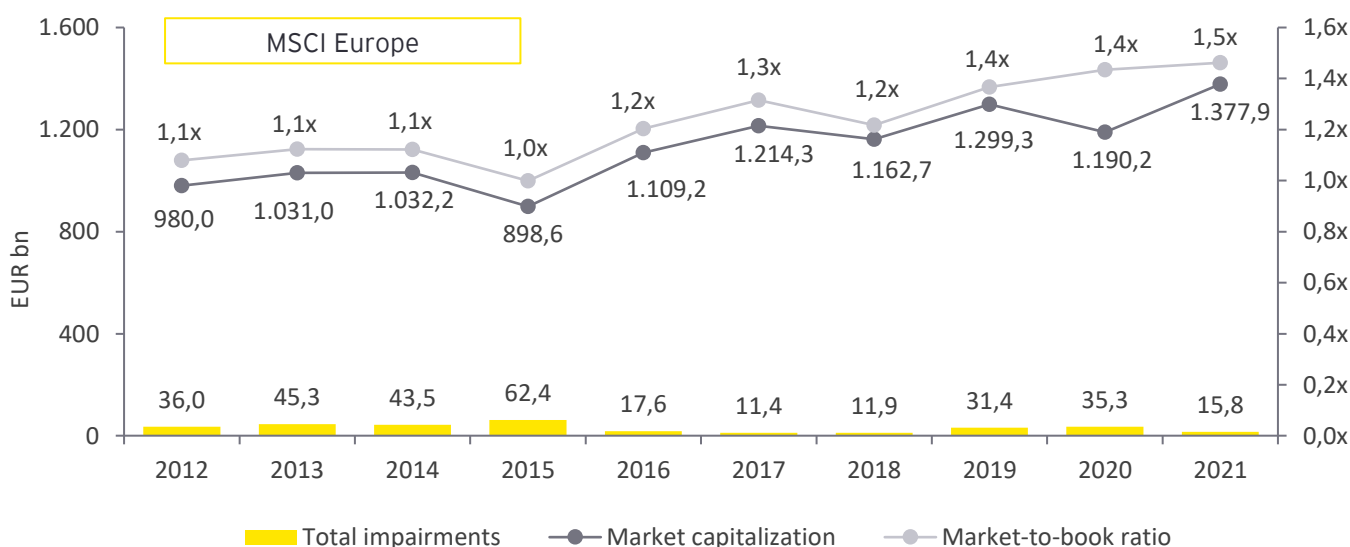
# FTSE MIB vs. MSCI Europe (Energy sector)

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 86,5% of impairment derived from asset write-down for MSCI Europe and 89,6% 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 2021, in MSCI Europe, 41,5% of total impairment was recorded by top 3 companies
- ▶ In 2021, in FTSE MIB, 99,5% of total impairment was recorded by top 3 companies
- ▶ Covid-19 crisis determined a decrease in market cap for both FTSE MIB and MSCI Europe Energy companies in 2020 while determined an increase in 2021 due to the rebound of the economy

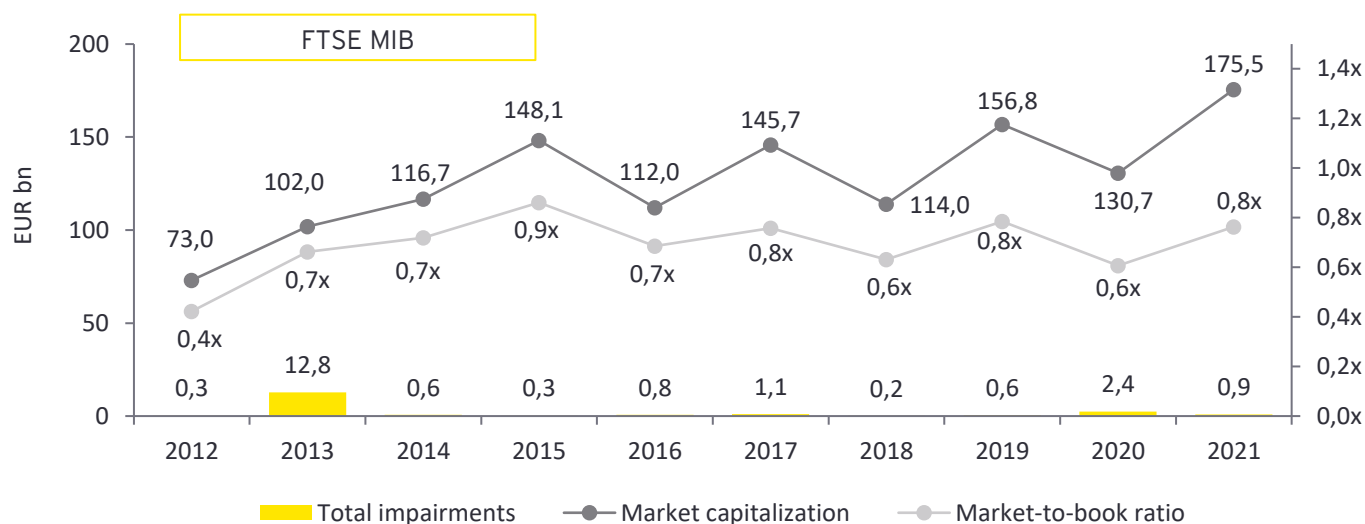


\* FTSE MIB companies by sector compared with MSCI Europe as FTSE AIM companies reported negligible impairment

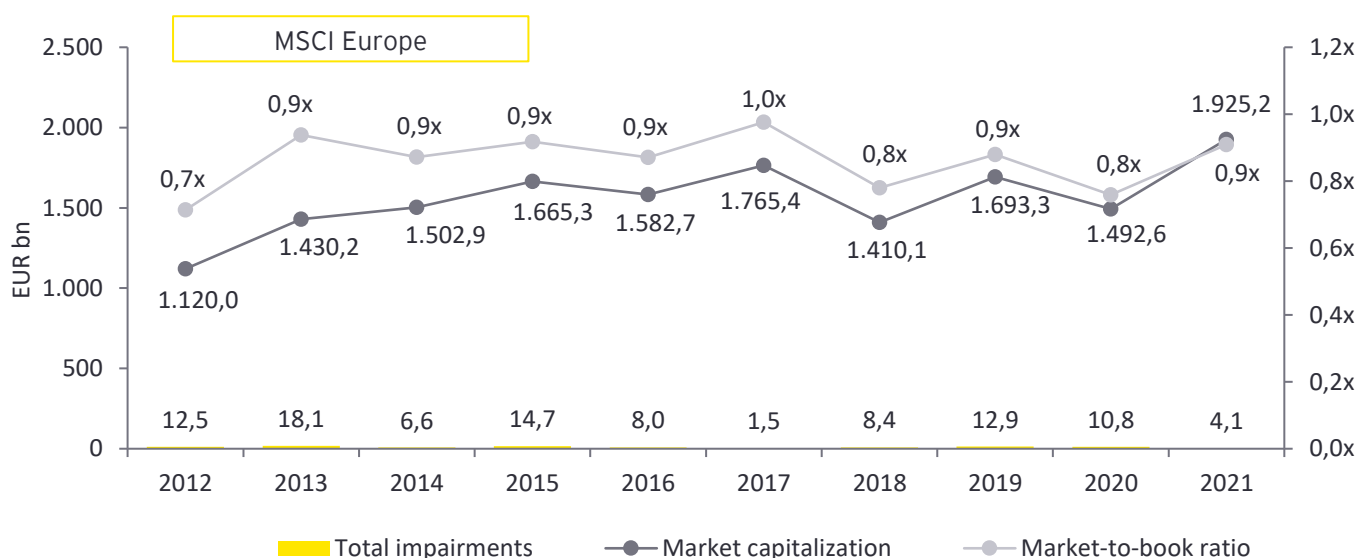
# FTSE MIB vs. MSCI Europe (Financial sector)

Impairment was high in 2012-2013 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 73,0bn and 0,4x, respectively in 2012 to EUR 175,5bn and 0,8x, respectively in 2021
- ▶ For MSCI Europe, total impairment was highest in 2013, with EUR 18,1bn
- ▶ Top 3 financial companies reported significant total impairment in 2021;
  - ▶ In MSCI Europe, 56,2% of total impairment was recorded by top 3 companies
  - ▶ In FTSE MIB, 67,6% 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, while determined an increase in 2021 due to the rebound of the economy

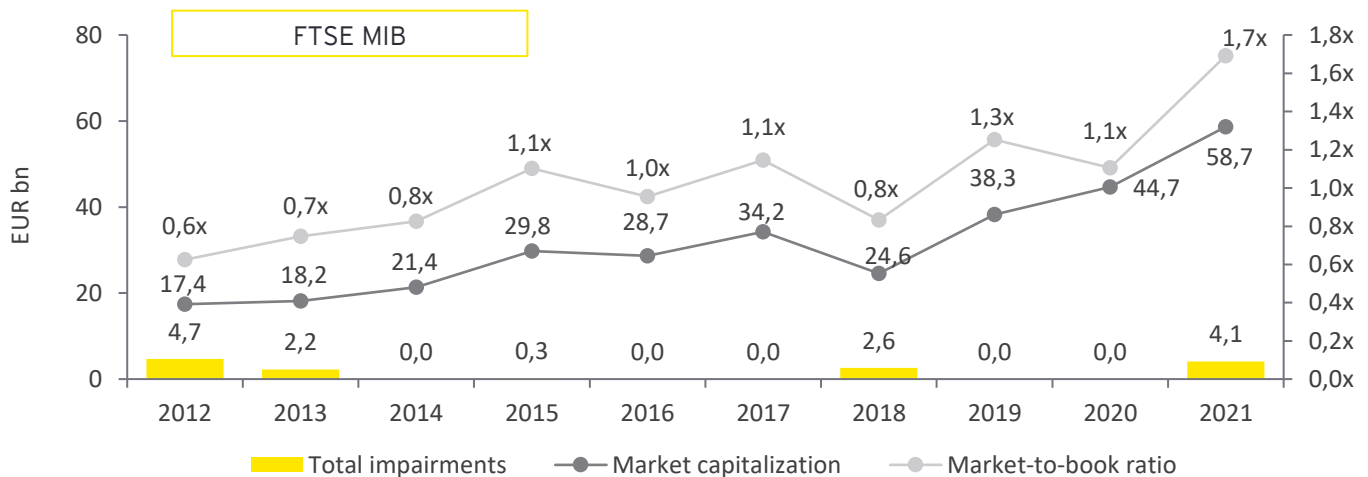


\* FTSE MIB companies by sector compared with MSCI Europe as FTSE AIM companies reported negligible impairment

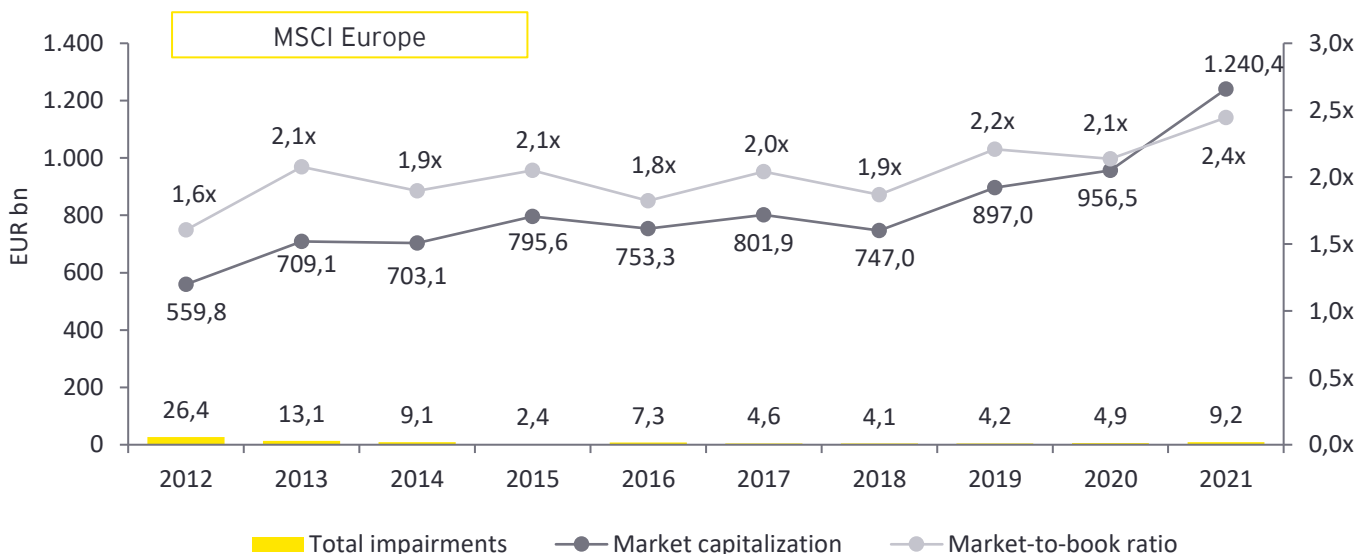
# FTSE MIB vs. MSCI Europe (TMT sector)

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 and again in 2021 for covid-19 crisis
- ▶ For MSCI Europe, total impairment during 2012-2013 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 2021;
  - ▶ In MSCI Europe, 91,1% 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 had an influence in the second year (2021) on impairment and market capitalization trend for both MSCI Europe and FTSE MIB TMT companies



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



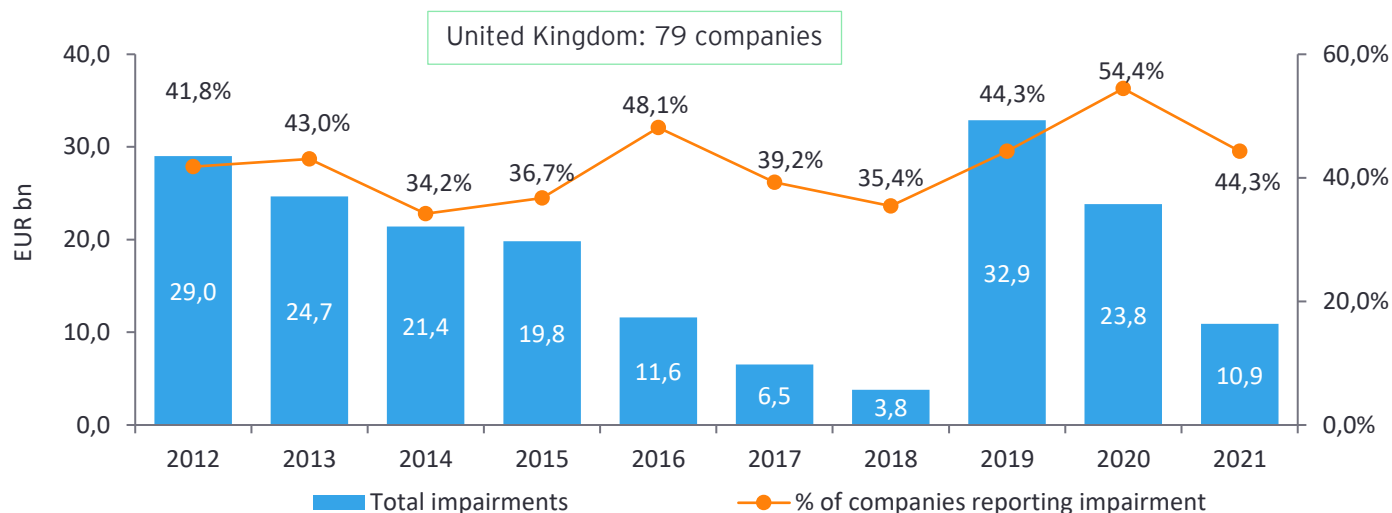
# 14.

## MSCI Europe by country

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# MSCI Europe by country: United Kingdom

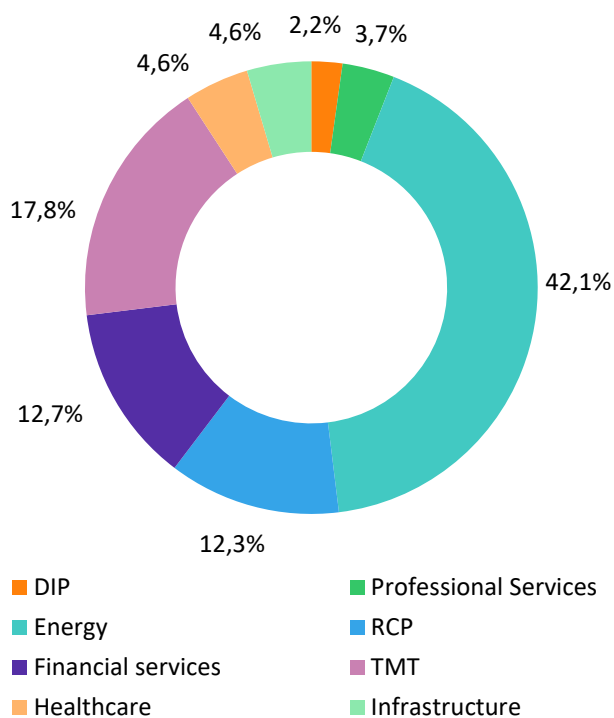
Average of 42,2% n° of UK companies reported impairment during 2012-2021, 44,3% in 2021



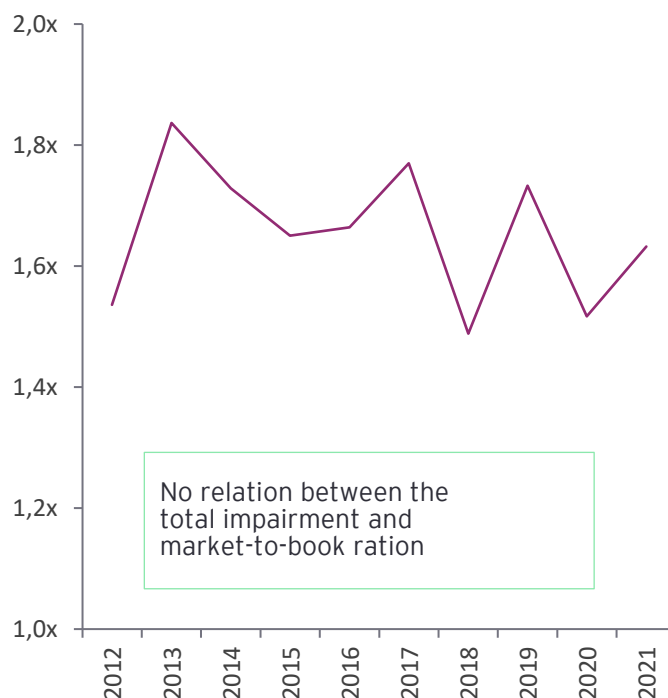
In 2021, top 3 companies based on total impairment reported 52,7% of total impairment of 2021 impairment

57,5% of total impairment reported by the top 3 companies during 2012-2021

## 2012-2021 total impairment by sector



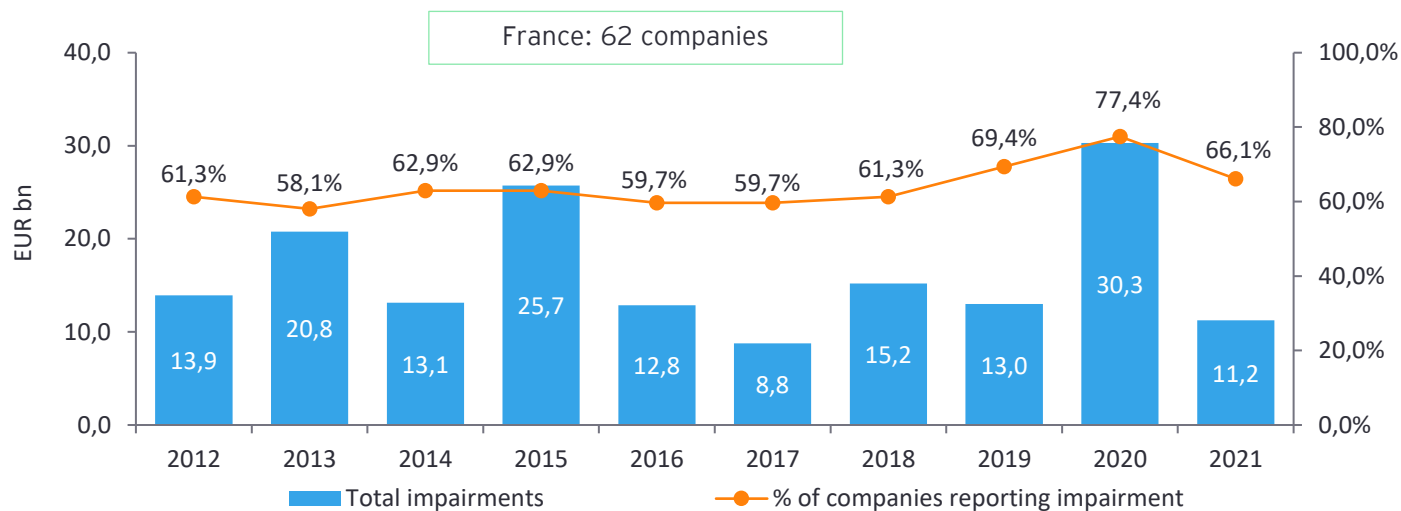
## Market-to-book ratio





# MSCI Europe by country: France

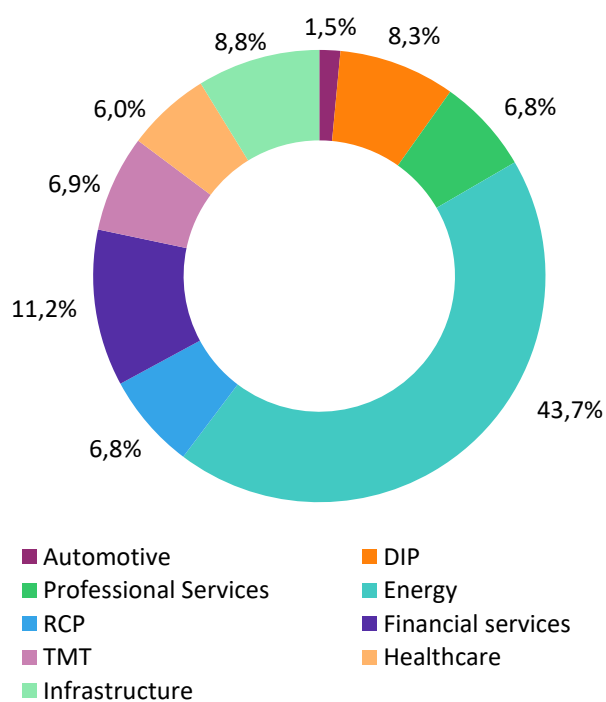
Average of 63,9% n° of French companies reported impairment during 2012-2021, 66,1% in 2021



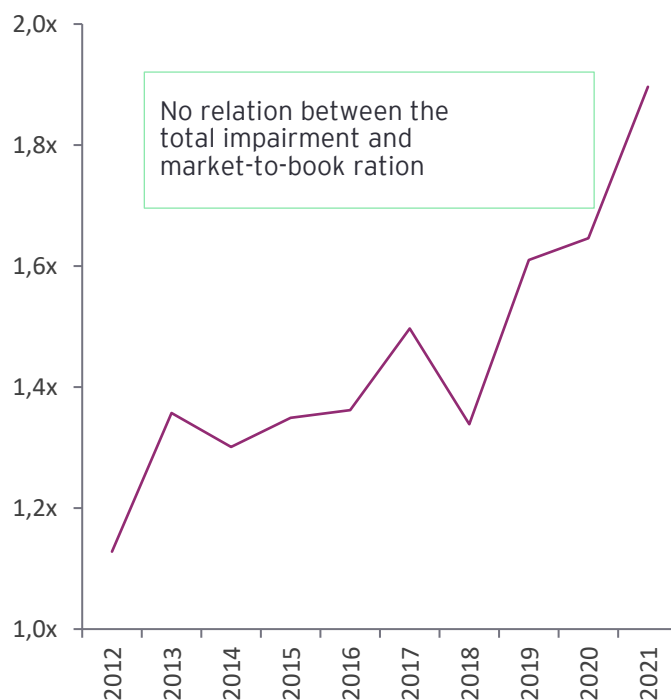
In 2021, top 3 companies based on total impairment reported 54,9% of total impairment of 2021 impairment

61,3% of total impairment reported by the top 3 companies during 2012-2021

## 2012-2021 total impairment by sector

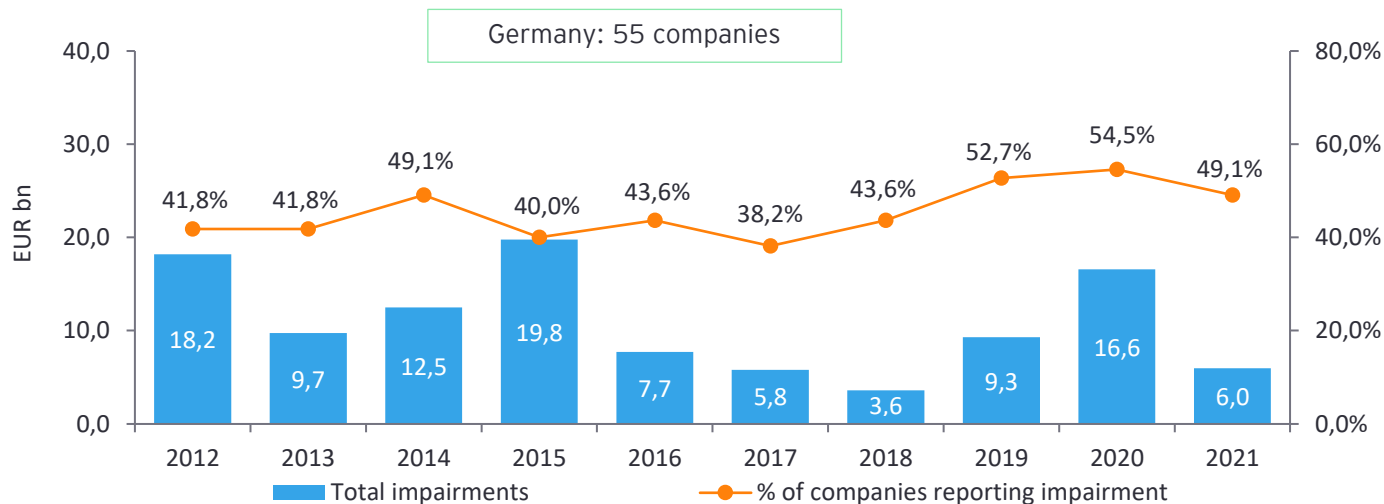


## Market-to-book ratio



# MSCI Europe by country: Germany

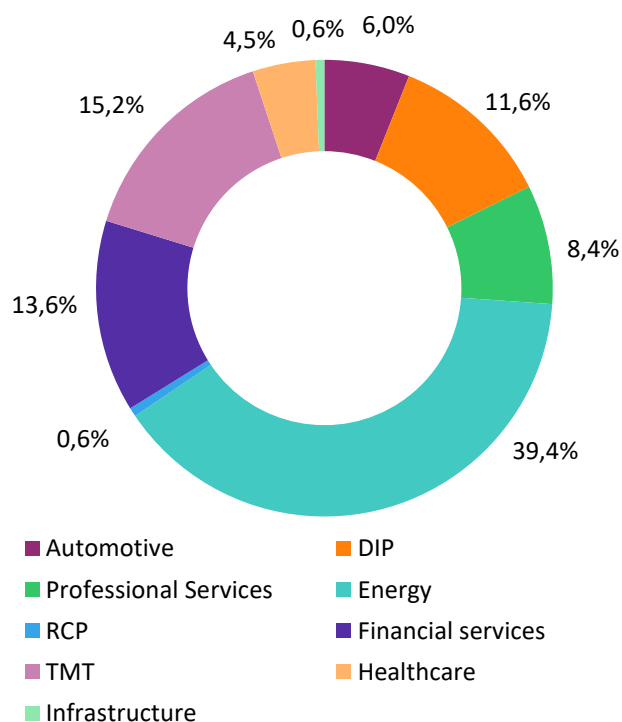
Average of 45,5% n° of German companies reported impairment during 2012-2021, 49,1% in 2021



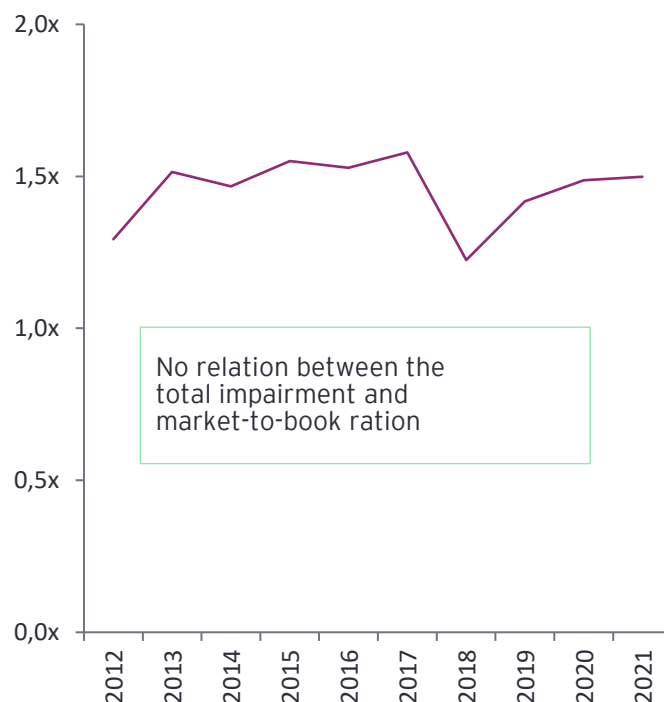
In 2021, top 3 companies based on total impairment reported 77,5% of total impairment of 2021 impairment

71,8% of total impairment reported by the top 3 companies during 2012-2021

## 2012-2021 total impairment by sector



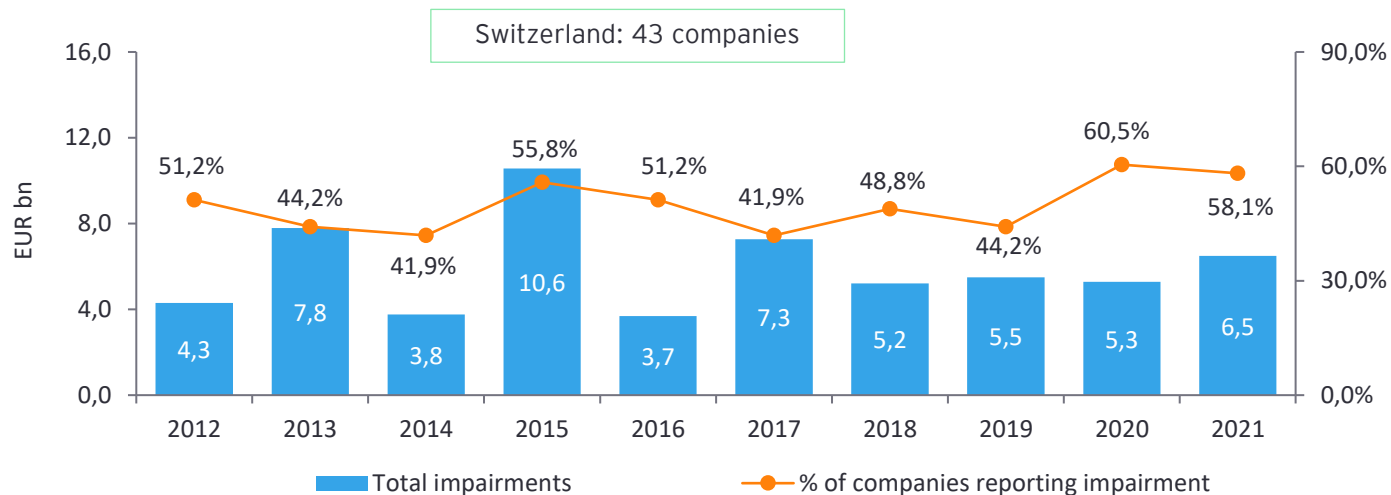
## Market-to-book ratio



No relation between the total impairment and market-to-book ration

# MSCI Europe by country: Switzerland

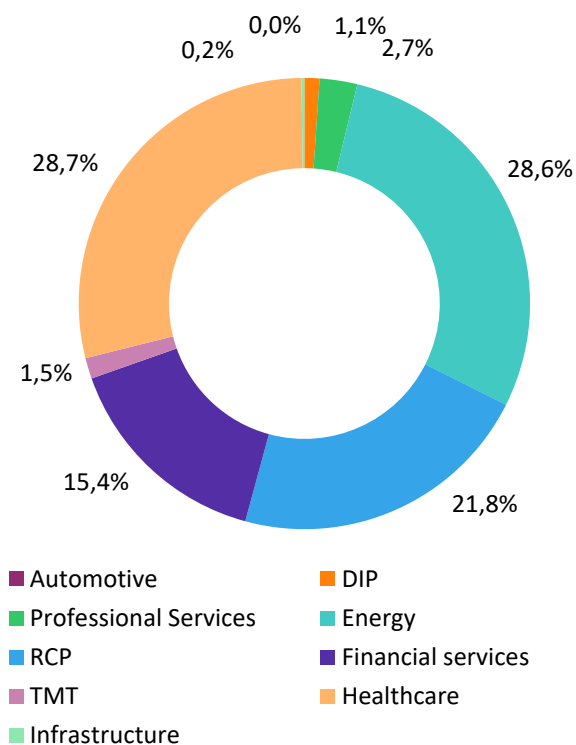
Average of 49,8% n° of Swiss companies reported impairment during 2012-2021, 58,1% in 2021



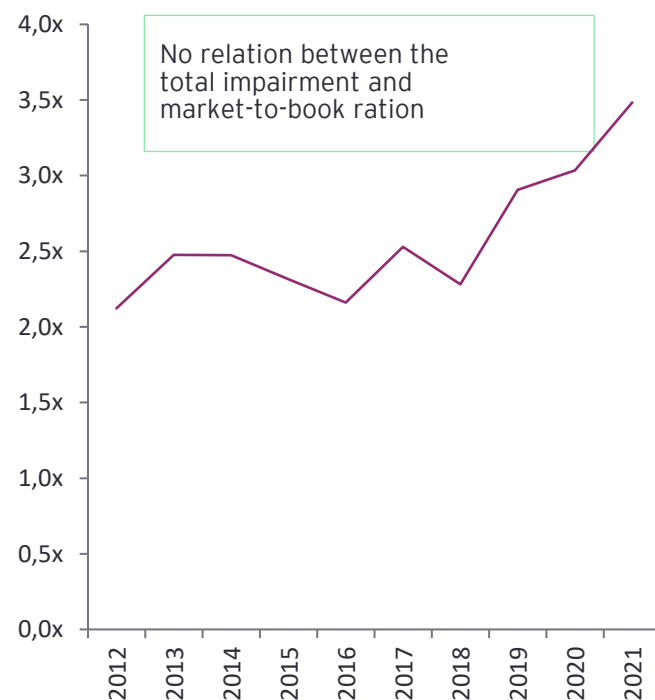
In 2021, top 3 companies based on total impairment reported 75,8% of total impairment of 2021 impairment

84,5% of total impairment reported by the top 3 companies during 2012-2021

## 2012-2021 total impairment by sector



## Market-to-book ratio





# 15.

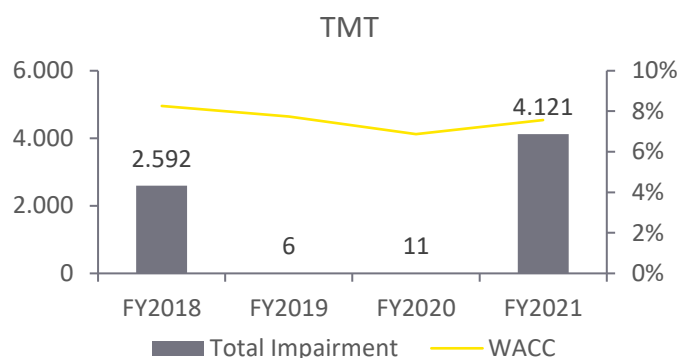
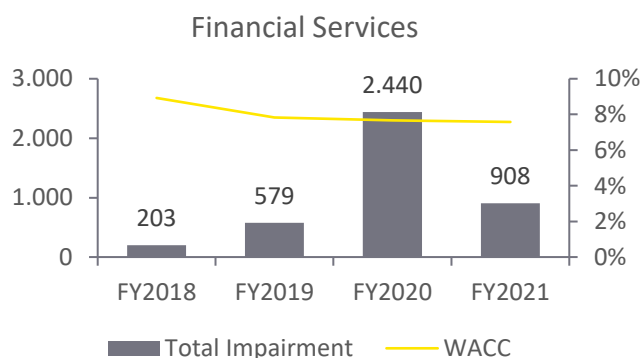
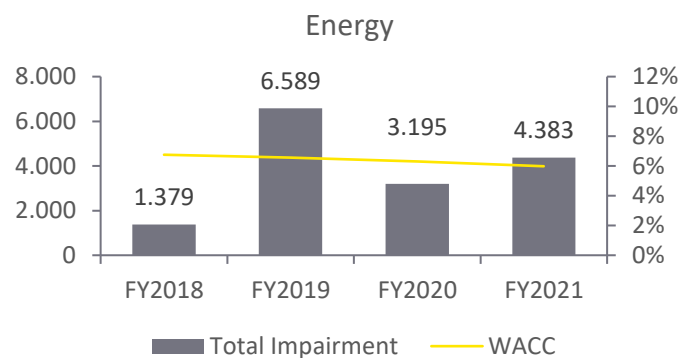
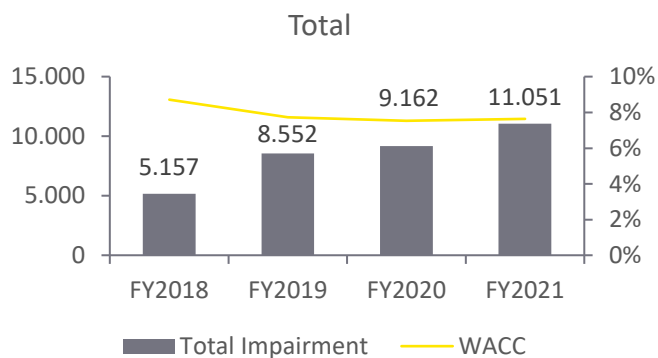
## Covid-19 crisis impact

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# 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 2021



- ▶ In late 2019, but especially in 2020, and 2021 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 2020 and 2021 Total impairment in FTSE MIB firms increased of 20,6%. In the tables above are reported the sectors of FTSE MIB companies that recorded higher total impairment in 2021
- ▶ The Financial Services sector has experienced a different trend in terms of total impairment: the total impairment in 2021 (EUR 908 m) is significantly lower than that recorded in 2020 (EUR 2.440 m). This difference is mainly due to the fact that in 2020, one of the company with the most influence on the Financial Services sector recorded a peak in Total impairment due to a particular situation
- ▶ The TMT sector had a particular trend during the Covid years. In 2019 and 2020, probably because of the benefit due to the relevance of the sector during the period, companies do not record impairment. In 2021, on the other hand, companies reported significant impairment, for a total of EUR 4,1bn, this impairment is related to a specific situation not related to covid that affected the trend of the sector and the total impairment of 2021
- ▶ Overall, the WACC of the companies, decreased between 2018 and 2021
- ▶ 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 on WACC to manage the impacts of Covid-19





# 16.

## Glossary

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# Glossary

000	Thousands
Avg	Average
CAGR	Compound annual growth rate
CGU	Cash Generating Unit
DIP	Diversified Industrial Products
EUR m	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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