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Private Equity Exit Report

January 2004 to April 2017

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Management summary

The private equity market is undergoing transformation. Portfolio companies are held longer by private equity firms, which have since established themselves in the market as active owners and operational partners. This report analyses the exit activities of German and international private equity firms and their German portfolio companies.

The combination of the low interest rate environment and the substantial liquidity currently available to private equity firms creates an ideal fundament for investments and exits alike. As operational improvements have increasingly become the top focus of private equity investors, holding periods of portfolio companies have been creeping up steadily. Despite the seemingly ideal conditions, the timing of a sale is therefore a crucial factor in maximising the value of the investment.

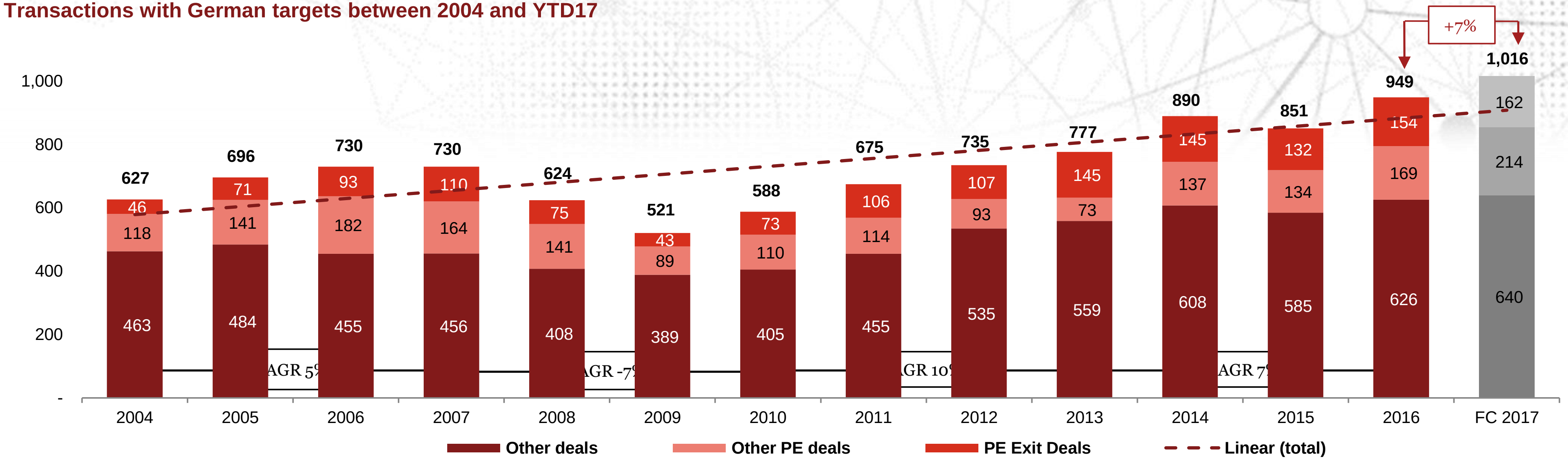
However, multiple arbitrage no longer exists: it is no longer easily possible for private equity firms to buy companies low and sell them high at a profit after a holding period of two to three years. Many exit processes fail due to the discrepancy between seller and buyer price expectations. This is primarily true for assets acquired at a relatively high price before the financial crisis. At the same time, the pressure on private equity firms to decrease their management fee, usually 2% of the fund volume, is rising. The pressure to make successful transactions is therefore also on the rise.

German deal market

Overview and breakdown

Deals with German targets have been constantly on the rise since 2009

Transactions with German targets between 2004 and YTD17



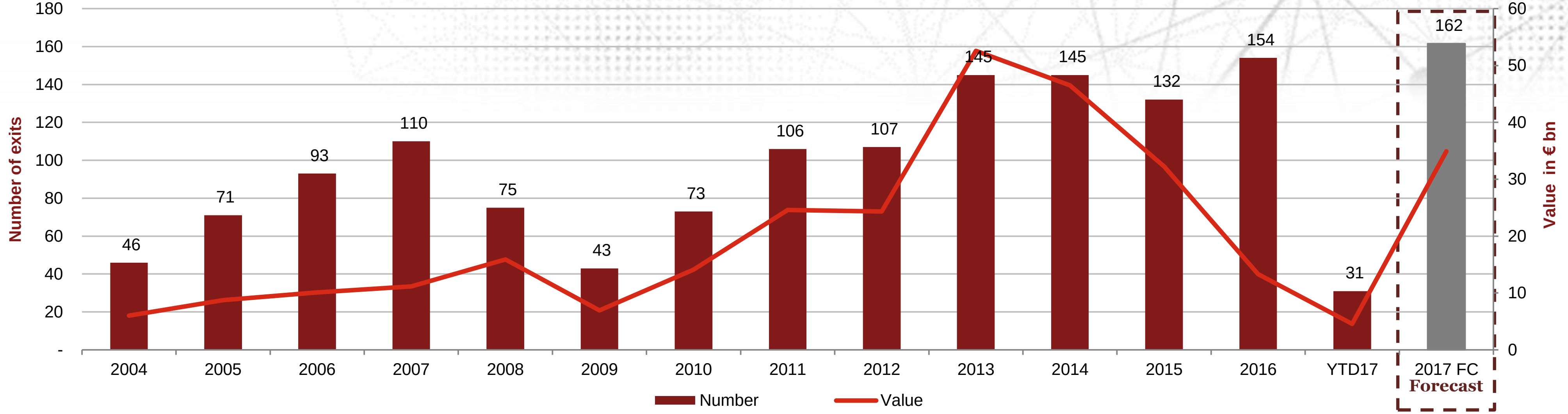
The number of transactions in Germany has increased continuously since 2010. The pre-crisis deal level of 2007 was overachieved in 2012 by reaching 733 transactions. 2016 ended with a 12% year-on-year increase in deal activity by reaching 949 transactions. Between 2013 and 2016, deals with German targets grew by a cumulative rate of 7%.

A forecast for 2017 is currently challenging, as the first four months of the year are generally weaker. Our analysis shows that 2017 will surpass 2016 by another 7% and that private equity as well as corporate deals will continue to grow. Germany has established itself as a safe haven for investments within Europe. In addition, the political stability and Germany's positive view towards the European Union will further spur market activity, leading PE firms to further deepen their focus on investing in Germany.

In addition, 2017 is markedly characterised by political instability and change. The first months of the year were influenced by the elections in France and the Netherlands. The German elections in September will also have an effect on the number of transactions. The economic impact of election results, such as custom and tariff regulations or the isolation of countries (Brexit), mainly affects internationally operating companies. The investment horizon for private equity firms is roughly five years. As such they cannot wait to see what happens and postpone their exits. Depending on the outcome of the upcoming elections, we expect two above-average quarters.

German private equity exits

Private equity exits involving German targets between 2004 and YTD17



Transactions in Germany are constantly on the rise, leading to an increase in the current portfolio of companies owned by private equity firms. Based on historical values, this will lead to an increase in the number of exits, meaning that further growth in the number of deals can be expected.

The conditions for transactions in Germany are positive: banks are indicating a very clear willingness to provide financing, there is substantial fund availability, interest rates remain low and valuations are high and positive. The conditions for a sellers’ market are good. We expect the number of PE exits to reach 162 this year, although this number will probably be exceeded on account of the positive overall conditions. We expect a further increase in transaction volume this year following a weaker 2016. Although a prediction is difficult due to the fact that a transaction value is not disclosed for the majority of deals, we expect a increasing number of IPOs with disclosed transaction values in 2017.

Exit deals in Germany
Total value and number of transactions since 2014

	2014					2015					2016					2017			
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	YTD	FC
Number of deals	21	33	42	49	**145**	34	38	26	34	**132**	29	37	43	45	**154**	21	10	**31**	**162**
Total transaction value (in €bn)	9.2	8.4	16.1	12.9	**46.6**	21.0	3.8	5.3	2.7	**32.8**	1.6	3.5	3.6	4.6	**13.3**	1.4	4.5	**5.9**	**34.9**

2014 saw a large number of IPO exits. This IPO boom led to a very high total transaction value in 2014 that did not repeat in the years that followed. We do not expect this transaction value to be reached again until the next IPO window. However, we expect IPO activity to increase over the course of 2017 and 2018, which could then lead to a further increase in transaction value.

Top 10 exit deals between 2014 and 2017*
The 10 largest exit deals by volume

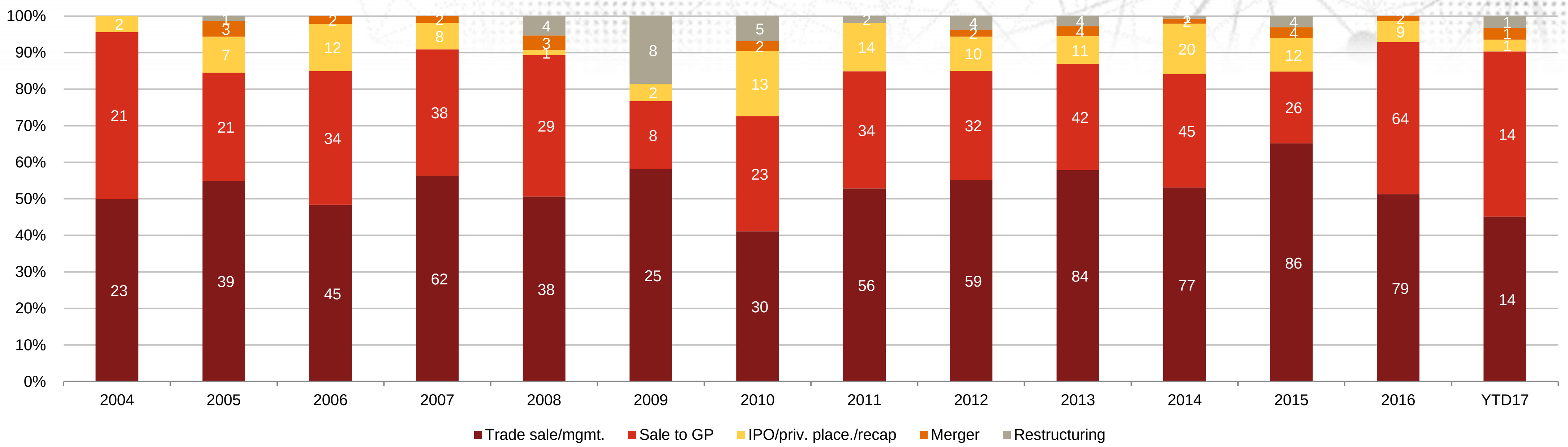
Investment date	Exit date	Target name	Seller name	Exit type	Holding period	Buyer name	Deal value in €bn	Primary industry
November 04	August 15	Tank & Rast	Terra Firma Capital Partners	Sale to GP	10.6	ADIA, Allianz Capital, Borealis, Munich Re	3.9	Retail and consumer
June 12	December 16	BSN Medical GmbH	EQT, Montagu Private Equity	Trade sale	4.5	Svenska Cellulosa	2.7	Healthcare and pharma
February 10	April 14	Flint Group	CVC	Trade sale	4.1	Goldman Sachs & Koch Industries	2.2	Industrials
July 08	December 16	Xella	Goldman Sachs Merchant Banking Division, PAI Partners	Sale to GP	8.3	Lone Star Funds	2.2	Materials
May 14	February 17	Mauser	Clayton Dubilier & Rice	Trade sale	2.7	Bway Corporation	2.2	Industrials
November 12	June 16	Dematic	AEA Investors, Teachers' Private Capital	Trade sale	3.6	KION Group GmbH	1.9	Industrials
January 10	June 15	Synlab	BC Partners, FutureLAB, Synlab	Sale to GP	5.4	Cinven	1.8	Healthcare and pharma
July 07	October 14	Rocket Internet	Global Founders, Kinnevik, Holtzbrinck, u.a.	IPO	7.2	Free float	1.4	TMT
December 12	May 16	SynteractHCR	Celerity Partners, Gryphon Investors, Ticonderoga Private Equity	Sale to GP	3.4	Amulet Capital Partners	1.4	Healthcare and pharma
May 06	June 14	Minimax	IK Investment Partners	Sale to GP	8.0	Intermediate Capital Group, Kirkbi A/S	1.3	Industrials

*Exits with disclosed deal value

Exit strategies since 2004

Exit strategies since 2004

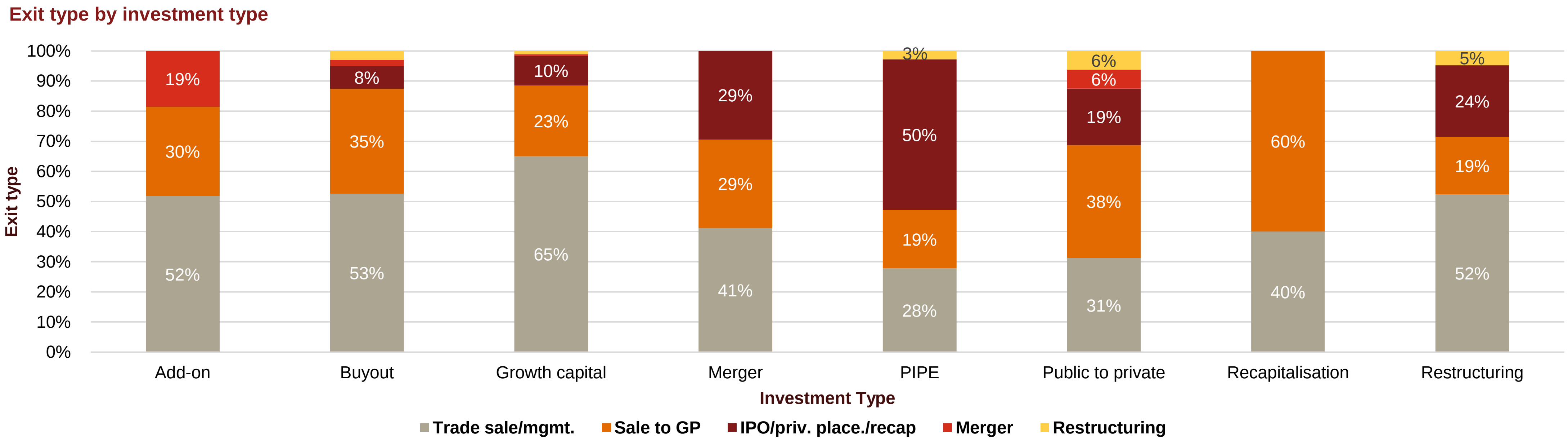
Exit strategies by type of exit between 2004 and YTD17



In Germany, there is a clear trend towards exits to strategic investors and others. Since 2004, exits to strategic investors have represented 53% on average, with exits to other financial investors accounting for 33%. This development becomes even clearer when looking at individual time periods. In 2013, 58% of all exits were to strategic investors, and in 2015 this trend reached a new high of 86 exits, or 65% of the total. Private equity firms have increasingly established themselves as active shareholders. As such, strategic investors gladly buy PE-held assets. Exits to other financial investors reached their highest point in 2016: 64 companies in total changed hands to another private equity firm. This exit strategy therefore accounted for 42% of all exits.

Due to the global financial crisis, restructurings accounted for 19% of all deals in 2009. The impact of the financial crisis continued to make itself felt in 2010, with restructuring transactions again accounting for 7% of all deals. The public market continued gaining relevance for PE exits after 2010. In 2010, 18% of transactions were concluded through the public market. That figure was 13% in 2011. In 2014, we saw a record level of exits through public markets: there were 20 public market exit transactions, 10 of which were IPOs.

Exit strategies since 2004



Restructuring cases that are taken over by private equity investors end up being successful: following a successful turnaround, 52% of restructurings are sold to strategic investors and 19% to further financial investors. Altogether, 24% end up being exited through public markets.

At 53%, the exit to strategic investors was the most dominant exit strategy among investment types in the period between 2004 and YTD 2017. At 32%, exits to financial investors came in second.

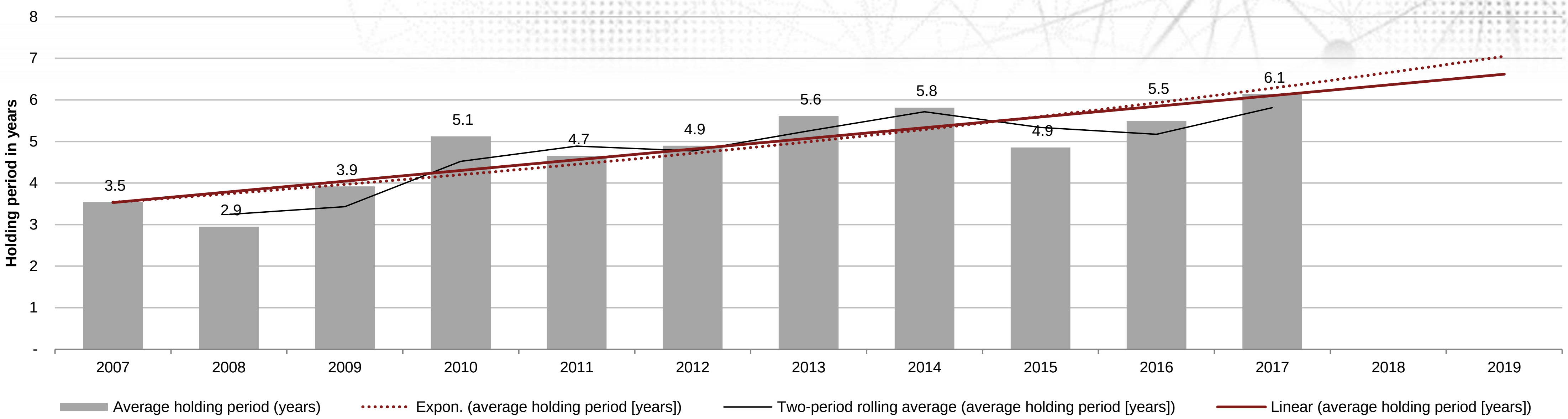
The public market is the most popular exit route for the investment types merger and PIPE – 30% and 50% respectively are exited by an IPO or private placements. In addition, 19% of all public-to-private and 10% of all growth capital investments end up changing hands through public markets.

Recapitalisations are usually handed over to other financial investors (60%), while the remaining 40% go to strategic investors.

Development of historical holding periods by industry and forecast

Holding periods between 2007 and YTD 2017

Holding periods of targets between 2007 and YTD 2017

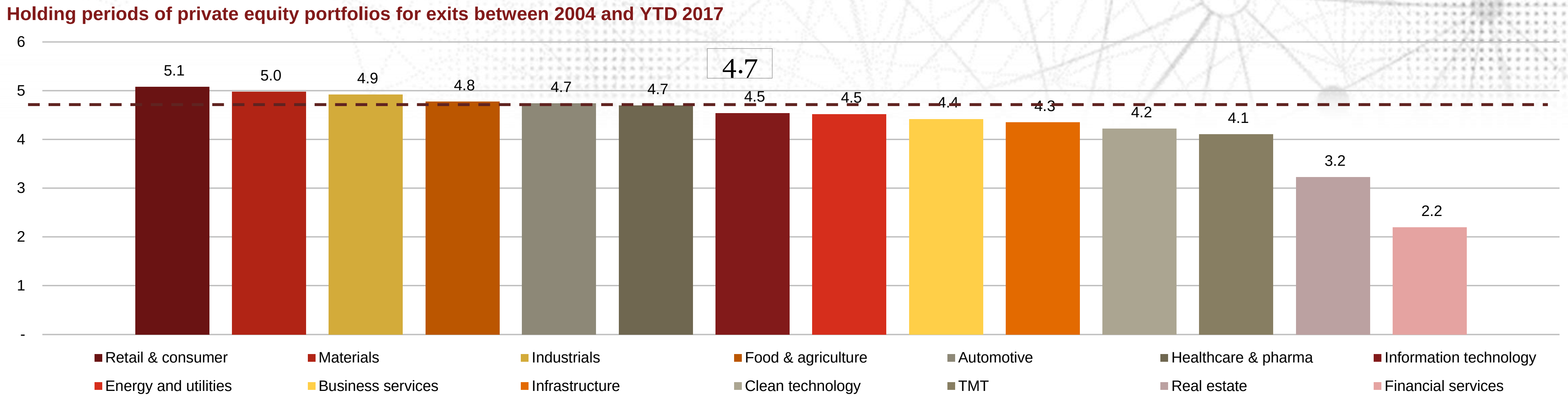


Private equity firms are focusing increasingly on value creation and operational improvements. This is reflected in the holding periods of their portfolio companies. Until 2014, exited portfolios had an average holding period of 4.6 years. Since then, it has increased further to 4.7 years. Based on the exits over the past ten years, the average stands at 4.9 years and could increase to up to 7 years by 2019.

Currently, private equity funds hold very high capital reserves. However, assets are scarce. This puts private equity investors increasingly under pressure to make new investments to get the raised capital to work. The pressure to invest and the growing number of transactions between private equity firms led to a slight reduction in holding periods in 2015 and 2016. Nevertheless, we expect average holding periods to rise in 2017.

Should this trend be extrapolated, the current situation will further intensify and deepen. Under linear projection, holding periods will reach roughly 6.2 years by 2019. Should economic conditions deteriorate, however, this trend could increase exponentially to holding periods of 6.5 years or even more.

Holding periods by industry

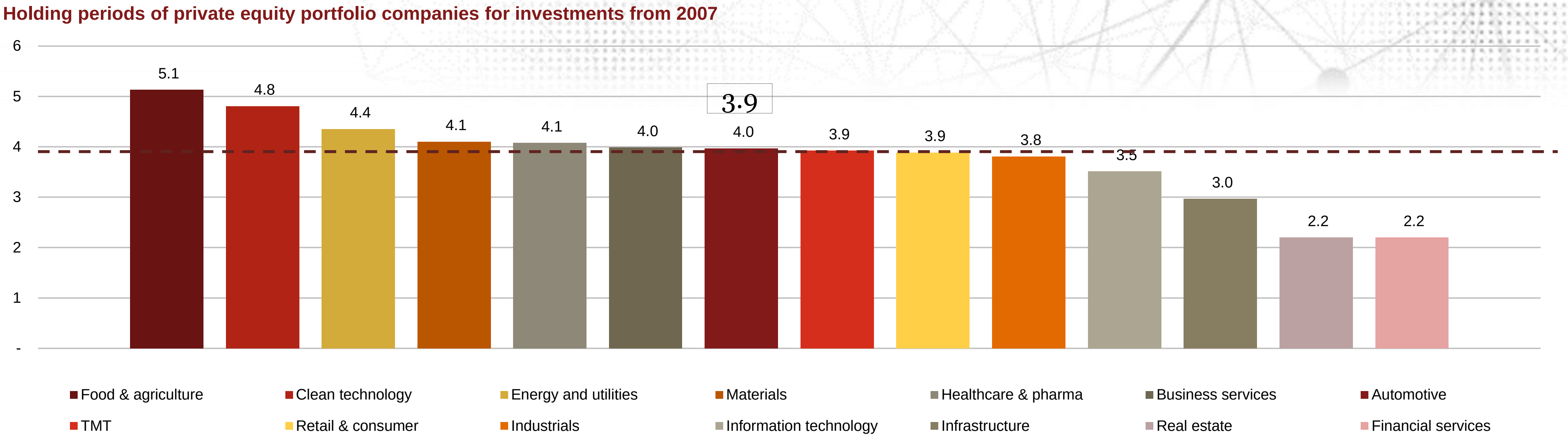


Compared to 2014, the retail and consumer sector took infrastructure's first place in terms of holding period, although the average holding period in R&C remains unchanged at 5.1 years. By contrast, the holding period for infrastructure assets fell to 4.8 years during the same period due to multiple assets having been exited.

Many private equity firms have diversified their investment focus more strongly and allocated capital not only to buyout funds in order to be able to better tackle the flood of capital and rising investment pressure. Some have created debt funds or funds with longer investment horizons or a focus on real estate. Infrastructure assets are of special interest to such funds. As a result, such assets have changed hands quicker in recent years, which has led to shorter holding periods (4.3 years). In addition, low interest rates have led to a real estate price boom in many cities. Private equity funds have also used this trend and invested more in real estate assets that they have since largely sold. This is another aspect that has contributed to the decrease in holding periods.

Private equity firms have only recently discovered the financial services sector to be a fast-growing market. The investments in the sector have been quick to change hands, explaining the lowest average holding period of any industry of only 2.2 years.

Holding periods by industry

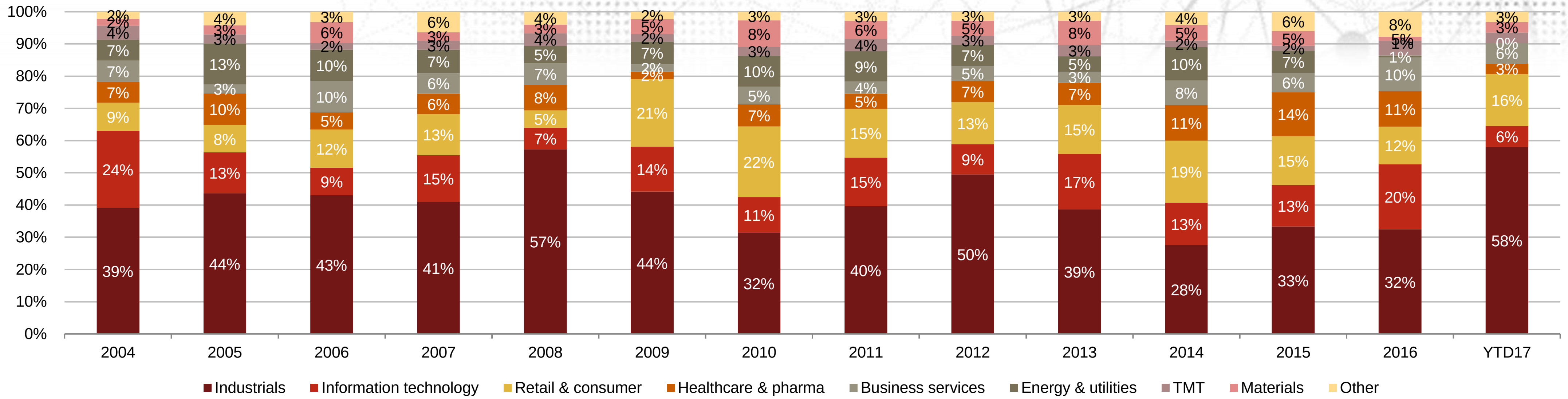


The private equity industry has, as a whole, matured and grown more professional and sophisticated. The average holding periods of investments made in the past 10 years amounts to 3.9 years, compared to 4.7 years when considering all investments.

Investments are now being made in a more professional and diligent manner, and investors are no longer willing to pay any price. Private equity firms already start thinking about the goals of the equity story and ways to seize the potential of an investment from the very start.

Private equity exits by industry between 2004 and YTD 2017

Private equity exits by industry between 2004 and YTD17



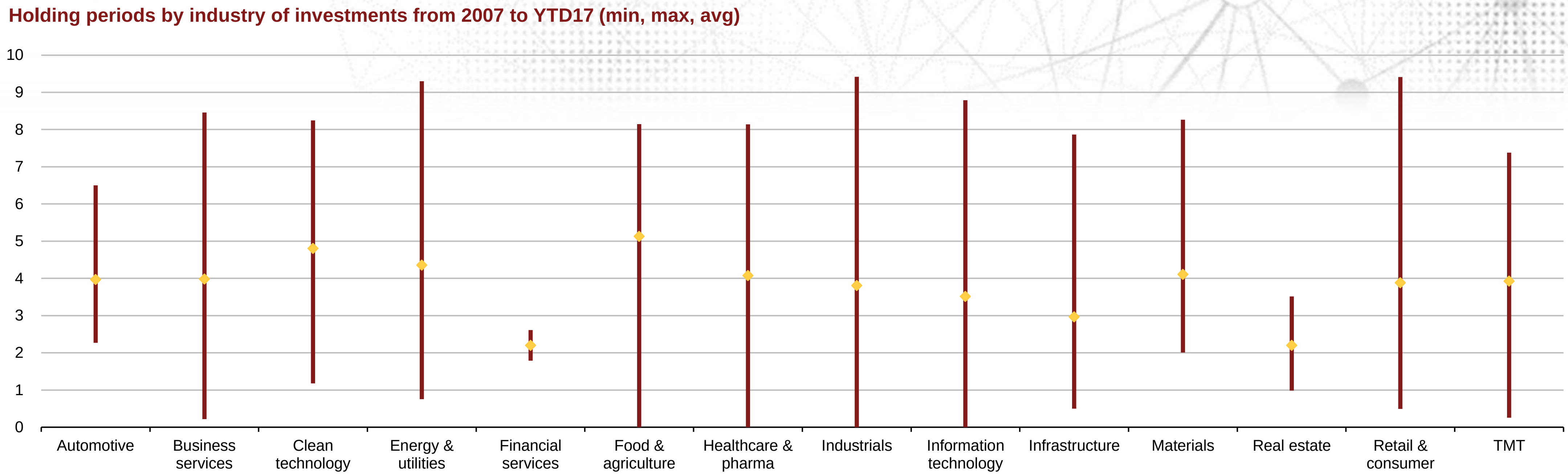
Industrial assets remain sought after in Germany and were the largest sector in PE portfolios and exits between 2004 and YTD 2017. The lowest point was in 2014, when only 28% of exits were attributable to the sector, which was due to the high proportion of industrial exits in 2011. Since 2014, the share of exits attributable to the industrial sector has constantly been on the rise and could achieve a new high in 2017.

The sectors information technology and business services are further on the rise and are being spurred by the current trends of digitisation and disruption of traditional business models. In 2016, there were 31 exits in the IT sector – more transactions than ever before. The business services also benefited from this trend and finished the past year with a total of 16 exits.

Healthcare and pharma has been gaining in importance since 2012. The share of exits accounted for by this sector increased from 5% in 2011 to 14% in 2015. The increase becomes even more clear in absolute numbers: the number of exit deals in the healthcare and pharma sector rose from 5 in 2011 to 17 in 2016. Demographic change remains the megatrend in this sector.

Energy and utilities portfolios also changed ownership more frequently in 2016. With 7 transactions, they accounted for 5% of exits in 2016.

Private equity exits by industry: high/low by investment date



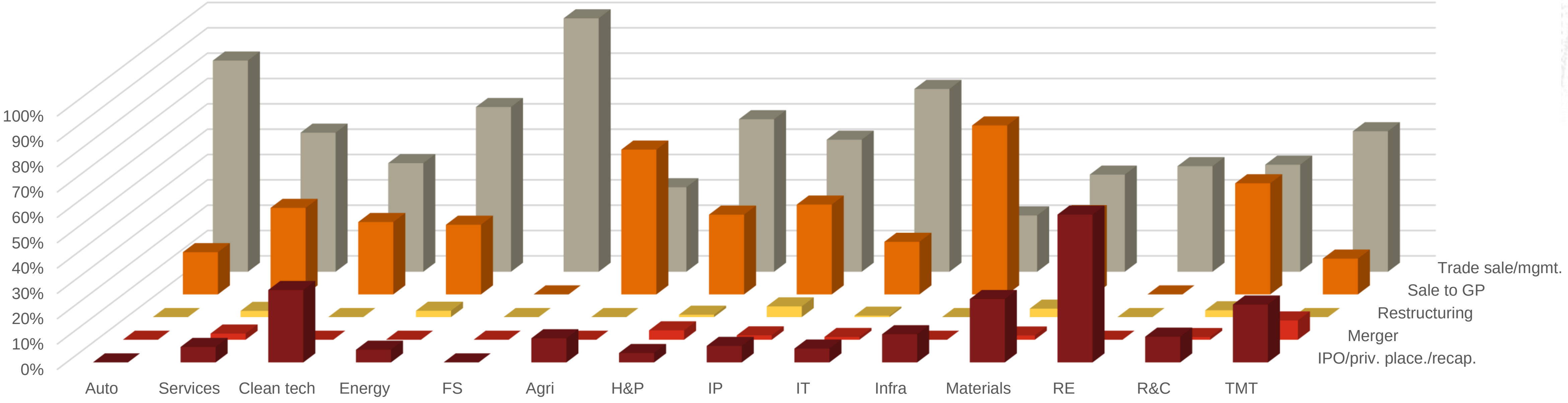
A downward trend can be seen in average holding periods of private equity investments depending on the period of investment. When taking all investments since 1975 into consideration, we find an average holding period of 4.7 years. If we only consider investments with an entry date after 2000, the average holding period falls to 4.4 years. If we limit the period to the past ten years, the average holding period even falls to 3.9 years.

Many private equity firms are struggling with historical legacies from the period prior to the financial crisis. These assets lead to longer holding periods. Investments are now being made in a much more professional and diligent manner. Private equity firms are no longer buyers at any price – which may have partially been the case before the crisis.

The largest fluctuations in holding periods – between almost ten years to under one year – can be seen in the industrials, energy and utilities, and retail and consumer sectors. In contrast , holding periods in the real estate and financial services sectors are below average and have seen the lowest fluctuation.

*Exit types by industry**

Private equity exits by industry and exit type between 2004 and YTD17



Assets involving the real estate, clean tech, technology, media and communications, and materials sectors were the exits most frequently handled on stock exchanges between 2004 and YTD 2017. Financial services (100%), automotive (83%), information technology (72%) and healthcare and pharma (60%) were the assets most frequently sold to strategic buyers.

Infrastructure (67%), agriculture (57%) and retail and consumer (44%) companies were the assets most frequently sold to other private equity firms.

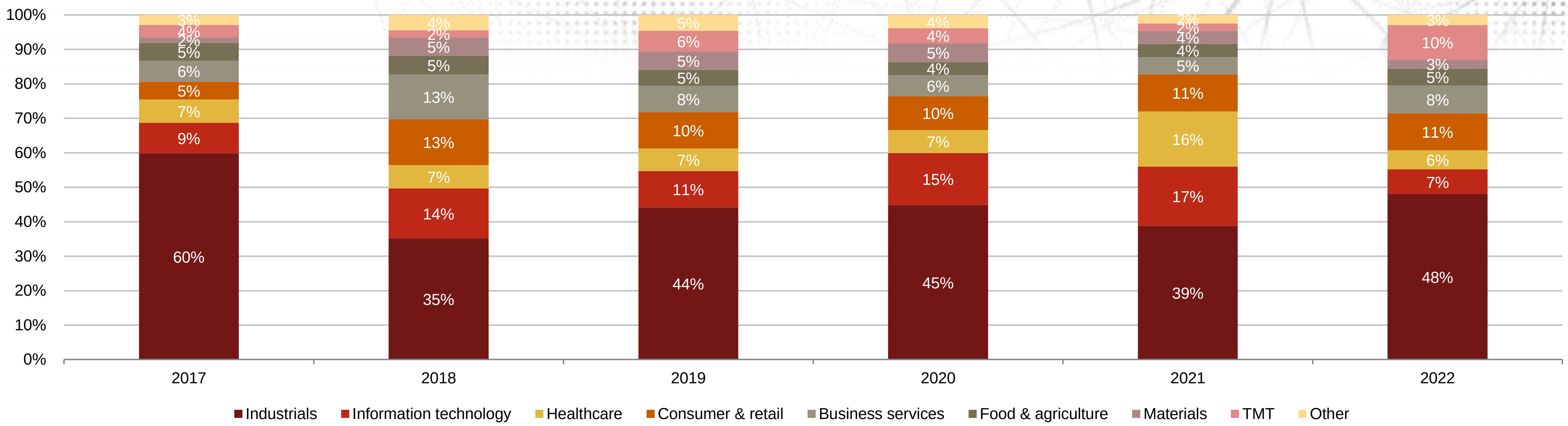
By contrast, the majority of mergers took place in the technology, media and telecommunications, healthcare and pharma, and business services sectors.

Restructurings were necessary most frequently in the industrials sector between 2004 and YTD17 and led to the exit of the financial investor.

*Industries set too 100%

*Exit forecast by industry**

Forecast exits by industry in % of annual total between 2017 and 2022*



In 2017 , we expect another increase in exit activity in the industrial sector. We believe that private equity firms' portfolios currently contain some investments that they have already held for a very long time. They could take advantage of the favourable market situation to plan an exit. These transactions have accounted for a small share of exits in recent years. This is also reflected in the figures for January to April 2017: 58% of all exits this year are attributable to the industrial sector.

Information technology assets will probably represent 14% of all exits in 2018 and will therefore remain an additional driver of private equity exits in 2020 and 2021.

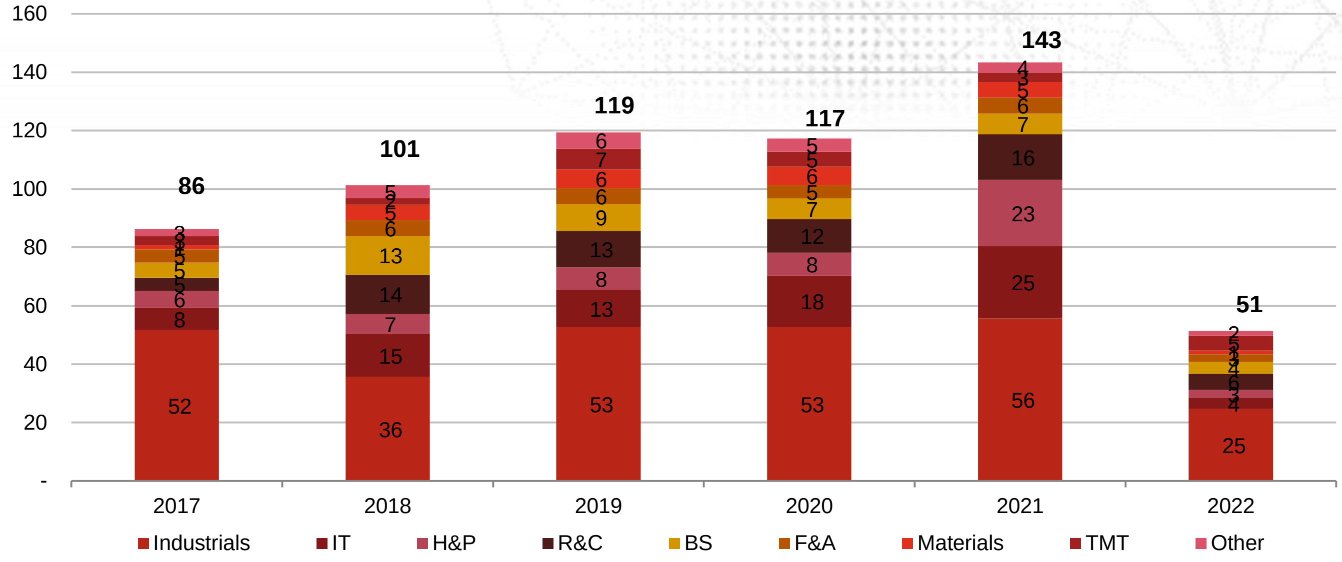
Assets from the retail and consumer industry, as well as from the business services sector, will increasingly come to market in 2018.

Exits from healthcare and pharma assets should remain stable at 7% in the years ahead. However, the number of transactions in the healthcare and pharma sector will substantially increase in 2021. In addition, technology and media and telecommunications assets should gain in importance in 2022.

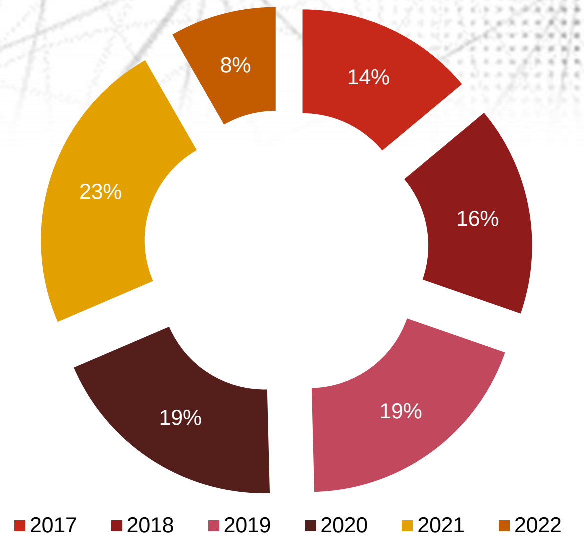
*Calculated by applying average holding periods

*Forecast exits of secondary buyouts by industry and year**

Forecast exits by industry between 2017 and 2022*



Exit maturity between 2017 and 2022



The majority of the current PE-held portfolios (except for the pre-crisis investments) is relatively young. This is reflected in the growing importance of sale to GP exits in recent years.

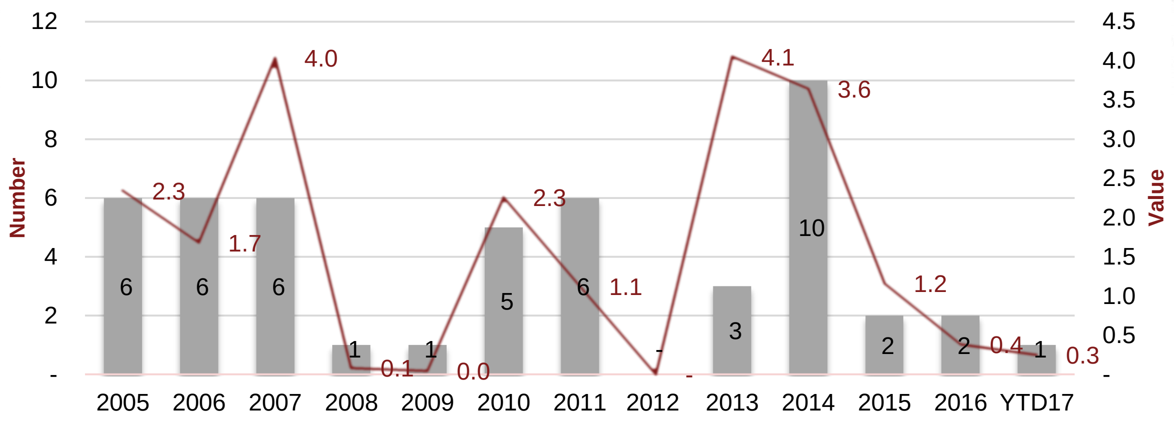
As such, only 14% of the current PE portfolio companies are ready for exit in 2017. This proportion will increase in the years ahead, nearly doubling to 23% by 2021 and reaching its peak. We therefore expect a larger exit wave of private equity companies in 2021.

*This calculation is based on average calculated holding periods and refers only to secondary buyouts and the current PE portfolio.

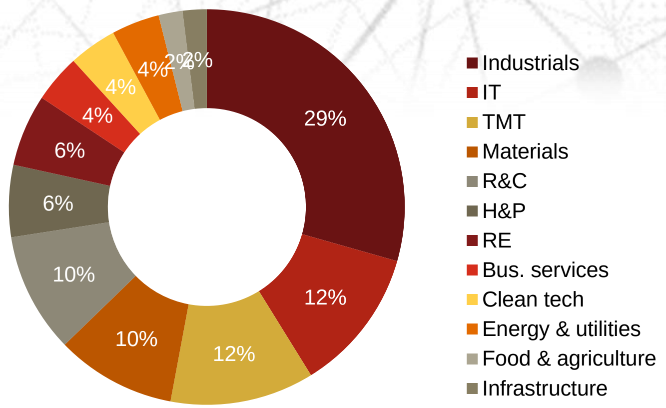
IPO exits

IPO exit type since 2004

Number and value of IPOs of PE-owned portfolio companies



IPOs by Industry between 2004 to YTD17



The peak of exits with an IPO was reached in 2014.

Since then, there have been few IPOs. In 2015 and 2016, there were only two IPOs chosen as an exit route by financial investors. In 2016, we were witness to many dual-track exit processes. However, most of these assets ultimately went to other financial investors or strategic buyers.

Despite the good market situation, we believe that stock exchanges in continental Europe are operating at full capacity. Some financial investors who are planning an exit from their assets in 2017 will increasingly turn to stock exchanges in the hopes of higher price ranges. This window may quite well shift into 2018 due to the scheduled elections in the United Kingdom in June 2017 and in Germany in September 2017.

All IPOs* since 2014

Investment date	Exit date	Target name	Investor name	Exit type	Holding period in years	Deal value In €bn	Primary industry
July 07	October 14	Rocket Internet	Global Founders, Kinnevik, Holtzbrinck, u.a.	IPO	7.2	1.4	TMT
November 13	October 15	Scout24	Blackstone Group, Hellman & Friedman	IPO	1.8	1.0	TMT
July 12	October 14	Zalando	Global Founders, Kinnevik, Holtzbrinck, u.a.	IPO	2.2	1.0	Retail and consumer
July 09	June 14	Monier Group Services GmbH	Apollo, TowerBrook Capital & Invita AG	IPO	4.9	0.5	Materials
December 12	October 14	TLG Immobilien	Lone Star Funds	IPO	1.8	0.4	Real estate
January 15	March 16	Senvion SE	Centerbridge Capital Partners	IPO	1.2	0.3	Clean Tech
April 11	July 14	Orion Engineered Carbons	Rhône Capital & Triton	IPO	3.2	0.3	Materials
November 15	March 17	Aumann GmbH	MBB Industries	IPO	1.3	0.3	Industrials
July 08	April 14	Stock Spirits Group	Oaktree	IPO	5.7	0.3	Retail and consumer
April 13	May 14	SLM Solutions	Deutsche Private Equity	IPO	1.1	0.2	Information technology
April 10	May 14	Stabilus	Triton	IPO	4.1	0.1	Industrials
November 11	September 16	Va-Q-tec	Zouk Capital	IPO	4.8	0.1	Industrials
April 07	September 14	Affimed	Life Sciences Partner, BioMed, OrbiMed Advisors	IPO	7.3	0.0	Healthcare and pharma
June 07	October 14	Probiodrug	IBG, TVM Capital, HBM BioVentures AG	IPO	7.2	0.0	Healthcare and pharma

*Exits with disclosed deal value

Methodology

Methodology

This report is an analysis of the exit activities of German and international private equity firms and their German portfolio companies.

The analysis is based on information from the Preqin and Mergermarket databases. This data encompasses all private equity deals announced during the period and involving portfolio companies that are based in Germany.

The analysis includes all announced exits, including trade sales, sales to general partners, IPOs, mergers, management and leveraged buyouts (MBO/LBO), restructurings (sales from insolvencies) and private placements in the period between 1 January 2004 and 30 April 2017. The dates of the individual investments range back to 1975. Private equity deals are deals in which a private equity firm or fund was the direct seller and/or part of a consortium of sellers, as well as deals that are processed through a special purpose vehicle (SPV), where a private equity firm was the parent company.

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