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Research Report

Private equity in Germany: An assessment of transaction, structures and players

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STUDY

Study 470 · February 2022

PRIVATE EQUITY IN GERMANY

An assessment of transactions, structures and players

Christoph Scheuplein

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An assessment of transactions, structures and players

Christoph Scheuplein

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SUMMARY

- The activities of private equity companies in Germany from 2012 to 2018 are presented from an employee-oriented perspective.
- During this period, 1,505 buyouts of companies were documented. After 2015, the number of takeovers rose continuously.
- The number of employees increased as well, but at a slower pace. In total, about 570,000 domestic employees were working in companies taken over by private equity.
- The most important target industry was the health sector, in which numerous small and medium-sized enterprises were acquired and merged.
- In more than half of the companies with 2,000 or more domestic employees owned by financial investors, parity co-determination was ignored or avoided.
- Around 620 companies changed hands from private equity ownership between 2013 and 2018, but a large number of companies were sold to a financial investor (42%) again and twelve percent of companies went into insolvency.
- The annual return of funds operating in Germany ranged from 13 percent to 21 percent, with younger funds from the start year 2016 at the upper end of this range.
- The private equity funds were predominantly located in tax havens, and this increased over time.

1 INTRODUCTION

“Private equity” is a form of corporate finance that operates outside the regulated capital markets. Therefore, this market for corporate control often remains opaque. The research studies currently available are mostly formulated from the perspective of private equity (or synonymously in this paper: financial investors) (cf. EY 2020; PwC 2020; BVK 2021). In this study, the activities of private equity firms are considered from an employee-oriented perspective, because employees are faced with particular challenges due to the operational and strategic interventions of private equity in the acquired companies, due to the time limits of such investments and due to the usually high profit expectations of the financial investors. This should also provide an instrument to assess an imminent company takeover from the perspective of workers’ representatives. This report focuses primarily on the following questions:

- What are the investment targets and how many workers are affected by the takeovers?
- Which types of private equity firms dominate in Germany and what is known about their funding base and returns?
- How long are the companies owned by a financial investor and what ownership characterises the companies after the exit of the financial investor?

This study continues the “Private Equity Monitor Deutschland” (Scheuplein 2019) and supplements it with another year, 2018. At the same time, the previously available data set was completely rechecked and supplemented. This affected the early years 2012 to 2015 in particular. Among other things, the definition of private equity companies was narrowed and, for example, public private equity companies were completely excluded. The economic data (employees, turnover), which can often only be taken from the annual reports with a longer time lag, were revised. In addition, some newly discovered buyouts and exits were classified, which applies above all to insolvencies of companies (cf. [Chapter 9](#)). With these changes and additions, more far-reaching statements can now be made, e.g.:

- For all buyouts and exits, a distinction can be made between employment in Germany and employment in the company as a whole.
- By taking insolvencies into account, the entire spectrum of exits and thus also holding periods can be represented.

In the remainder of the paper, the business model (Chapter 2) and the methodology (Chapter 3) are explained first. Then, the acquisitions from 2012 to 2018 (Chapter 4) and the total stock of companies with more than 2,000 employees owned by financial investors (Chapter 5) are presented. Furthermore, the sellers of companies (Chapter 6), the acquiring financial investors (Chapter 7) and the funds controlled by them (Chapter 8) are considered. Subsequently, companies sold by private equity firms in the period 2013 to 2018 and their new owners are examined (Chapter 9). To conclude, the results are summarised (Chapter 10).

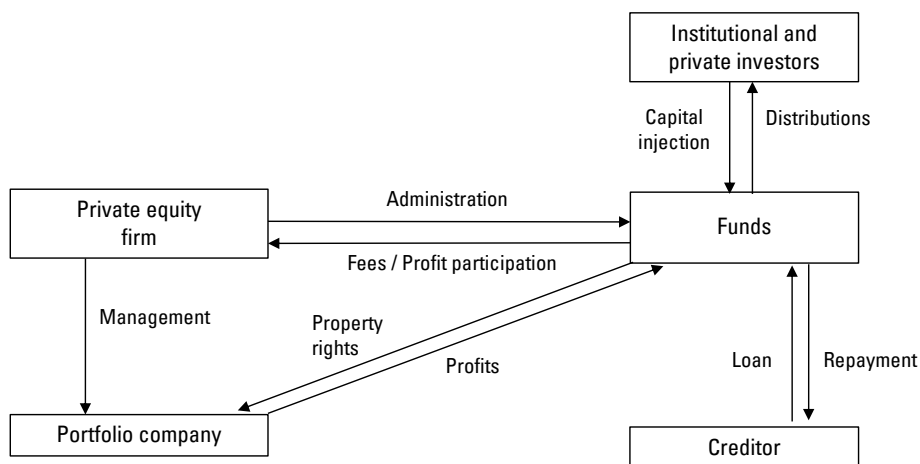
Finally, it should be noted that in a parallel evaluation, the economic development of companies was determined for a period of four years after takeover by a private equity company and compared with a sample of companies not managed by private equity (Scheuplein 2020a). The corresponding study extends the present paper by looking at the longer-term effects of private equity ownership.

2 HOW PRIVATE EQUITY WORKS

Private equity is a business model in which companies are acquired with the aim of reselling them (cf. Figure 1). When acquiring, the financial investor usually seeks a majority ownership of the company (“portfolio company”), mostly a complete takeover, in order to be able to implement operational and strategic goals more easily. If a listed company is taken over, then the shares are usually removed from the stock exchange list after the takeover. The profit is earned on the one hand through income during the holding period of the company and on the other hand through the purchase price in case of a resale. Private equity companies collect their capital mainly through closed-end funds. The private equity companies receive a fee for fund management, and in addition they share in the profits once a profit threshold is reached. The remaining profit flows back to the fund investors. When a company is taken over, liabilities often cover up to 70 percent of the purchase price. This increases the funds’ takeover volume so that the investors can acquire more companies. In many cases, the loan is passed on to the acquired company after the takeover.

Figure 1

Business model of a fund-based private equity company



Source: authors’ representation based on Fleming (2010, p. 14); Talmor/Vasvari (2011, pp. 21–27); Gilligan/Wright (2014, p. 38)

Even if only a small proportion of companies are owned by private equity, the effects on companies and their employees can be serious (Watt 2008; Appelbaum/Batt 2014; Amess 2018). From an employee-oriented perspective, four points should be highlighted here:

- By taking out loans, fund investors have the opportunity to increase the return on their equity (leverage effect). At the same time, they can spread their risk by taking over different companies. Since the loans are often shifted to the acquired companies, interest and the repayment obligation burden the companies, increase their insolvency risk and thus reduce the job security of their employees (Morgan/Nasir 2020).
- Since private equity companies raise most of their capital through funds, their exposure is limited by the duration of the respective fund. This makes it rational for the financial investors to view business from a short-term perspective (Kaplan/Strömberg 2009). Companies thus become commodities that constantly undergo new changes of ownership and strategy (Scheuplein 2019b).
- Financial investors usually do not have specific industry knowledge that can be helpful for the further development of the company. This increases the probability of yield-enhancing measures such as the sale of assets, the divestment of marginal activities, outsourcing, workforce reductions, cost reductions vis-à-vis suppliers and various financial measures without the strategic alignment of the company with new products or markets (Sekanina 2018).
- When financial investors become involved in the operational business, the management loses decision-making competence. As a result, works councils may lose their local discussion and negotiation partners and co-determination is de facto undermined (Scheuplein 2020b).

For some years now, private equity has established itself as the generic term for two business areas that may be differentiated by the life cycle stage of the companies involved. If investments are made in the founding of companies or in young, growing companies, one speaks of venture capital. If investments are made in companies that are already established on the market, the term buyout is mainly used. In the venture capital business, information is always difficult to obtain and the risk is always high. This risk is minimised or spread through intensive support with management expertise, minority shareholdings and investment rounds with various investors. In the case of buyouts, there is often a higher level of information about the market and the business model, so that a majority stake is sought and the company is often

managed without a management presence on site and with standardised controlling systems. In this study, private equity always refers to the takeover of established companies (buyouts).

3 METHODOLOGY

The study is based on transaction data that describes the sale of a company and usually includes information on the target company, the buyer and the seller. This type of data has been the standard data source in international private equity research for several years (cf. Kaplan/Strömberg 2009; Wood/Wright 2009; Talmor/Vasvari 2011, pp.6–13 and various contributions in Cumming 2012).

The various characteristics of private equity, some of which have already been mentioned, are empirically operationalised in the following way:

- Only investors for whom the business content consists of buying and selling companies are considered; the acquisition of companies follows financial logic alone and is limited in time. In contrast, strategic investors who make their acquisitions primarily according to industrial logic and are also permanently active in these industrial fields are excluded. However, it is possible for private equity companies to specialise in one or a few industries or to acquire and merge several companies in the same industry (“buy-and-build strategy”).
- Only participations of 25 percent or more of the company’s property are taken into account.
- Only investors who have an entrepreneurial influence on the strategy and operational business of the company are taken into account. This excludes, for example, hedge funds that invest in changing investment fields.
- Only takeovers of established companies (buyouts) are taken into account. This restriction is implemented by using six years as the minimum age of the companies considered.
- Participation in the public capital market is only taken into account if the acquisition of ownership leads to the financial investor having a determining influence (ownership share > 75%) and to a de-listing of the company.

In terms of time, the period from 2012 to 2018 is considered for the buyouts. For the funds and exits, the period begins in 2013. Geographical limitations are set by examining the location of the acquired company’s headquarters. All companies whose main location was in Germany at the time of the acquisition are covered. Since the situation of employees in Germany is of particular interest, the number of persons employed in Germany is generally used.

(In some cases, however, this could not be determined, so that total employees had to be used as an alternative). In the presentation of company takeovers and exits, the figures for domestic employees and total employees are presented in parallel to illustrate the economic size of the companies as a whole.

Transaction data from the information service providers Bureau van Dijk (Zephyr), Majunke Consulting (Deal News) and Preqin (Buyout Deal Analyst) served as the empirical basis for this study. Company data on, among other things, employees, turnover and the Ebit of the acquired companies were supplemented using the Dafne database of the information service provider Bureau van Dijk and research of the annual financial statements, the company homepages and the press.

Since the enterprise value (see box) is rarely publicly published by the contracting parties, it is determined in this study using an estimation method. In the multiplier method used here, the multiplier describes the ratio of the market price to a basic economic variable such as Ebit or turnover. The multiples are usually obtained from the known market prices of comparable companies. This study uses the multiples of the financial magazine “Finance” www.finance-magazin.de, which publishes quarterly turnover and Ebit multiples for 16 industries and three company size categories each. The multiples are calculated on the basis of market assessments and the empirical values of experts from around 20 consulting firms for mergers and acquisitions.

The Ebit and turnover of the target companies serve as the basis for the company valuation in this study. For this purpose, data from the two years prior to the transaction were used where possible and these were averaged in order to smooth out any special influences in the financial year prior to the takeover. The enterprise value is estimated with a range, which is supported by the specification of the “Finance” multiplier with a maximum and a minimum value. Accordingly, a lower and an upper transaction volume are calculated for both value variables (turnover, Ebit). Where the presentation must be kept simple, the minimum value is used in the following, so that a deliberately conservative estimate of the transaction volumes is presented.

The researched information and estimates were used in the following order. The first choice was the published purchase prices. The second choice was the calculated transaction volume based on an Ebit multiple. The third choice was the calculation based on the sales multiple. In the buyout transactions examined here from 2012 to 2018, the transaction volume was publicly known in ten percent of the cases and it was determined using the Ebit multiple method for 30 percent of the transactions and using the turnover multi-

ple method for 55 percent of the transactions. In just under five percent, the transaction volume could not be determined. In two-thirds of the cases, this deficit relates to the last two years of the period under review, in which there is a strong increase in the takeover of small companies for which no data on the annual results is published.

Since the buyers and sellers of the transactions were determined with their respective shares of ownership, it is possible to state which transaction volume was allotted to the actors involved in each case. This calculation of the transaction volume was also made for the resale (“exit”) of the target companies.

Most evaluations refer directly to the acquired companies and their characteristics. Since in some buyouts two or three financial investors cooperate with each other, the economic variables such as employees or transaction volume are weighted with the share acquired by the companies in the evaluation of the private equity companies. A buyout can thus consist of two or three “buyout cases”, which are all included in order to draw a more accurate picture.

Enterprise Value

Enterprise value is defined as the value of equity and debt minus financial assets. It denotes the total value of all funds raised for the transfer of ownership. This includes loans encumbering the acquired company as well as loans taken out by the acquirer for the acquisition. Thus, the entire capital input is included, regardless of the degree of indebtedness. The tax-reducing effect of debt financing is not taken into account.

The presentation of the terms and returns of private equity funds presented in [Chapter 9](#) is intended to show the economic burden that is (or may be) placed on the acquired companies. This primarily uses data from the information service provider Preqin. In a first step, international funds involved in a buyout were researched through the “Fund Profile” database (Preqin) and German funds through the German commercial register.

In a second step, the legal locations of the funds were identified. In addition to the “Fund Profile” database, the offerings of OpenCorporates and the Global Legal Entity Identifier Foundation (GLEIF) as well as the registers of various offshore financial centres (OFCs) were particularly helpful. It should be noted that companies do not use just one offshore centre for their capital flows, but usually combine a chain of several OFCs (cf. Garcia-Bernardo et al. 2017). This practice is also followed by many private equity firms. However,

this level of complexity cannot be reflected in this study; rather, only one fund location per fund is listed here. Where an OFC can be demonstrated, this is given preference in the presentation, as the focus here is on the link between private equity and OFCs. Finally, it must be pointed out that the transparency of OFCs varies. For example, no funds in the British Virgin Islands, the Bahamas and Mauritius are included in this study, although these are important OFCs (cf. e.g. Obermayer/Obermaier 2016). Furthermore, it can be assumed that the funds for which the UK was identified as a legal location also have locations in OFCs. Some are (former) private equity subsidiaries of major international banks, which have been proven to operate numerous companies in offshore financial centres.

In a third step, the fund conditions (minimum return, management fee) were presented approximately. Since the funds usually only disclose their conditions to selected clients, we use the “Fund Terms” database (Preqin) in which the conditions for individual funds are presented anonymously. Since these funds are characterised, among other things, by their type, the year of market launch (vintage year), the capital volume and the target countries for acquisitions, these indicators were collected for each of the funds active in the period 2013 to 2018. Afterwards, a sufficiently large comparison sample was formed from the anonymous funds in the data according to the indicators of each participating fund, and the arithmetic mean of the different fund conditions was calculated. Accordingly, the values for the fund conditions are to be regarded as average values.

In a fourth step, the returns of the participating funds were determined. The Net Internal Rate of Return (Net IRR) has become the central measure of the fund investors’ return¹. Net IRR is based on realised gains (returns to fund investors) and unrealised gains resulting from the valuation of the fund’s assets. Both are calculated for a specific point in time. The sum of the profits is related to the capital invested in the fund. Corresponding data was available via the “Performance” database (Preqin), to which market participants report voluntarily². The validity of this data is critically discussed, but the simultaneous reports from investors and fund managers provide a control mechanism. The return data should always be seen in the context of the re-

1 Harris/Jenkinson/Kaplan (2014, p. 1859)

2 Cf. on the use of return data in research Talmor/Vasvari (2011, pp. 8–14); Higson/Stucke (2012); Phalippou (2014); Gilligan/Wright (2014, p. 34); cf. for a critical discussion of the data basis: Talmor/Vasvari (2011, p. 52f.); Appelbaum/Batt (2014, pp. 163–181); Fleming (2010, p. 20f.); cf. for comparison with other data sets: Harris/Jenkinson/Kaplan (2014, pp. 1852f.) and Phalippou (2014, p. 190).

spective duration of the funds and were in each case collected as of the date December 2019 (or the last available date). For funds that have only been active on the market for one to two years, performance data is usually not available.

A more in-depth presentation of most of the methodological steps addressed here is provided in the method overview in Scheuplein/Teetz (2017).

4 BUYOUTS

The central requirement for company takeovers by private equity companies is a sufficient capital base. This precondition was consistently met in the period under review. Globally, the funds raised grew steadily from 2013 until 2017. In 2018, the amount remained at the previous year's level of 628 billion US-dollars (Preqin 2020: p.20). In Germany, fundraising for buyout funds reached a new high in 2018 (BVK 2020: p.8) and the fundraising climate was also at a high level (KfW Research 2019: p.2).

In Germany, this was reflected in a constant private equity activity of 160 acquisitions per year in the three years from 2012 to 2014 (cf. Figure 2). Since 2015, a steady increase could be observed, which was particularly high in 2017 (plus 33 percent). In 2018, a new high of 324 buyouts was reached (plus ten percent compared to the previous year). A similarly strong increase in acquired companies on the German buyout market this year was also observed by the industry association BVK (BVK 2020: 22) and the magazine "Finance" (2019), while the auditors EY (2020: p.2) and PwC (2019: p.23), which tend to focus on large companies, reported a sideways movement at a very high level.

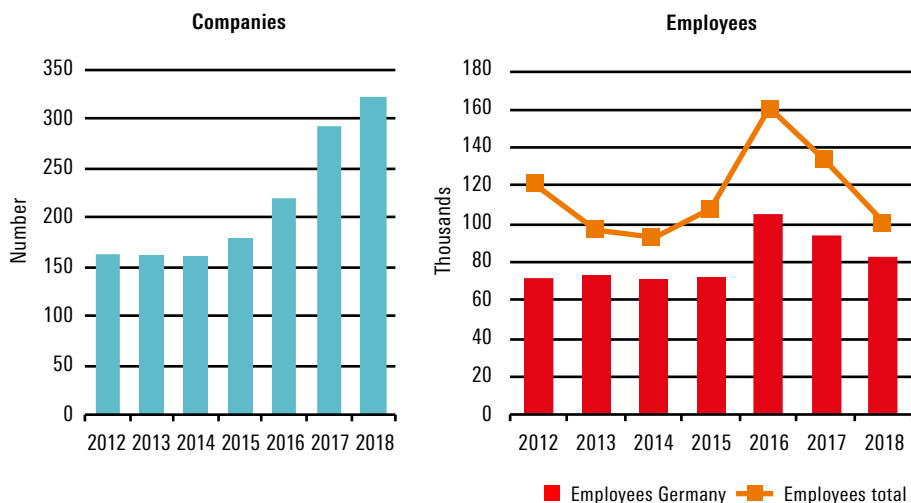
At the same time, however, a trend towards buying smaller companies was observed from 2017 onwards. For example, the number of employees in the target companies was around 71,000 to 73,000 during 2012 to 2015 and then increased to 103,000 with the increased buyouts in 2016. However, in 2017 and 2018, the number of employees in the acquired companies fell and reached 83,000 employees in 2018 (Figure 2). As a result, the number of employees in the buyout companies viewed as share of total number of employees subject to social security contributions also fell and was still 0.25 percent in 2018.

This also had an impact on the average employment size of the acquired companies. It ranged between 430 and 450 employees in the years 2012 to 2013 and then decreased significantly – with the exception of 2016. In 2018, an average of 256 people were still employed in these companies in Germany.

The above-mentioned investment pressure from the growing volume of capital in private equity funds was expressed in the form of rising prices on the market for corporate control during the period under review (Argus Wityu 2020; cf. Garbs 2017 and Eich 2019). From the perspective of private equity managers on the German market, entry prices for buyouts also increased up to 2018 (KfW Research 2019: p.2).

Figure 2

Buyouts of companies in Germany and their employees from 2012 to 2018



Source: authors' presentation based on Preqin, Zephyr and Dafne / Bureau van Dijk, Majunke Consulting and own research (n=1,505 companies)

The transaction volume in the period from 2012 to 2018 was always between 18 billion euros (minimum multiplier) and 24 billion euros (maximum multiplier). There was an upward trend from 2015 to 2017, but this was interrupted in 2018 (Figure 3). In 2018, the transaction volume rather decreased to a range of 18.4 billion euros to 21.5 billion euros. It should be noted that the increase in buyouts in 2018, for example, is not automatically reflected in the transaction volume, as in some cases no figures on Ebit or turnover are available for small companies, so that the transaction volume cannot be estimated.

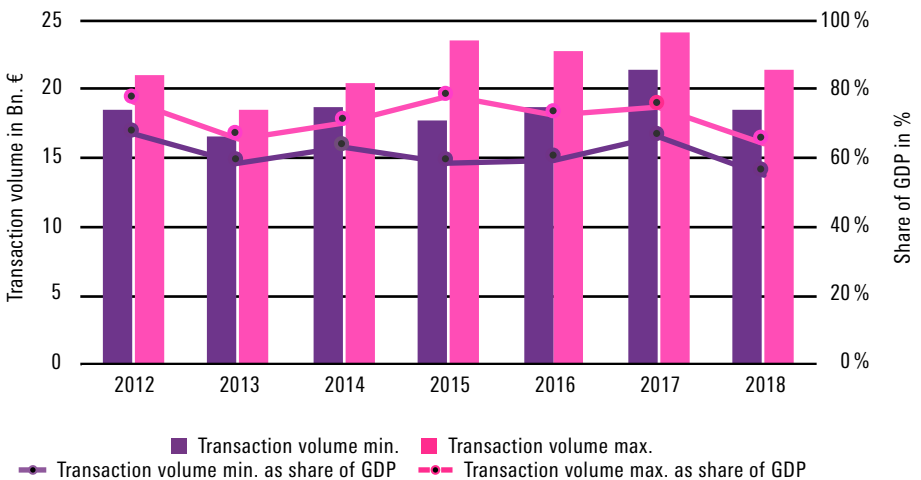
The share of gross domestic product averaged between 0.61 percent (minimum multiplier) and 0.71 percent (maximum multiplier) in the period under review. There was more of an upward trend in the years 2015 to 2017. Parallel to the falling transaction volume in 2018, the share of gross domestic product also fell compared to the previous year and was between 0.55 percent and 0.64 percent.

Financial investors usually take over a large share of ownership in the companies in order to be able to implement their strategies without resistance. This is also true for the German companies, the vast majority of which (87%) were taken over with a share of at least 75 percent. For another nine percent of the companies the share was between 50 percent and 75 percent and for the remaining four percent of the companies between 25 percent and 50 percent. The share of strong control rights with more than 75 percent has grown over time. While it was 83 percent in 2012, it reached values around 90 percent in 2017 and 2018. Conversely, the companies with shares of less than 50 percent reached their lowest values (1% to 1.5%) in these two years.

Private equity investors are active in many sectors and their investment behaviour is subject to fashions and cyclical influences. The “Private Equity Monitor Deutschland” (Scheuplein 2019) distinguishes 17 sectors, of which Table 1 shows all sectors with a share of at least five percent of buyouts in Germany in the period 2012 to 2018. The sectors with the most frequent buyouts were healthcare (15%), machinery and equipment, and software, IT and internet (11% each). In this context, the machinery and equipment and soft-

Figure 3

Transaction volume of buyouts and its share of GDP in Germany from 2012 to 2018



Source: authors' presentation based on own calculations and data from the Federal Statistical Office

Note: n=1,434 companies

ware, IT and internet sectors had a regular share of ten percent or more in buyouts in most of the seven years of the period under review, while the health sector only achieved high values in the last two years. In 2018, the health sector was far ahead of all other sectors with a share of 29 percent. The next two sectors, traditional industries (9%) and chemicals and plastics (8%), were also characterised by rather continuous takeover activity.

Table 1

Buyout companies by industry from 2012 to 2018 (in percent)

Rank	Industry	2012	2013	2014	2015	2016	2017	2018	Average 2012– 2018
1	Healthcare	2	9	6	11	7	23	29	15
2	Mechanical engineering	10	16	14	11	6	10	10	11
3	Software/IT	4	12	7	10	13	14	11	11
4	Traditional industries	12	10	6	9	13	10	6	9
5	Chemical industries/ plastics	13	7	9	11	10	4	7	8
6	Vehicle construction	12	9	7	6	8	6	5	7
7	Electrical engineering/ electronics	10	8	9	5	10	4	5	7
8	Retail	5	2	7	13	6	3	6	6
9	Pharmaceuticals/ medical technology	8	3	9	4	6	4	4	5
	Other 8 sectors	25	23	26	18	21	21	19	22
	Total	100	100	100	100	100	100	100	100

Source: authors' presentation based on Preqin, Zephyr and Dafne/Bureau van Dijk, Majunke Consulting and own research
 Note: All sectors with a share of at least five percent of the total number of buyouts are listed independently. n=1,505 buyouts of companies. Percentages may not total 100 due to rounding.

Table 2 shows the development of the industries according to the number of employees of the buyouts. Again, only those industries with a share of at least five percent of total employees are listed. The healthcare industry is once more in the top spot as a result of the high number of employees in both 2017 and 2018 (35%). An irregular development in the number of employees can also be seen in the second-placed sectors of trade (12%) and transport/logistics. (When considering the high volume of employees in the transport/logistics sector in 2016 and 2017, it should be noted that the temporary employment sector is included here.) It is striking that these two sectors were able to place themselves far in front, although they accounted for a lower number of buyouts. The following sectors of traditional industries (8%), vehicle construction (8%) and mechanical and plant engineering (7%) have rather stable shares of the number of employees and are also in the upper ranks in terms of the number of buyouts.

Table 2

Employees of buyouts by industry from 2012 to 2018 (in percent)

Rank	Industry	2012	2013	2014	2015	2016	2017	2018	Average 2012–2018
1	Healthcare	1	12	16	14	11	35	35	18
2	Retail	15	9	18	22	8	4	14	12
3	Transportation/ logistics	11	8	13	8	16	13	7	11
4	Traditional industries	14	5	7	8	7	9	5	8
5	Vehicle construction	11	10	4	3	14	6	4	8
6	Mechanical engineering	8	8	11	6	3	4	8	7
7	Chemical indus- tries/plastics	8	8	6	8	7	4	6	6
8	Construction/ crafts	0	16	3	2	11	3	1	5
	Other 9 sectors	33	25	23	29	22	21	22	25
	Total	100	100	100	100	100	100	100	100

Source: authors' presentation based on Preqin, Zephyr and Dafne/Bureau van Dijk, Majunke Consulting and own research

Note: All sectors are listed independently that have a share of at least five percent of the total number of employees in companies taken over. n=570,000 employees. Note: Percentages may not total 100 due to rounding.

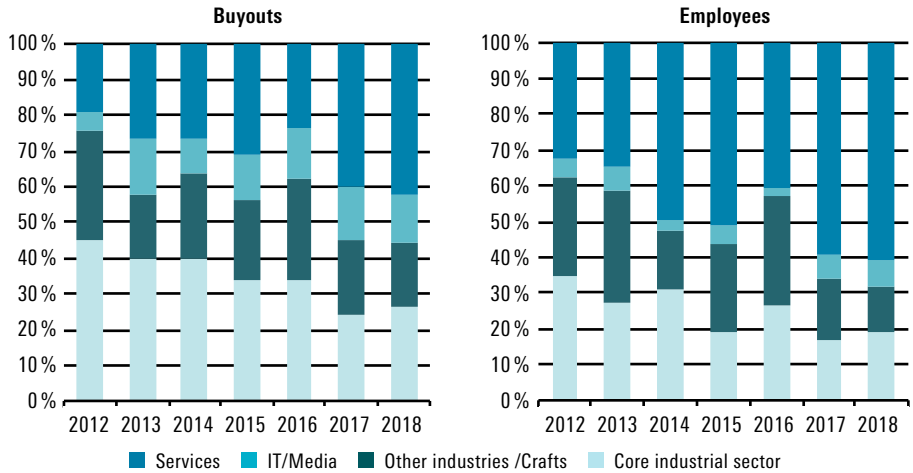
The related industries were additionally grouped into four areas (cf. Figure 4). For this purpose, the four export- and innovation-strong sectors of German industry, i.e. chemicals and plastics, electrical engineering and electronics, vehicle manufacturing and mechanical and plant engineering, were aggregated to form the industrial core sector. This sector accounted for the most buyouts over the entire period (33%). However, its importance declined over time – from 40 percent of all buyouts at the beginning of the analysis in 2012 to 26 percent in 2018.

A second sector comprises the service industries (trade, transport/logistics, health, higher-value services and financial services). Here, the second most buyouts were made (32%) and there was expansive development. This sector accounted for 43 percent of all buyouts in 2018, although this is strongly attributable to the healthcare industry. The other industries (traditional industries, metal extraction, pharmaceuticals/medical technology, construction/trades and energy/environment) were the target of 23 percent of buyouts. Over time, the importance of this sector declined, accounting for 30 percent of companies in 2012, and 18 percent in 2018. However, due to its heterogeneous composition, the sector was also subject to various swings. The fourth sector, ICT/media, comprises the media, software/IT/internet and telecommunications industries. The fewest takeovers took place here (13%), whereby the software/IT/internet sector dominated and there was rather continuous takeover activity.

If the development of employment is considered at the level of the four sectors mentioned, the picture shifts in three respects. First, the service sector was by far the most employment-intensive sector over the entire period (47%). This dominance has increased over time, with this sector achieving values of around 60 percent of employment in 2017 and 2018. Secondly, the core industrial sector (25%) is correspondingly only in second place in terms of total employees. Here, its share of employees (35%) was already significantly lower than its share of acquisitions in 2012, but the subsequent loss of share over time was similar to that of acquisitions. In 2019, 19 percent of employees were still in an acquired company in the industrial core sector. Thirdly, the ICT/media sector accounted for only five percent of total employees, so its share is once again significantly smaller than the number of buyouts. By contrast, the share of the other manufacturing and craft sector in the total period was just as high in terms of the number of employees (23%) as in terms of the number of buyouts. Here, too, there was a similar downward trend as in the development of buyouts.

Figure 4

Buyouts and their employees by industry group from 2012 to 2018

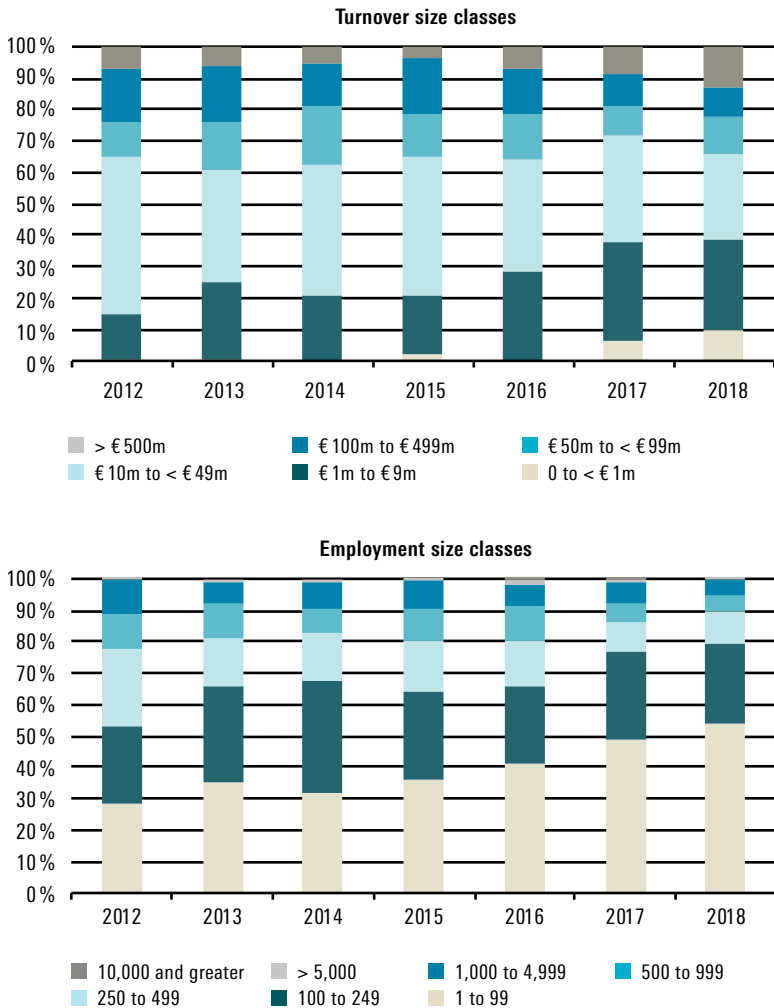


Source: authors' presentation based on Preqin, Zephyr and Dafne / Bureau van Dijk, Majunke Consulting and own research
 Note: n=1,505 companies

The declining average employment size in buyouts was already mentioned above. How is this trend distributed among the employment size classes? In [Figure 5](#), the companies are differentiated according to six employment classes. The class with the largest share over the entire period (42%) is that with the fewest employees, a maximum of 99. At the beginning of the period in 2012, this class still accounted for 29 percent and the gap to the two following classes was small. By 2018, however, the share of this class of employees had expanded to 54 percent. The second most common class (100 to 249 employees) accounted for a total of 28 percent of takeovers, and here the share of takeover activity remained more stable. The four classes above 250 employees developed at a similar level in terms of the absolute number of employees over time, but their relative share fell due to increased takeovers of small enterprises. Thus, in the two classes of 5,000 employees and above, a total of 14 takeovers took place, with one to two buyouts per year in each case (with the exception of 2016 with four takeovers).

Even though the relative share of the upper employment class is small, it represents the largest volume of employees. Thus, most employees (37%) were in the class with 1,000 to 4,999 employees and another 15 percent each

Figure 5

Employment and turnover size classes of acquired companies

Source: authors' representation based on Preqin, Zephyr and Dafne / Bureau van Dijk, Majunke Consulting and own research

Note: n=1,497 companies for the turnover classes and n=1,505 companies for the employment classes

in the two classes with 500 to 999 employees and with 5,000 to 9,999 employees.

For turnover, six classes were distinguished in parallel (Figure 5). A similar increase in the share of small companies can be traced here. While the two lowest turnover classes accounted for around 20 percent of the companies taken over in 2016, their share doubled to 39 percent by 2018. The most numerically represented enterprise size class was that with a turnover of between ten million and 49 million euros (36%), but its weight shrank significantly over the period considered, from 49 percent in 2012 to 27 percent in 2018. In contrast, the class with the largest turnover (> 500 million euros) was able to increase its share in the years 2016 to 2018. While eight percent of the companies were in this class in the overall period, 13 percent of the companies belonged to this class in 2018. The companies in this class also accounted for the largest share of turnover (44%), followed by the second largest class (100–499 million euros) with 33 percent. The four smaller classes with turnovers of less than 100 million euros account for only 23 percent of turnover.

5 AVOIDANCE AND IGNORING OF CO-DETERMINATION

Since the 2000s, the practice of undermining the legal rules governing parity representation on supervisory boards has increased (Sick 2020: p.13). The number of companies with more than 2,000 employees that are subject to parity co-determination in Germany declined continuously between 2002 and 2014. Since then, a slight upward trend has set in again and in 2019, there were 652 parity co-determined supervisory boards (Emmler/Misterek 2020: p.13). The decrease was due less to a decline in domestic employment than to management strategies to circumvent the requirements of co-determination law (Sick 2015; Bayer/Hoffmann 2015). In this study, companies with more than 2,000 employees in Germany that had been taken over by private equity in the period from 2006 to 2018 were checked to see whether they were still owned by private equity at the end of 2018; it was possible to identify a total of 37 companies for which this was the case. The co-determination status of these companies was differentiated into four categories, following Hoffmann (2016):

- The company has equal co-determination within the meaning of the 1976 Co-Determination Act.
- The company is exempt from the provisions of the 1976 Co-Determination Act, e.g. because it pursues political, ideological, scientific or artistic goals rather than economic ones.
- Co-determination is avoided or (e.g. by using a limited joint-stock partnership) only applied in a weakened form (co-determination avoidance or co-determination reduction).
- The legal provisions of co-determination are not applied by management despite an abstract duty of co-determination (should co-determination) (co-determination alignment).

The distribution between the status categories had hardly changed at the end of 2018 compared to the previous year (Table 3). In 17 companies (46%), parity co-determination was practised. In contrast, in a further 17 companies the legal requirement was apparently ignored and in three companies (8%) co-determination was avoided as a result of their legal design, e.g. by involving a holding company in the form of a *Societas Europaea*. This meant that more than half of all companies (54%) were exempt from parity co-determi-

nation, affecting just under 107,000 domestic employees, i.e. a good 52 percent of the employees in the 37 companies surveyed. A standard of comparison here would be the list of all companies in Germany that avoid and assign co-determination, which can be compared with the number of companies with co-determination (Sick 2020: p. 13 f.). According to this, the proportion of companies avoiding and ignoring co-determination was 47 percent, i.e. this fact is slightly more pronounced among companies with private equity owners.

Table 3

Companies with more than 2,000 employees owned by private equity and their employee volume by co-determination status at year-end 2018

Status of co-determination	Companies		Employees	
	Number	Share	Number in 1000s	Share
Co-determination on a parity basis	17	46%	97	48%
Ignoring co-determination	17	46%	79	39%
Avoidance of co-determination	3	8%	28	14%
Total	37	100%	205	100%

Source: authors' representation based on Dafne / Bureau van Dijk, Deal News / Majunke Consulting, Preqin, own research and data from Bayer/Hoffmann 2015

Note: Percentages may not total 100 due to rounding.

It should be noted that only the formal legal side of co-determination institutions has been presented here. There is a critical, if not extensive, discussion about the impact of private equity on the practice of co-determination (Haves/Vitols/Wittke 2014; Sekanina 2018; Clark 2018). Recent research findings suggest that private equity companies intervene in the established decision-making structures of companies and reduce the informal interaction of company managements with employee representatives (Scheuplein 2020b).

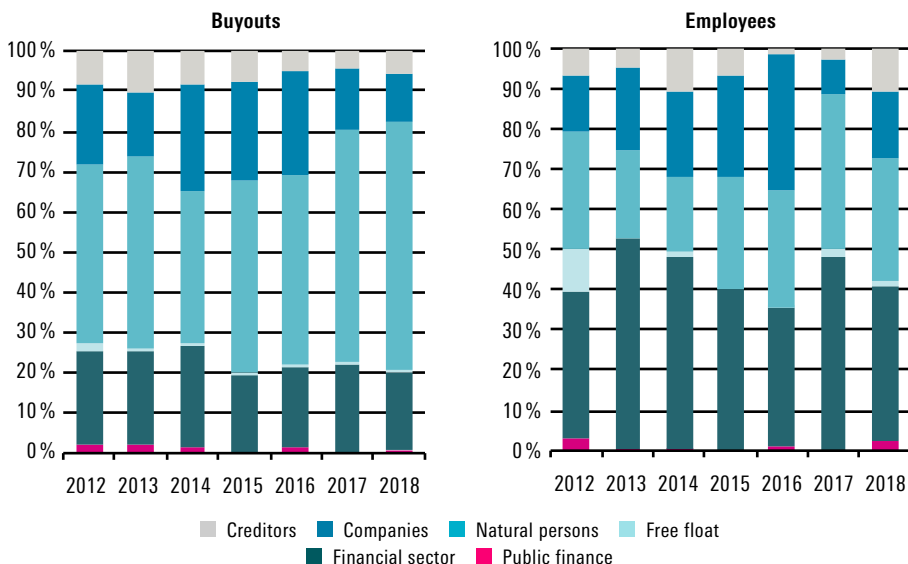
6 COMPANY SELLERS

The lack of objects for sale on the corporate control market has led to increasing competition with other buyers in recent years. In the overall period from 2012 to 2018, natural persons, e.g., entrepreneurs before retirement age or communities of heirs, were the most important source of takeovers, with a share of 51 percent (Figure 6). Private equity companies came in second with 21 percent, followed by strategic companies (19%). The fourth relevant acquisition channel was company insolvencies (7%), while takeovers on the stock exchange and purchases from public owners (privatisations) each accounted for only one percent of acquisitions.

If the volume of employees in the acquired companies is investigated, the shares shift. The most important seller types were private equity companies

Figure 6

Buyouts and their employees by seller ownership type 2012–2018



Source: authors' presentation based on Preqin, Zephyr and Dafne / Bureau van Dijk, Majunke Consulting and own research
Note: n=1,505 companies

(42%), followed by natural persons (28%) and strategic companies (20%). In contrast, insolvent companies (6%), listed companies (2%) and public companies (1%) had shares similar to the number of acquisitions.

The strong position of purchases made by other private equity companies, i.e. the so-called secondary buyouts ([cf. box](#)) from 2012/13 onwards, was a new development after the financial crisis of 2008/09 ([cf. Scheuplein/Teetz 2017: p. 40; Hammer et al. 2019: p. 95](#)). Since the boom in secondary buyouts at that time, they have maintained a high share throughout the entire period under review. However, declines in their share of number of buyouts in 2015 and 2018 were somewhat greater than gains in 2014 and 2017, so that their share was four percent lower in 2018 than in 2012. Conversely, the number of employees increased somewhat more in 2013 and 2017 than it decreased in the other years, so that the share of employees increased by one percent.

Secondary buyout

The sale of a company between private equity companies is called a secondary buyout. While cost reductions, the sale of marginal activities and an optimisation of purchasing are usually implemented after the first buyout, a new corporate strategy often has to be found to provide a good return on the second sale. Secondary buyouts therefore do not lead to continuity, but often bring new changes to the company.

The second important trend was the increase in the importance of natural persons as sellers. Thus, the highest values of 58 percent and 61 percent were reached in the last two years of the period under consideration. By volume of employees, the two highest values were also reached in the last two years, with the record value in 2017 (38%), falling to 31 percent in 2018. These sales by natural persons correlate with the increase in smaller companies as well as sectorally with the increase in buyouts in the healthcare industry. That is, it was primarily owners of nursing homes, medical practices or laboratories that drove the increase in buyouts in these two years, almost all of which were sold by individuals. The private equity companies relied on the buy-and-build strategy, in which several smaller or medium-sized companies are merged ([see box](#)). In this framework, private individuals were systematically tapped as sellers and thus as a new source for acquiring or building new businesses.

Finally, a third trend worth mentioning is the declining acquisition of insolvent companies. Their share fell from between nine and ten percent in 2012/13 to between four and five percent in 2017/18. A general decline in the

insolvency rate in Germany in these years probably played an important role here.

Buy-and-build strategy

In this strategy, a larger company (the platform) is acquired first, after which other smaller companies (add-ons) are then connected to the larger one. The growing company can gain advantages, for example, through its size, through its range of technologies or through its international presence. Often lower purchase prices are demanded for smaller companies, so that the overall purchase price decreases. On the other hand, higher prices can be expected when selling the new company. The buy-and-build strategy presupposes that there are many (smaller) companies on the supply side and that on the demand side strategic companies are not already pursuing such market consolidation. The private equity companies can use their core competencies – e.g. their capital strength and the efficient acquisition of companies – in this strategy.

Private equity firms are a highly internationalised group of buyers that mostly acquire companies from domestic sellers. This is also the case in Germany, where three-quarters of the sellers of companies had their legal domicile in Germany in the years 2012 to 2018. This share has risen steadily. While it was 65 percent in 2012, it reached 82 percent in 2017 (and 79 percent in 2018). The increase is largely due to the rise in buy-and-build strategies with natural persons as sellers, as described above. Furthermore, the number of financial investors from Germany has increased. In contrast, the share of sellers from other countries has decreased from 23 percent in 2012 to 15 percent in 2018. The reduced purchase of insolvent companies described above has also meant that the proportion of sellers without an identifiable country of origin in 2017/18 was only half that of 2012/13, with values between five and six percent.

The international background of the sellers becomes more significant when the size of the company is investigated. According to this, around 56 percent of employees in the buyouts between 2012 and 2018 were employed in companies with a German seller and 37 percent in companies with international owners. Around eight percent worked in companies owned by shareholders or creditors – for which the country of origin is not shown. For the employee volumes, as with the company figures, there was an increase in domestic ownership, with the highest value in 2017 at 67 percent, and this was lower again in 2018 at 58 percent.

Sellers from the United States and the United Kingdom, i.e. from the most important private equity markets, are primarily responsible for this somewhat stronger weight of international sellers in terms of the number of employees. If we exclude secondary buyouts, the share of domestic sellers indeed rises to 81 percent by number of companies and 72 percent by number of employees over the period as a whole. In this case, too, an increase in domestic sellers can be seen between 2012 and 2018. The pre-buyout domestic ownership of firms should be noted when the surge in internationalisation by private equity firms is considered in the next chapter.

7 PRIVATE EQUITY FIRMS

The number of active private equity firms has increased globally since the financial crisis in 2008/09 (Prequin 2020: p.98). This can also be observed in Germany. On average, between 2012 and 2018, around 130 firms were involved in a buyout per year. At the beginning of the period, the figure was 110 financial investors, rising to 168 by 2017. In the following year 2018, however, the number of active private equity firms fell to 158.

A total of 417 different private equity firms involved in buyouts between 2012 and 2018 could be identified. This high number of firms consists of three groups with different levels of activity. A smaller group of firmly established firms is constantly present in the market and determines a good half of the market volume. A somewhat larger group had frequent market contacts and was involved in a quarter of the buyout volume. And a third group of about 70 percent of all financial investors was only present on the market selectively. These three groups will be considered in more detail here according to their capital base, their date of market entry and their legal domicile in order to characterise the financial investors typically active in Germany.

The first group of investors with six or seven active buyout years in the period under review consisted of 44 private equity firms, i.e. eleven percent of all players involved. The group had a share of 46 percent of all buyouts, 51 percent of the volume of employees and 43 percent of the volume of sales in the acquired firms. The vast majority of these firms were fund-based (84%). All of them had already invested in the German market before 2012 and a good half of the players had already acquired a company in Germany before 2000. The majority of these investors had their legal domicile in Germany (55%), but investors from the USA (14%), Great Britain (11%) and other European countries (20%) were also active.

A second group of 76 firms had made at least one acquisition in three to five years. This was equivalent to 18 percent of all active financial investors. This group was responsible for slightly more than a quarter of all buyouts, or for slightly less than a quarter of the employment volume and the turnover volume in the acquired firms. Fund-based financial investors were represented to a lesser extent in this group (67%), but industrial holding firms and direct investments (33%) took up more space. Around four-fifths of these players had already invested in the German market before the period under review, predominantly in the decade from 2001 to 2011. Slightly fewer Ger-

man financial investors were represented in this more selective investment group (49%).

The third group consists of just under 300 private equity firms that were involved in only one or two buyouts in Germany in the years 2012 to 2018. They thus accounted for 71 percent of all identified private equity firms, but only for just over a quarter of the buyouts or employees and just under a third of the turnover. Among these “occasional investors”, industrial holdings / direct investments were much more strongly represented than in the other two groups, with a share of 40 percent. In the majority of cases (62%), no other investment in Germany before 2012 was identified. In line with this, a high proportion of these investors operated from a legal domicile abroad (also 62%). Germany is not a preferred target region for these private equity firms; they tend to be active in other regional markets and only become active in Germany on special occasions, e.g. for very large transactions or when a company fits well with their buy-and-build strategy.

The next step is to examine the access of private equity firms to capital, which shapes the business model of a financial investor to a large extent. Thus, the maturity of the available capital results in certain time horizons for the investments or different profit demands by the capital owners ([see box](#)).

Financial investors by type of capital raising

Fund-based private equity firms raise capital from private and institutional investors through a fund, whereby the capital in this fund is invested for a fixed period of time. The fund becomes the actual owner of the companies to be acquired. The return is distributed to the investors until the end of the term. The private equity company acts only as the manager of the fund and receives a fee (management fee) for this service. In addition, the private equity managers receive a share of the profits (carried interest) once a minimum threshold of profit for the investors (hurdle rate) is reached.

Industrial holding companies have a fixed capital stock, e.g. by acting as asset managers for financial institutions, foundations or private individuals, or because they have received the capital as part of a stock exchange listing.

In direct investment models, the capital is not provided via a fund, but directly by investors when a company is taken over. The private equity firms are responsible for the takeovers in the same way and receive a management fee from the investors for this.

In the period under review from 2012 to 2018, the majority of private equity firms active in Germany were fund-based firms, accounting for 258 of the 417 players (62%). Around 23 percent of the investors were industrial holding companies and 13 percent of the firms worked with direct investment.

The capital base of fund-based private equity firms exceeds the capital base of the other investment types. This explains why the economic activity of fund-based firms is significantly higher than their share of all private equity firms. For example, from 2012 to 2018, fund-based players accounted for around 75 percent of acquired companies, as well as 81 percent of employees and 80 percent of turnover. The economic activity of the industrial holding companies amounted to 17 percent of the acquired companies, 13 percent of the employees and 15 percent of the turnover. Their activity was thus a quarter weaker than their share in private equity firms. For direct investment firms, this ratio was even lower. Their share of buyouts (7%) was only half of their share of all private equity firms and their share of turnover (3%) was only a quarter of their share of all companies. Direct investments were conspicuously active in 2018, when several large companies were acquired through this type.

Finally, we take a look at the most important private equity firms on the German buyout market. As in previous editions of the Monitor, the number of buyouts and the number of employees in the acquired companies were each divided into eight classes. For each of these two criteria, the private equity firms could score a maximum of eight points, which were added together. [Table 4](#) presents the 20 private equity firms with the most points for takeovers in the years 2012 to 2018. These can be assigned to four places. First place is shared by the investors Carlyle, Deutsche Beteiligungs AG, EQT, Auctus and Waterland, all of which scored the highest possible number of points. In addition, the company Nordic Capital should be mentioned, which had the second most employees (20 thousand employees) in the acquired companies.

The most frequently represented firms in this Top-20 were from Germany (7), Great Britain (4), the USA and Sweden (3 each). With the exception of two industrial holding companies, the capital base of the private equity firms consisted of funds. The majority of the firms are owner-managed, i.e. the managing directors hold the shareholder shares. In five cases they were listed firms and in one case the owner was a family office.

Table 4

The top 20 private equity firms in the German buyout market from 2012 to 2018

Rank	Private equity firm	Country	Buyouts	Employees	PEM*-Points
1	Carlyle Group	USA	25	23.141	16
	DB AG	Germany	47	13.671	16
	EQT AB	Sweden	40	18.194	16
	Auctus Capital	Germany	35	13.899	16
	Waterland	Netherlands	25	14.386	16
2	Equistone	United Kingdom	27	7.442	15
3	Triton	United Kingdom	14	11.016	14
	Advent International	USA	12	14.707	14
	Nordic Capital	Sweden	14	20.784	14
	Capiton AG	Germany	21	4.834	14
	Quadriga Capital	Germany	28	4.161	14
4	Cinven	United Kingdom	15	7.830	13
	Aurelius	Germany	20	4.760	13
	3i	United Kingdom	12	6.565	13
	Ardian	France	20	4.702	13
	Chequers Capital	France	11	8.218	13
	H.I.G. Capital	USA	15	5.628	13
	Bregal	Germany	14	5.589	13
	Afinum	Germany	17	3.653	13
	IK Investment	Sweden	17	3.353	13

*PEM = Private Equity Monitor

Source: authors' presentation based on Preqin, Zephyr and Dafne / Bureau van Dijk, Majunke Consulting and own research

The ranking of the Top 20 private equity firms shows that international investors dominate the German buyouts, but German firms are still a relevant group of players. This statement also holds true if one includes all private equity firms involved. According to this, financial investors with a legal seat in Germany had a share of 47 percent in all buyouts in the period 2012 to 2018. The trend was volatile over time, but after German financial investors were responsible for more than half of all buyouts in 2014 and 2015, their share fell again. In 2018, the last year observed so far, their share of buyouts was 44 percent. Investors from the traditionally strong private equity financial centres of the US and the UK accounted for 27 percent of all buyouts, while investors from other European countries accounted for 25 percent. The steady increase in investors from other European countries over time is remarkable. While they still had a share of one-fifth in the first two years of the observation in 2012 and 2013, this rose to a share of 30 percent of all buyouts in the last two years 2017 and 2018. Private equity firms from Sweden were particularly responsible for this increase. Investors from France, the Netherlands and Switzerland also played a role.

German financial investors tended to take over small and medium-sized companies. Correspondingly, their employment volumes add up to only 30 percent and their turnover volumes to 24 percent in the total period. In contrast, the US and British firms bought larger companies, accounting for 37 percent of the employees and 48 percent of the turnover in the acquired companies. Investors from other European countries accounted for 32 percent of employees and 25 percent of turnover over the period. Here, too, an increase over time could be observed. Thus, these European investors were able to triple their shares of 15 percent of employees and twelve percent of turnover in the acquired companies from 2012 to 2018 in each case. This underpins the trend towards a Europeanisation of private equity players in the German buyout market.

8 FUNDS

The original private equity business model is based on funds into which investors put their capital. The private equity companies operating in Germany also predominantly use this capital base, as the previous chapter has shown. They are similarly of particular interest from the point of view of employees, as the temporary use of capital and financial incentives for the private equity managers can create a high degree of temporal and economic pressure on the companies taken over.

The financing structure can be presented in this study for 1,341 buyouts in the years 2013 to 2018. Since two private equity companies were involved in 61 cases and industrial holdings or direct investments were used in a good quarter of the financings, data on the fund structures are available for 1,041 buyouts of companies in which 365 separate funds were involved.

The funds active in Germany can be roughly divided into three size categories. Slightly more than a third have more than one billion euros in capital volume, just under a third have less than 300 million euros and the final third are in between. Looking at the six size classes in more detail (Table 5), it can be seen that the funds are distributed quite evenly across these size classes. The quantitatively strongest size class with 83 funds is that with a fund volume of more than two billion euros, followed by the class with 100 to 299 million euros (69 funds).

These different fund sizes can be attributed to different market segments, e.g. access to institutional investors or private investors. At the same time, they come from different financial systems, as was already made clear in the previous chapter with the private equity companies. For example, almost two-thirds of the active funds managed by financial investors from the capital-market-based financial systems of Great Britain or the USA had a capital volume of at least one billion Euros. In contrast, 60 percent of the funds from Germany's bank-based financial system had a maximum fund volume of 300 million euros. The funds of financial investors on the European continent – where the financial systems mix – lie between these values. Here 35 percent of funds had a capital volume of less than 300 million euros and 39 percent of funds one billion euros and more. In short, German private equity firms predominantly control smaller funds, while Anglo-Saxon firms almost exclusively operate with funds of more than one billion euros. In the case of the European companies, the search and transaction costs are low enough to be able to bring some funds with smaller capital volumes onto the German market in this case.

Table 5

Funds and fund volumes involved in buyouts in Germany from 2013 to 2018, by fund volume class

	Funds		Fund volumes	
	Number	Share	billion €	Share
€ 0–99 million	29	9%	1.7	0.3%
€ 100–299 million	69	21%	13	2%
€ 300–499 million	45	14%	17	3%
€ 500–999 million	59	18%	40	7%
€ 1,000–1,999 million	46	14%	64	12%
> € 2,000 million	83	25%	399	75%
Total	331	100%	534	100%

Source: authors' calculations based on Preqin and own research

Note: Percentages may not total 100 due to rounding.

Internationally, a trend towards ever larger funds has been observed for some time. For example, the average capital volume of buyout funds more than doubled from 2015 to 2019 to around 1.5 billion euros (Preqin 2020: p. 21). This is also reflected in the greater activity of large funds on the German buyout market. While in each of the two years 2013 and 2014 there were around 20 buyouts by funds with a capital volume of more than two billion euros in Germany, this number rose continuously in the following years and reached a maximum of 61 buyouts in 2018. The same trend can be seen for funds with a volume of one to two billion euros – here the number tripled to around 30 buyouts in both 2017 and 2018. However, the presence of smaller funds has also increased on the German market. For example, funds with a capital volume of 300 million euros or less increased their number of buyouts from around 40 in 2013 to 70 in 2018.

A similar doubling of activity figures can also be seen for medium-sized funds with a volume of 300 to 1,000 million euros. On the one hand, therefore, the global trend of a growth in the size of funds can be seen in the buyout market in Germany, but on the other hand, the market entry of new smaller financial investors can also be observed. As a result, in relative terms, there was only a slight increase in the share of large funds with a capital vol-

ume of more than one billion euros from 30 percent of all buyouts in 2013 to 37 percent in 2018. In terms of the employees of the acquired companies, funds with a capital volume of more than one billion euros had a share of just under 60 percent in the period from 2012 to 2018, with the highest values in 2016 and 2017.

The next step is to present the conditions under which investors can invest capital in the fund. Through these conditions, the economic pressure that weighs on the acquired companies can be presented in more detail.

This mainly concerns the agreement of a profit threshold (hurdle rate), above which the private equity managers are granted a share in the fund profits. Once this threshold is reached, the managers receive a profit share (carried interest) of mostly 20 percent. It is clear that this regulation forms a strong incentive for fund management and is in fact perceived by fund investors as guaranteeing a minimum return.

The minimum return could be determined for 318 funds, i.e. 87 percent of all identified funds that undertook a takeover in Germany in 2017 (cf. [Chapter 3](#) on methodology). The minimum return for 91 percent of these funds was in the range of seven to eight percent ([Table 6](#)). The largest share (58%) is accounted for by a minimum return of eight percent – this is the standard value in the fund contracts. The arithmetic mean of the minimum

Table 6

Funds according to the range of minimum return (hurdle rate)

Range of minimum return	Funds	
	Total	Share
3–6.9%	11	3%
7–7.3%	29	9%
7.4–7.6%	24	8%
7.7–7.9%	52	16%
8%	185	58%
8.1–11.5%	17	5%
Total	318	100%

Source: authors' calculations based on Preqin and own research

Note: Percentages may not total 100 due to rounding.

return was 7.9 percent and the median eight percent. Deviating values are often not from the majority buyout funds, but from funds that focus on special segments (e.g. funds for growth situations or financial distress). The minimum return of the funds also shows a high degree of consistency over time. Focusing only on the buyout funds, a slight reduction of the average minimum return by 0.2 to 7.8 percent can be observed between 2012 and 2017.

It is crucial for both investors and private equity managers that the agreed minimum return is achieved. In the next step, the extent to which this is achieved will be determined on the basis of the funds' return data (cf. [Chapter 3](#) on methodology). For this purpose, the measure of the Net Internal Rate of Return (Net IRR) is used, in which the distributions already made to the fund investors and the assets acquired by the funds are added together. This sum is then related to the paid-in capital of the fund investors and expressed as an annual rate. Since the reflux of profits into the funds only begins after a few years and the greatest profits are achieved with company sales in the last few years, only funds of the same starting year (vintage year) are compared with each other.

The Net IRR could be determined for 169 funds that carried out a buyout in Germany in the years 2013 to 2018 ([Table 7](#)). The Net IRR data refer to the fourth quarter of 2019 in each case, which is the last possible point in time before the "Corona shock". If the fund had already reached the end of its term beforehand, the last available return data was used. The funds span 13 initial years from 2004 to 2016, meaning that the funds of the last start year taken into account, 2016, had completed a term of three to four years by the time the return data was collected, so that sufficient data on the return level was also available. Since only a few funds existed in the first three vintages 2004 to 2006 and their terms had already been completed at the time of data collection, these three years were considered together.

The average return (mean value) of the funds active in Germany was between 12.9 and 21.5 percent at the end of 2019. It is noteworthy that the lowest returns are to be found in the funds with the start years 2004 to 2007. During this period there was a pronounced buyout boom on the German market (Jowett/Jowett 2011), so that presumably the parallel increase in the purchase prices of companies before the financial crisis of 2008/09 lowered returns in the long term. The funds with start years 2011 to 2013, which were launched after the financial crisis of 2008/09 and for which the end of their life cycle is approaching, are documented as having a return of between 16.8 and 19.6 percent. These 59 funds represent more than one-third of the sample and also represent a very high return due to their quantitative weight.

The funds of the subsequent three start years 2014 to 2016 show an even higher return with values of 18.3 to 21.5 percent. The fact that the values still increased compared to the returns of the older funds is surprising, as the larger profit returns are only usual at the end of the fund term. However, due to the short term of these funds, this is only a snapshot.

The funds examined here each invest across countries, so the returns of the funds (also) active in Germany differ only slightly from a sample of funds with other country focuses. The global data on buyout funds from the data service provider Preqin (2020: p. 69) can be used as a benchmark for the returns of the funds active in Germany. The median values of the Net IRR of the funds active in Germany with the start years 2010 to 2012 each oscillated one to two percent around the values of the global funds. For the funds with start years 2013 to 2015, the deviation was around 0.4 percent. The only exception was the last available start year 2016, where the median Net IRR for the buyout funds active in Germany was more than four percent above the value of the global funds.

Table 7

Net Internal Rate of Return of funds active in Germany with a buyout between 2013 and 2018 after year of launch (2004 to 2016)

Vintage	Number	Mean	Median	Minimum	Maximum
2004–06	10	12.9	11.5	4.3	33.0
2007	12	14.5	13.6	3.4	28.3
2008	12	16.8	17.9	11.4	22.1
2009	7	18.8	18.2	10.9	37.3
2010	9	14.6	13.0	3.9	28.7
2011	21	19.6	17.1	–12.4	64.0
2012	15	18.0	16.2	9.0	32.3
2013	23	16.8	15.3	1.2	45.7
2014	24	18.3	18.1	2.9	47.6
2015	19	18.3	15.9	0.8	37.9
2016	17	21.5	17.6	4.0	64.2
All years	169	–	–	–12.4	64.2

Source: authors' presentation based on Preqin; survey date: 4th quarter 2019

In fund-based private equity models, the fund companies become the actual owners of the acquired companies. The respective profits are also directly transferred to them. Therefore, for tax reasons, an offshore financial centre (OFC) is chosen as the legal domicile for many private equity funds ([see box](#)). The Anglo-Saxon legal form of the limited partnership is often used, which allows a legal entity to be created for a limited period of time without being subject to taxation as a new corporate level. In this structure, the private equity companies act as general partners and the investors as limited partners³.

The legal domiciles of the funds can be shown here for the 365 separate funds already introduced above that were involved in acquisitions in Germany from 2013 to 2018. The two most important groups were the British Crown Dependencies with 31 percent and the British Overseas Territories with 26 percent of the funds. The Crown Dependencies are the islands of Guernsey, Jersey and the Isle of Man, which are separate legal entities, although on the other hand British law applies (and until Brexit EU law also applied). The British Overseas Territories are 14 territories under the sovereignty of the UK, with the Cayman Islands standing out as a fund location and Bermuda and Gibraltar hosting a smaller number of the funds covered here. A further two percent of the funds were domiciled in the UK, so that a total of 59 percent of the funds were domiciled in the UK sphere of influence. Another fund location, presumably chosen primarily for tax reasons, was Luxembourg with a share of nine percent. Other offshore financial locations were Hong Kong and the Bahamas with a share of only one percent. The USA occupies a special position with six percent of the funds. Since the funds located here were all domiciled in the US state of Delaware, which has low taxes on income from intangible assets and lax disclosure requirements for company registration, these funds must also be counted as offshore locations, at least to a limited extent (Dyreg/Lindsey/Thornock 2013). The remaining funds were registered in Germany (14%) and in other European countries (11%).

3 A limited partnership is structured similarly to a limited partnership in Germany, i.e. a general partner manages the business and is liable with her/his full assets, while the limited partner's liability is limited to her/his capital contribution and s/he usually cannot intervene in the business.

Offshore financial centres

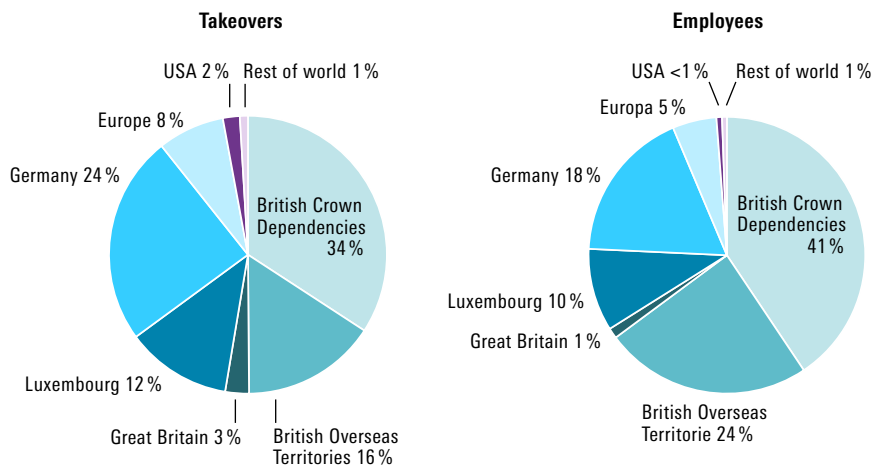
Offshore financial centres (OFCs) provide banking and other financial services predominantly to actors located outside their legal and administrative territory. The reason for this is mostly low tax rates as well as low transparency regulations, making it difficult to further trace any profits to the actors' countries of origin. In contrast, onshore financial centres predominantly serve the clients of their respective territories. Using an offshore financial centre involves the costs of registration and annual reporting. The larger the fund, the less these costs matter. This is probably one reason why various smaller funds of German private equity companies are not located in offshore locations.

In addition, we will look at how buyout activity in Germany is distributed among the fund locations in order to demonstrate their actual economic significance. For this purpose, the 1,041 buyouts of companies in which a fund was used in the years 2013 to 2018, already introduced above, were used. For these buyouts, it was also possible to identify a fund location in almost all cases, so that the locations for 1,032 buyouts are available. [Figure 7](#) shows the distribution of fund locations according to the number of company acquisitions and the number of employees in the acquired companies, taking into account the funds' ownership shares in the companies in each case. Roughly speaking, the British zone of influence remains predominantly important from the perspective of economic activity. The role of Germany and Luxembourg is somewhat stronger compared to the distribution of the individual funds, and the role of the USA and the other European countries is reduced.

Looking at it in more detail, the share of the British zone of influence according to the number of takeovers is 53 percent. At 34 percent, Jersey and Guernsey (British Crown Dependencies) account for more than twice as many takeovers as the British Overseas Territories (16%). In terms of employees, the importance of the British zone of influence rises to 66 percent, with the Crown Dependencies (42%) still ahead of the Overseas Territories (24%). Germany's importance is even greater in terms of the number of companies (24%) and the number of employees (18%) than in terms of share of funds. The reason for this is probably that the funds registered in Germany operate almost exclusively in the home country, while the entire European market is served from the offshore fund locations. A comparative increase in importance can also be seen for Luxembourg, whose funds account for a twelve percent share of companies and a ten percent share of employees. In contrast, the

Figure 7

Takeovers of companies in the years 2013 to 2018 in Germany and their employees according to the legal domicile of the funds



Source: authors' presentation based on Prequin, Zephyr and Dafne / Bureau van Dijk, Majunke Consulting and own research (n=1,032 companies acquired by a private equity fund with known fund location)

USA's share drops to between one and two percent by companies and employees. The share of funds from other European countries decreases to eight percent of enterprises and five percent of employees. It is probably relevant here that primarily the funds' domestic markets are worked from these locations.

In the period from 2013 to 2018, there was a continued increase in the quantitative importance of offshore locations as the legal domicile of the owners of buyouts in Germany. While the share of OFCs among acquired companies was still 57 percent in 2013, it grew to 70 percent by 2018. The share in the volume of employees was already at the high level of 77 percent in 2013 and then increased slightly to 82 percent in 2018. The offshore financial centres are thus an important building block for numerous private equity companies allowing increases in the returns of fund investors and their own earnings.

9 EXITS

When the ownership of financial investors ends, employees are again faced with a change of ownership. In most cases, the strategic goals of the company are readjusted during this new takeover. A special feature of exits is that they often involve further financial investors. This raises the question of how many companies actually end up in stable ownership after the exit of a financial investor. For this reason, the number and structure of exits and new buyers are described in more detail here. The data on exits was generated using the same sources and methods used for the buyout data. In the case of secondary buyouts, the transactions appear in both data sets.

Exit

The resale of the target company is an important source of return in the private equity business model. Therefore, the (international) search for suitable buyers and the right timing on the market are two core competencies of every private equity company. For the majority of private equity companies, the timing of the exit is determined by the term of the fund from which the capital for the acquisitions is provided. Typically, a fund term of ten years is assumed, with the first one to two years for investment and the last one to two years for divestment.

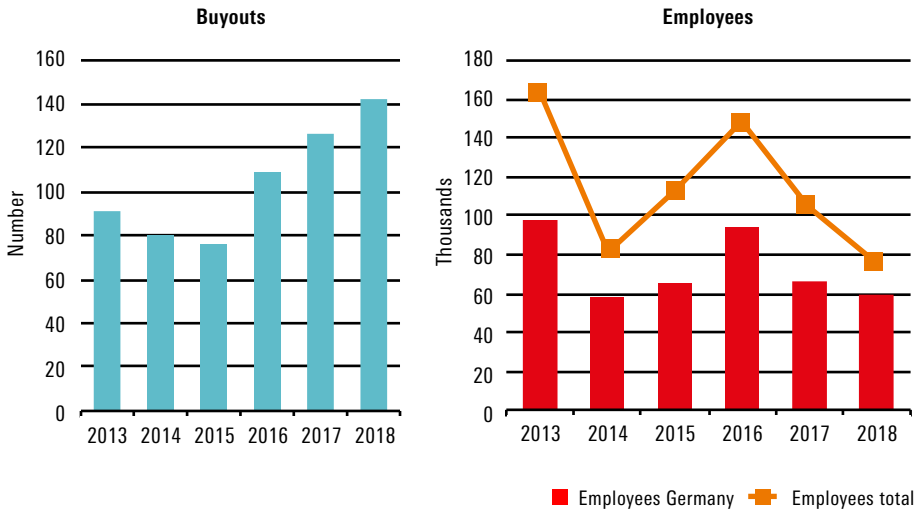
9.1 Number of exits and structure of exit companies

A total of 624 exits by companies headquartered in Germany can be documented for the years 2013 to 2018 (Figure 8). This shows a clear trend reversal. The number of exits was 91 in 2013, and it fell to 76 in the following two years. After that, however, it rose steadily again and reached 142 exits in 2018. It should be noted here that the relevant exit data sources hardly report on insolvencies or closures, if at all. For this study, however, the course of all companies with a buyout between 2012 and 2015 was also tracked, so that further exits (e.g., through insolvency) could be identified up to 2018. These newly surveyed exits are mainly attributable to the later years, so that the increase in the figures from 2016 onwards may also be partially related to the research approach.

The number of employees in the companies developed along a similar path until 2016. The level of 98,000 employees already achieved in 2013 in

Figure 8

Buyout companies and their employees in exits from 2013 to 2018



Source: authors' presentation based on Zephyr and Dafne / Bureau van Dijk, Deal News / Majunke Consulting, Preqin and own research

Note: n=624 companies

Germany was almost reached again in 2016 (93,000 employees). After that, however, the number of employees dropped to just under 60,000 employees in 2018. This trend is also found in the total number of employees of the companies (Figure 8), which was on average a third higher than their number of employees in Germany. Again, the highest number of company employees was reached in 2013 (164,000 employees) and 2016 (149,000 employees). By 2018, the number of employees had decreased to 76,000.

The mechanical engineering sector had the most exits in the years 2013 to 2018 with 74 (12%). The chemicals/plastics, traditional industries and vehicle manufacturing sectors had almost as many exits (11% each). In terms of the number of employees, however, two other sectors came out on top. Most employees were employed in companies in the transport/logistics sector with 66,000 employees and a share of 15 percent. This was followed by the health (15%), chemicals/plastics (11%) and vehicle construction (9%) sectors.

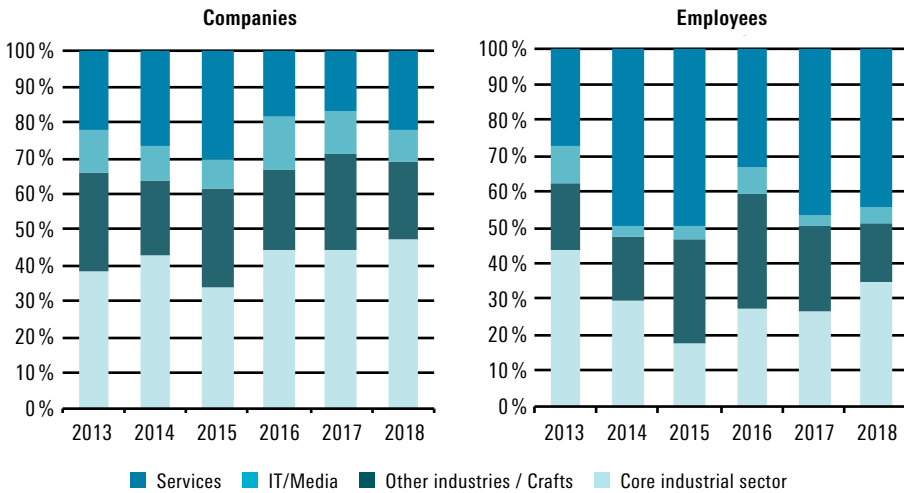
In the individual sectors, the trends over time are repeatedly interrupted by the influence of large exits. For this reason, we use the four industry groups with which the sectoral changes in buyouts have already been presented. The industrial core sector group, which comprises the four export- and innovation-strong sectors of chemicals and plastics, electrical engineering and electronics, vehicle manufacturing and mechanical and plant engineering, had a share of 42 percent over the entire period (Figure 9). This share fell only briefly in 2015 to 33 percent and then rose again to 47 percent in 2018. The group of other industries and crafts (traditional industries, metal extraction, pharmaceuticals/medical technology, construction/handicrafts and energy/environment) had a share of one-quarter over the entire period – this share increased especially in 2015 (29%) and reached values between 22 and 27 percent in the remaining years. Overall, two-thirds of all exits over the entire period were in the manufacturing sector, whereby this share did not fluctuate too much over time and has also remained stable in recent years. Conversely, one-third of all exits concerned services, which included the service sector in the narrower sense (trade, transport/logistics, health, higher-value services, financial services) with a share of 22 percent and the industry group ICT/media with a share of eleven percent.

However, the services sector group had a significantly higher share of employees. A total of 177,000 people were employed by companies in this industry group (40%) over the entire period. Due to several large exits in 2014 and 2015, this industry group accounted for around half of all employees. In contrast, the share of employees in the ICT/media industry group (6%) was only half the share of the total number of exits. The two industry groups of the manufacturing sector had a share of around 54 percent in the overall period. Here the share of the core industrial sector (31%) was larger than the share of other industries and crafts (23%). Despite a temporary reduction in the number of employees, these two industrial sector groups again accounted for half of all employees in the exit companies in the last two years of the period under review.

The companies that exited from the ownership of financial investors spanned all company sizes (Figure 10). Most exits were in companies with 100 to 249 employees (31%). The second most exits (21%) were in the lowest employment size category (10–99 employees) and the third most exits were in the middle category with 250–499 employees. The two employment size categories above this already have significantly lower shares of 13 percent and 14 percent respectively. The top category of companies with more than 5,000 employees had a share of only two percent. Over time, the share of these

Figure 9

Companies with an exit in the years 2013 to 2018 and their employees by industry group



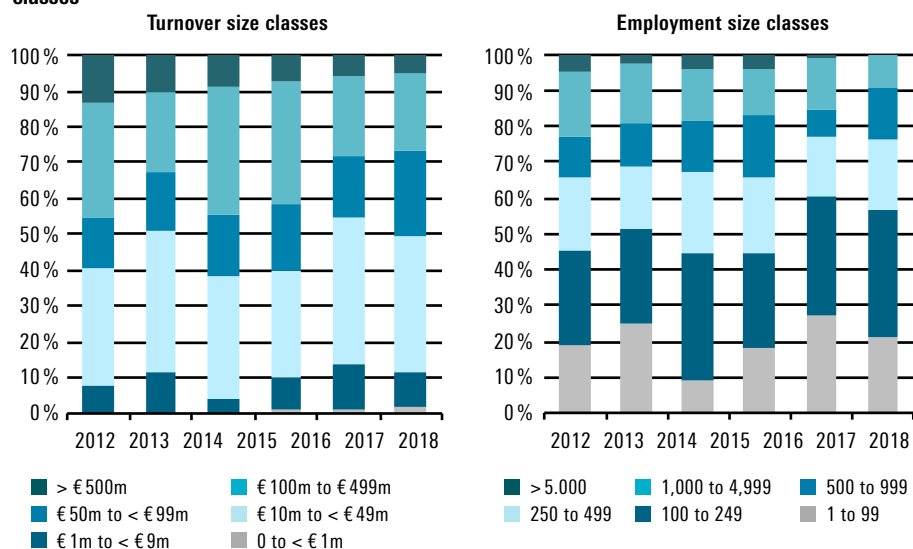
Source: authors' presentation based on Preqin, Zephyr and Dafne / Bureau van Dijk, Majunke Consulting and own research
 Note: n=624 exits

three upper employment size classes decreased from just over one-third in 2013 to just over one-fifth in 2018. Over the same period, the share of enterprises in the two lower size classes (up to 249 employees) increased from 35 percent in 2013 to 57 percent in 2018. The trend towards smaller corporate entities, which was observed in the buyouts during the period under review, can thus also be found in the exits.

Among the turnover size categories, companies with a turnover between ten million euros and 50 million euros had a share of 36 percent. The second most important category was companies with a turnover between 100 million and 500 million euros (27%). The trend towards smaller company sizes can also be seen in the turnover. However, it is less pronounced and the medium-sized companies (with turnovers between ten million and 100 million euros) proved to be stable over time.

Figure 10

Companies with an exit in the years 2013 to 2018 according to the employment and turnover size classes



Source: authors' presentation based on Preqin, Zephyr and Dafne / Bureau van Dijk, Majunke Consulting and own research
 Note: n=624 exits

9.2 Holding period of the exit companies

On average, the 624 companies that underwent an exit in the years 2013 to 2018 were owned by a financial investor for 61 months or 5.1 years. Over the period as a whole, the holding period shortened from 64 months in 2013 to 58 months in 2017; in 2018, the holding period increased again slightly to 60 months. These averages include a larger number of companies that were held for only a few months or years (Table 8). In total, 77 companies (12%) exited the ownership of their financial investor within the first two years. They employed 33,000 people (7%). Another 30 percent of the enterprises with 21 percent of the employees experienced their exit in the third or fourth holding year. This means that for two-fifths of the companies, ownership by a financial investor remains a short-term occurrence. Insolvencies play an important role here: by the end of the fourth holding year, three-quarters of all insolvencies in the sample had taken place.

Table 8

Companies with an exit in the years 2013 to 2018 and their employees by holding period

Holding period	Companies		Employees	
	Number	Share	In 1000	Share
Up to 2 years	77	12 %	33	7 %
3 and 4 years	187	30 %	95	21 %
5 and 6 years	177	28 %	163	37 %
7 and 8 years	94	15 %	71	16 %
9 years and more	89	14 %	80	18 %
Total	624	100 %	442	100 %

Source: authors' presentation based on Prequin, Zephyr and Dafne / Bureau van Dijk, Majunke Consulting and own research, n=624 exits

Note: Percentages may not total 100 due to rounding.

The share of companies with a holding period of five to six years was 28 percent; for these companies, too, another change of ownership followed only a few years after the acquisition. Around one-third of all companies had a holding period of seven or more years. The reasons for this are complex. In part, it reflects a lack of attractive buying opportunities. In some cases, this led to private equity companies transferring companies from one of their funds whose term was expiring, to one of their other, newly launched funds. In some cases, these were portfolio companies in economic difficulties for which the search for a buyer had been unsuccessful for a long time. This can be seen empirically in the fact that several companies with a particularly long holding period were passed on to their creditors or to their managing directors on exit. In the latter case, the long holding period ended in a distress sale, which was then followed by insolvency for several companies. Finally, the owners were financial investors with a fixed capital stock, which are therefore not subject to a time constraint on selling.

An additional aspect is that many companies go through further buyouts, which significantly extends the overall holding period in private equity ownership (cf. Scheuplein 2020a: p.55).

9.3 Owner after exit

The owner a company receives when the involvement of the financial investor ends is of particular importance for employment. As the analysis of buyouts has already shown, a large proportion is sold a second or third time to another private equity company.

In the entire period under review from 2013 to 2018, 261 companies (42 %) were sold to another private equity firm in an exit (Figure 11). In second place, strategic investors (40 %) were buyers of the companies. IPOs and sales to private individuals only took place in about three percent of the cases each. More significant, however, were the 70 insolvencies. Including closures and restructurings, these cases of economic distress accounted for more than twelve percent. Over time, a slight increase in secondary buyouts can be seen with their highest share in 2017 (51 %) and 43 percent in 2018. Conversely, sales to strategic buyers, which stood at 47 percent in 2013, declined. Strategists still accounted for 32 percent and 38 percent of buyers in 2017 and 2018 respectively.

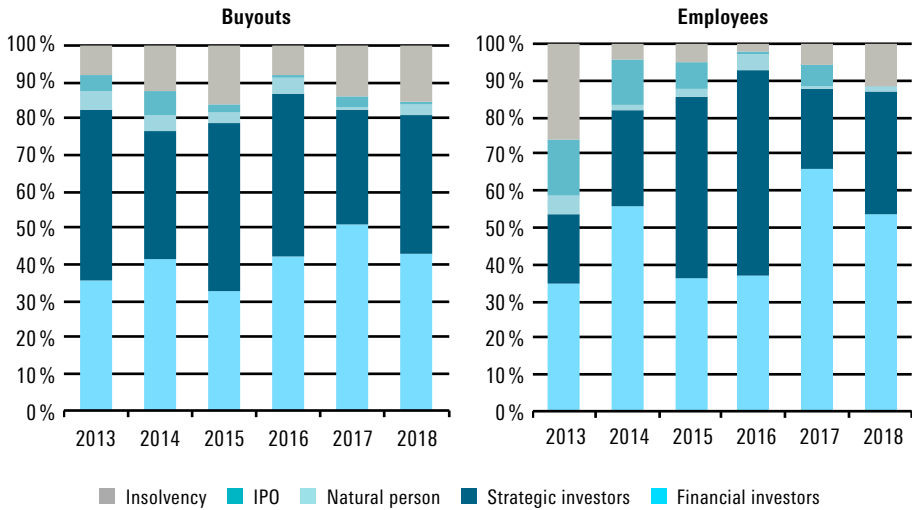
If one includes the employees in the companies that underwent an exit, the strong position of secondary buyouts becomes even clearer. In the years 2013 to 2018, a total of 46 percent of all employees were employed by companies that were sold to another private equity company. The highest share was reached in 2017 (66 %), followed by 54 percent in 2018. The share of employees in acquisitions by strategic companies was significantly lower (35 %). The share of employees in IPOs reached seven percent, i.e. it was twice as high as the share of IPOs in the number of exits, as these mostly concern large companies. The share of employees in insolvencies (including closures and restructurings) was nine percent.

If the shares of non-financial owners (strategic investors, private individuals, IPOs) after the exit are combined, they represent around 45 percent of both the companies and the employees. This also means that for 55 percent of the companies or employees the exit did not lead to stable ownership, but rather in the majority only heralded a new round with a financial investor or was even associated with the economic distress of the company. Significantly higher rates of insolvency or financial distress occurred than in comparable companies by other owners. If one follows the development of companies with a buyout in 2013 until 2019, their annual rate of 15 insolvencies per 1,000 companies was twice as high as the insolvency rate in the economy as a whole (cf. Scheuplein 2020a: p. 48).

The exit scenarios also repeat the internationalisation that accompanied

Figure 11

Companies with an exit in 2013 to 2018 and their employees by buyer ownership type



Source: authors' presentation based on Preqin, Zephyr and Dafne / Bureau van Dijk, Majunke Consulting and own research

Note: Insolvency including restructuring and plant closures; n=623 exits

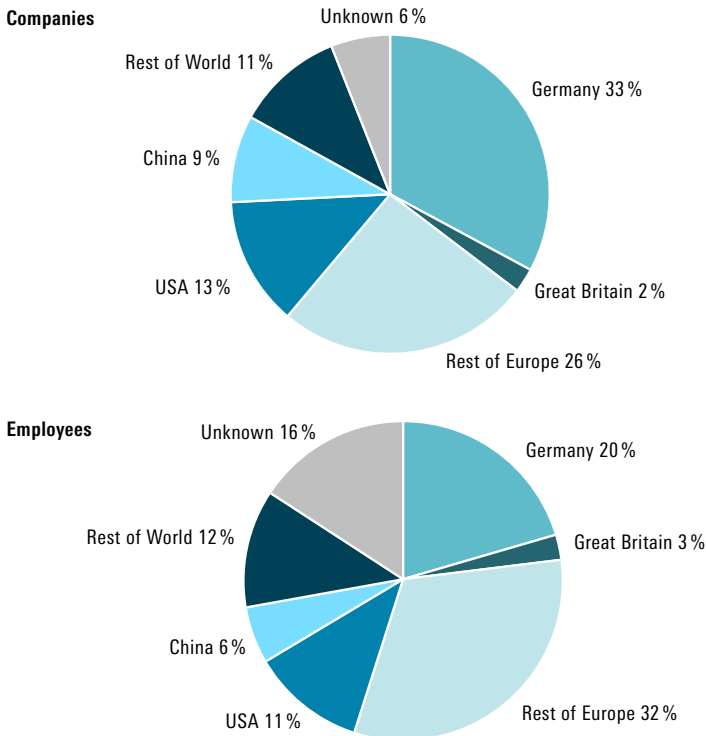
the first private equity takeover, when around 53 percent of the companies or 70 percent of the employees in the companies received an international owner (cf. Chapter 7). In the exits of the 624 companies considered in this chapter, again 57 percent of the companies and 69 percent of the employees acquired an international owner. In a further 14 percent of the exits, the origin of the new owners remained unknown because, for example, they were IPOs or insolvencies. Owners with a legal seat in Germany still held 29 percent of the companies and 17 percent of the employee volume after the exits.

However, this analysis also includes sales to other private equity companies. If these secondary buyouts and the insolvencies are omitted, then all companies with an ownership constellation that is expected to remain stable in the longer term remain. These are 283 companies with an exit in the years 2013 to 2018 (Figure 12). In one-third of the companies, the non-financial owner was based in Germany, whereas this was the case in only 13 percent and two percent of the private equity financial centres in the USA and the UK, respectively. 26 percent of the companies acquired an owner from other

European countries. Among this new group of owners, non-European countries were represented, especially China (9%) and other countries (11%). In terms of the employees involved in the enterprises, domestic owners held a lower share of only 20 percent. In contrast, owners from other European countries (32%) and “unknown owners” (16%), who are mostly shareholders, had higher shares. Owners from the USA (12%), the UK (3%) and the rest of the world (12%) achieved similar values to the number of companies.

Figure 12

Companies with an exit (excluding secondary buyouts and insolvencies) in the years 2013 to 2018 and their employees by the company location of the buyer



Source: authors' presentation based on Preqin, Zephyr and Dafne / Bureau van Dijk, Majunke Consulting and own research

Note: unknown: mostly shareholders; n=283 exits

If one compares these non-financial and presumably longer-term ownership constellations after the exit of the companies with the ownership structures before the first buyout (cf. [Chapter 6](#)), the original ratio of domestic to foreign owners has almost reversed. While four-fifths of the original owners in the buyouts (excluding secondaries) were based in Germany, this proportion fell to one-third among owners after the final exit. This upheaval was even more pronounced in terms of employees. Overall, private equity thus ensures a massive shift of control and power in the corporate sector to headquarters outside the region.

Finally, it should be noted that this chapter was initially based on the known exits of companies within the period 2013–2018. It became apparent during the work on the “Private Equity Monitor Deutschland” that insolvencies and in some cases other exits cannot be traced via the relevant data sources. However, it is possible to examine the ownership structures in subsequent years for all buyouts that have become known. With this approach, the critical situations for the companies presented here (short to medium-term changes in ownership, secondary buyouts, insolvencies, internationalisation) occur to an even greater extent (cf. Scheuplein 2020a and c).

10 SUMMARY AND CONCLUSIONS

The aim of this study was to summarise the activities of financial investors in Germany for the period from 2012 to 2018. In particular, it was intended to put into perspective the extent to which employees are affected by the takeovers. Therefore, on the one hand, the focus was placed on the number of employees when examining all transactions. On the other hand, the impact of the private equity business model on the situation of the employees was explored. The temporary capital base, the high proportion of debt capital in the takeovers, the expected level of returns, the profit sharing of the private equity managers and the international search for buyers in the exits have concrete consequences for the workforces, as could be empirically proven within the framework of this study. These core findings of the study are summarised below.

10.1 Boom of private equity in the 2010s in Germany

After the end of the global financial crisis by 2010 at the latest, the industry literature reported a growing number of private equity firms, growing fund volumes and thus an overall growing volume of capital for buyouts (“dry money”). The corresponding growth in buyouts in Germany led to a doubling of corporate buyouts in the period from 2012 to 2018. In the process, buyout activity was at a level of around 160 buyouts in the first three years, then steadily increased to around 320 companies by 2018. The number of employees stagnated at just over 70,000 in the period from 2012 to 2015 and increased significantly to around 103,000 in 2016. Then, however, the number of employees declined and was still at 83,000 in 2018. Increased buyouts were thus seen in the area of medium-sized and smaller companies. This partly shows the lack of supply of corporate control in the German market. In addition, the declining average employment size of the companies expresses the more frequently pursued buy-and-build strategy, which is aimed precisely at the acquisition and merger of smaller companies.

10.2 From the industrial to the service sector

The search for new investment fields has also brought new industries to the attention of financial investors. An overview primarily shows a trend from industrial to service companies. Overall, Germany's industrial core sector, i.e. the four export and innovation-strong sectors of chemicals and plastics, electrical engineering and electronics, vehicle construction, and mechanical and plant engineering, was the most attractive sector in terms of the number of acquisitions (33%), just ahead of services (32%). However, the service sector had a significantly higher employment volume (47%) than the industrial sector (25%). In third place were the other industries (traditional industries, metal extraction, pharmaceuticals/medical technology, construction/handicrafts and energy/environment) with a share of 23 percent of takeovers and employees, and the ICT/media sector with 13 percent of takeovers and five percent of industries. Over time, the two service sectors have increased, while the two industrial sectors have lost ground.

10.3 Main objective: health sector

In the service sector, buyouts increased in only a few industries. This applies to the software/IT and financial services sectors, but especially to the health sector, which accounted for only one to two percent of companies and domestic employees in 2012. In the following years, more and more healthcare companies were taken over and in 2018 this sector accounted for almost one-third of the takeovers and more than one-third of the employees in buyouts. Over the 2012–2018 period as a whole, the health sector ranked first with 15 percent of acquisitions and 18 percent of employees in each case. Within the health sector, the takeover of doctors' practices drove up the number of takeovers. On the other hand, the takeover of nursing homes and care services was relevant for employment. In both cases, buy-and-build strategies are pursued, whereby an increase in value is to be created primarily through economies of scale and corresponding cost savings (cf. in detail Scheuplein/Evans/Merkel 2019; Bobsin 2021; Scheuplein/Buzek 2021).

10.4 Top dogs and occasional buyers

Globally, the number of private equity companies has risen again after a brief slump in the wake of the 2008/09 financial crisis. This is also reflected in Germany, where the number of companies involved in buyouts rose from around 110 players in 2012 to around 160 players in 2018. In the classic private equity countries of the US and the UK, the players are mainly from the domestic market, fund-based, closely linked to the capital supply of the local financial market and constantly active in the M&A (Mergers and Acquisitions) market. The German private equity market, on the other hand, is also shaped by companies outside the region and by companies with other financing bases (industrial holding / direct investment). In fact, in the period from 2012 to 2018, about one-tenth of the financial investors had a permanent presence on the market, with a very strong tendency for finance via closed-end funds (84%) and accounting for a good half of the market volume. More than half of these investors were based in Germany, one-fifth in other European countries (other than the UK). A second group with almost another fifth of private equity firms had frequent market contacts and were involved in a quarter of the buyout volume. Here the funds (67%) were less dominant than with the industrial holdings and direct investments and just over half of all investors came from abroad. A third group of around 70 percent of all financial investors active during the period was only represented on the market sporadically and was responsible for a good quarter of all buyouts. For these occasional buyers, the financing base consisted even more strongly of industrial holdings / direct investments (40%). The share of German companies was only one-third and the share of companies from the USA and UK (35%) and from the rest of Europe (28%) was highest here.

10.5 Private equity becomes more European

As already mentioned above, the financial investors active in Germany can be assigned to three main regions of origin. Half of the companies active in the period 2012 to 2018 came from the domestic market and a quarter each from the USA/UK and other European countries. Investors from other regions only had a share of one percent. Over time, the share of German companies was highest in 2014/2015. In contrast, the share of European private equity companies grew in the last three years under review, 2016 to 2018, with this primarily involving companies in France, the Benelux countries and Sweden.

This Europeanisation of financial investors was linked to the boom in the healthcare sector, as a number of European financial investors were already involved in building up healthcare groups in their home markets and then exported this business model to Germany.

10.6 Lack of co-determination

In many companies with more than 2,000 employees, which should be subject to parity co-determination in Germany, employees are deprived of co-determination. Private equity also has a share in this. At the end of 2018, parity co-determination was practised in less than half of the private equity-managed companies. In contrast, it was ignored in 46 percent of companies and eight percent avoided it by choosing a specific legal form for the company. This ignoring and avoidance of co-determination affected just under 107,000 domestic employees, i.e. a good 52 percent of the employees in the 37 companies surveyed. The co-determination situation has thus hardly changed since 2016, when it was first described in the “Private Equity Monitor Deutschland”. Based on the available comparative data, it can be said that the ignoring and avoidance of co-determination is still slightly more pronounced among companies with private equity owners than among companies with other types of owners.

10.7 Peak profits

In recent years, private equity has shown higher returns globally than hedge funds or real estate funds. This is also reflected in the funds active in Germany. The returns (Net IRR) for 169 funds were determined for the fourth quarter of 2019. The annual return on capital of the private equity funds that were active in Germany in the years 2012 to 2018 ranged between 12.9 percent and 21.5 percent up to this point. A distinction must be made between the years in which the funds were launched and the years in which they began acquiring companies a little later. For example, the funds from the years before the financial crisis, i.e. up to 2007, had returns of between 12.9 percent and 14.5 percent at the end of 2019, while the funds from the last start-up years considered, 2014 to 2016, achieved returns of between 18.3 percent and 21.5 percent. The combination of high fund returns and at the same time strong cost savings at the expense of employees, as observed time and again,

means a redistribution of overall social welfare in favour of the owners of capital.

10.8 Transfer of profits to tax havens

Offshore financial centres offer economic actors low (or even no) tax rates as well as low transparency requirements. The legal location of the funds in these financial centres is an important piece of the puzzle for the above-average returns of private equity. This also applies to the funds active in Germany. A total of 365 funds were identified and their legal location determined. These funds were involved in more than 1,000 buyouts in Germany in the years 2013 to 2018. A total of almost three-quarters of the funds identified were located in an offshore financial centre, provided that the US state of Delaware is also counted as an offshore centre. In terms of the number of acquisitions, just under two-thirds of the companies were controlled by funds based in the offshore centres, with these companies accounting for more than three-quarters of the employment volume. The most important offshore centres were the British Crown Dependencies (Guernsey, Jersey, Isle of Man) with 31 percent and the British Overseas Territories – i.e. mainly the Cayman Islands – with 26 percent of the funds.

10.9 From one financial investor to the next

The resale (“exit”) of the companies is the strategic goal and the most important source of profit for private equity companies. In this study, 624 exits of companies headquartered in Germany could be documented for the years from 2013 to 2018. A quantitative trend can be seen in a reduction in exit figures up to 2015 and a subsequent increase up to 2018. The most important buyer group consisted of private equity companies, to which 261 companies (42 %) were sold. They accounted for 46 percent of the employment volume in exits. It is striking that the share of exits in the last two years under consideration, 2017 and 2018, was particularly high at more than 60 percent. Strategic investors as buyers of companies only appeared in second place (40 %). IPOs and sales to private individuals each only accounted for about three percent of cases. The combined employment volume of these three non-financial forms of exits reached only 45 percent. For a large proportion of companies, an exit is thus associated with another round with a financial investor, which

is often characterised by an increase in debt, strategic realignments and cost-cutting programmes as well as the uncertainties of the sales process.

10.10 A spotlight on insolvencies

Insolvencies, closures and restructurings (change of ownership due to financial distress) are not reported in most data sources on private equity. In this study, these exit forms were recorded as systematically as possible, although certainly not completely. It was possible to document 70 insolvencies and a further eight closures or restructurings. Overall, 12.5 percent of all exits documented in this study ended in some form of economic distress. The employment volume of the companies affected by this amounted to around 39,000 people (9%). Overall, therefore, a considerable proportion of companies in private equity ownership end up in financial distress.

10.11 Ownership as an interim period

Private equity involves ownership for a limited period of time. On average, the 624 companies that underwent an exit in the years 2013 to 2018 were owned by a financial investor for 61 months or 5.1 years. The average holding period shortened slightly over this period. The averages also mean that a significant proportion of companies have much shorter holding periods. For example, twelve percent of the companies changed hands within the first two years and another 30 percent of the companies changed hands in the third or fourth holding year. The employees in these companies totalled 127,000 people, i.e. slightly less than one-third of the total employees at exits. For these employees, a change of ownership, including operational restructuring and strategic realignment, is followed by a sale phase fraught with uncertainty and then another change of ownership.

10.12 The internationalisation push after the exit

The starting position of companies before a first sale to financial investors was characterised by strong domestic ownership. Thus, of all the buyout firms considered in this study, 81 percent were previously owned by a domestic owner, with these firms accounting for 72 percent of employment volume.

Private equity ownership then led to an initial surge of internationalisation, which was repeated with the exit. Even if only those companies are considered that acquired a non-financial owner with the exit (i.e. insolvencies and secondary buyouts are excluded), then the exits brought a second internationalisation push. Around 61 percent of the exit companies with 64 percent of the employees acquired an international owner, while only one-third of the companies with 20 percent of the employees continued in domestic ownership. The most important regions of origin were neighbouring European countries with a quarter of the companies, the USA (13%), China (9%) and Japan and other countries (11%). Internationalisation can undoubtedly be an opportunity for companies. However, there are also risks of know-how transfer, the relocation of jobs and an increased susceptibility to crises due to the shift of decision-making power to external regions. There is thus an open question concerning whether the interplay of financial investors weakens the value-added connections at home in the long run.

REFERENCES

- Amess, Kevin (2018):** Leveraged buyouts: their impact on jobs and wages. In: Wright, Mike / Amess, Kevin / Bacon, Nick / Siegel, Donald (eds.): *The Routledge Companion to Management Buyouts*. London, pp. 530–542.
- Appelbaum, Eileen / Batt, Rosemary (2014):** *Private Equity at Work: When Wall Street Manages Main Street*. New York: Russel Sage Foundation.
- Argus Wityu (2020):** Argos Index, Zweites Quartal 2020. Available at: <https://argos.wityu.fund/de/argos-mid-market-index/zweites-quartal-2020/>.
- Bayer, Walter / Hoffmann, Thomas (2015):** Gesetzeswidrige Mitbestimmungslücken bei der GmbH. *GmbHHR – GmbH-Rundschau* 17/2015, pp. 909–918.
- Bobsin, Rainer (2021):** *Private Equity im Bereich der Gesundheits- und Pflegeeinrichtungen in Deutschland. Grundlagen, Entwicklungen und Kontroversen*. Hanover.
- BVK – Bundesverband Deutscher Kapitalbeteiligungsgesellschaften (ed.) (2020):** *Der deutsche Beteiligungskapitalmarkt 2019*. Available at: https://www.bvkap.de/sites/default/files/page/20200225_bvk-statistik_2019_vorlaeufig_in_charts.pdf.
- BVK – Bundesverband Deutscher Kapitalbeteiligungsgesellschaften (ed.) (2021):** *Der deutsche Beteiligungskapitalmarkt 2020*. Available at: https://www.bvkap.de/sites/default/files/page/20210315_bvk-statistik_2020_vorlaeufig_in_charts_final_0.pdf.
- Clark, Ian (2018):** The Political Economy of Finance-Led Capitalism: Connecting Financialization, Private Equity, and Employment Outcomes. In: Wright, Mike / Amess, Kevin / Bacon, Nick / Siegel, Donald (eds.): *The Routledge Companion to Management Buyouts*. London, pp. 152–165.
- Cumming, Douglas (ed.) (2012):** *The Oxford Handbook of Private Equity*. Oxford.
- Dyreg, Scott / Lindsey, Bradley P. / Thornock, Jacob R. (2013):** Exploring the Role Delaware Plays as a Domestic Tax Haven. *Journal of Financial Economics* 108(3), pp. 751–772.
- Eich, Jakob (2019):** Hohe Kaufpreise am deutschen M&A-Markt. *Finance-Magazin.de* dated February 21, 2019. Available at: <https://www.finance-magazin.de/deals/private-equity-private-debt/hohe-kaufpreise-am-deutschen-ma-markt-2031931/>.
- Emmler, Helge / Misterek, Fokko (2020):** Zahlen und Fakten zur Mitbestimmung. Mitbestimmungsreport No. 58 of the Hans Böckler Foundation, pp. 6–9. Available at: https://www.boeckler.de/pdf/p_mbf_report_2020_58.pdf.
- EY – Ernst & Young (Hg.) (2020):** *Private Equity. Der Transaktionsmarkt in Deutschland – 1. Halbjahr 2020*. Available at: https://www.ey.com/de_de/news/2020/08/ey-finanzinvestoren-halten-sich-in-corona-pandemie-zurueck.
- Finance (2019):** *Midmarket-Buyouts-2018*. June 1, 2018.
- Fleming, Grant (2010):** Institutional Investment in Private Equity: Motivations, Strategies, and Performance. In: Cumming, Douglas (ed.): *Private Equity. Fund Types, Risks and Returns, and Regulation*. Hoboken, pp. 9–29.
- Garbs, Holger (2017):** Ist schon wieder Blase? In: *VentureCapital Magazin* No. 11/2017, pp. 34–35.
- Gilligan, John / Wright, Mike (2014):** *Private Equity Demystified: An Explanatory Guide*. 3rd edition. Available at: <http://ssrn.com/abstract=2668066>.

- Hammer, Benjamin / Leker, Sebastian / Schwetzler, Bernhard / Wünsche, Norbert (2019):** Private Equity in Deutschland – wo steht der deutsche Buyout-Markt im internationalen Vergleich? In: *Corporate Finance* No. 3–4/2019, pp. 91–100.
- Harris, Robert S. / Jenkinson, Tim / Kaplan, Steven N. (2014):** Private Equity Performance: What Do We Know? In: *The Journal of Finance* 69(5), pp. 1851–1882.
- Haves, Jakob / Vitols, Sigurt / Wittke, Peter (2014):** Financialization and Ownership Change: Challenges for the German Model of Labour Relations. In: *Gospel, Howard / Pendleton, Andrew / Vitols, Sigurt (eds.): Financialization, New Investment Funds, and Labour. An International Comparison.* Oxford, pp. 148–175.
- Higson, Chris / Stucke, Rüdiger (2012):** The Performance of Private Equity. Available at: <http://ssrn.com/abstract=2009067>.
- Hoffmann, Thomas (2016):** 40 Jahre Mitbestimmungsgesetz 1976: Schleichende Mitbestimmungserosion in Deutschland. In: *AG – Die Aktiengesellschaft* 11/2016, pp. R167–R170.
- Jowett, Paul / Jowett, Françoise (2011):** Private Equity. The German Experience. Basingstoke.
- Kaplan, Steven N. / Strömberg, Per (2009):** Leveraged Buyouts and Private Equity. In: *Journal of Economic Perspectives* 23(1), pp. 121–146.
- KfW Research (Hg.) (2019):** German Private Equity Barometer: 4. Quartal 2018. Gemischte Stimmung zum Jahresende. Available at: https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/KfW-Research/Economic-Research/Wirtschaftsindikatoren/German-Private-Equity-Barometer/PDF-Dateien/GPEB_Q4_2018.pdf.
- Morgan, Jamie / Nasir, Muhammad A. (2020):** Financialised Private Equity Finance and the Debt Gamble: The Case of Toys R Us. In: *New Political Economy* 26(3), pp. 455–471. Available at: <https://doi.org/10.1080/13563467.2020.1782366>.
- Obermayer, Bastian / Obermaier, Frederik (2016):** Panama Papers. Die Geschichte einer weltweiten Enthüllung. Cologne.
- Phalippou, Ludovic (2014):** Performance of Buyout Funds Revisited? *Review of Finance* 18(1), pp. 189–218.
- Preqin (2020):** 2020 Preqin Global Private Equity & Venture Capital Report. London.
- PwC – PricewaterhouseCoopers (2019):** Private Equity Trend Report. Powering through uncertainty. Available at: <https://www.pwc.de/de/finanzinvestoren/pwc-private-equity-trend-report-2019.pdf>.
- PwC – PricewaterhouseCoopers (2020):** Deals Watch Germany. M&A-Aktivitäten von strategischen und Finanzinvestoren. Available at: <https://www.pwc.de/de/private-equity/deals-watch-germany-m-a-aktivitaeten-von-strategischen-und-finanzinvestoren-2020.pdf>.
- Scheuplein, Christoph (2019):** Private Equity Monitor 2018: Die aktuelle Tätigkeit von Finanzinvestoren in Deutschland. Mitbestimmungsreport No. 49 of the Hans Böckler Foundation. Available at: https://www.boeckler.de/pdf/p_mbf_report_2019_49.pdf.
- Scheuplein, Christoph (2020a):** Wie entwickeln sich Unternehmen mit Private-Equity-Eigentümern in Deutschland? Study No. 447 of the Hans Böckler Foundation. Available at: https://www.boeckler.de/de/faust-detail.htm?sync_id=9137.
- Scheuplein, Christoph (2020b):** Impact of private equity on employment and co-determination: the case of Germany. In: *Revista Internacional de Sociologia* 78(4), 2020, e171. Available at: <https://doi.org/10.3989/ris.2020.78.4.m20.003>.
- Scheuplein, Christoph (2020c):** Wer kommt, wenn Private Equity geht? Langfristige Wirkungen auf die Eigentümerstruktur deutscher Unternehmen. In: *Forschung Aktuell* No. 10/2020.

Scheuplein, Christoph (2021): Private equity as a commodification of companies: the case of the German automotive supply industry. In: *Journal of Economic Policy Reform* 24(4), pp. 472–487. Available at: <https://doi.org/10.1080/17487870.2019.1637590>.

Scheuplein, Christoph / Büzek, Richard (2021): Private-Equity-geführte Praxis-Ketten in der vertragsärztlichen ambulanten Patientenversorgung in Bayern. In: *Gesundheits- und Sozialpolitik* 75(2), pp. 36–44.

Scheuplein, Christoph / Evans, Michaela / Merkel, Sebastian (2019): Übernahmen durch Private Equity im deutschen Gesundheitssektor. Eine Zwischenbilanz für die Jahre 2013 bis 2018. In: *IAT Discussion Papers* 19/1.

Scheuplein, Christoph / Teetz, Florian (2017): Private Equity Aktivitäten in Deutschland 2014/2015. Eine Analyse von Buyouts, Exits und Private Equity-Gesellschaften. Study No. 367 of the Hans Böckler Foundation. Available at: https://www.imu-boeckler.de/de/faust-detail.htm?sync_id=HBS-006559.

Sekanina, Alexander (2018): Finanzinvestoren und Mitbestimmung. Wie der Wandel der Investorenlandschaft die Mitbestimmung herausfordert. Mitbestimmungsreport No. 42 of the Hans Böckler Foundation. Available at: https://www.imu-boeckler.de/de/faust-detail.htm?sync_id=HBS-006866.

Sick, Sebastian (2015): Mitbestimmungsfeindlicheres Klima. Mitbestimmungsreport No. 13 of the Hans Böckler Foundation. Available at: https://www.imu-boeckler.de/de/faust-detail.htm?sync_id=HBS-006158.

Sick, Sebastian (2020): Erosion als Herausforderung für die Unternehmensmitbestimmung. In: Mitbestimmungsreport No. 58 of the Hans Böckler Foundation, pp. 13–17. Available at: https://www.boeckler.de/pdf/p_mbf_report_2020_58.pdf.

Talmor, Eli / Vasvari, Florin (2011): *International Private Equity*. Chichester.

Watt, Andrew (2008): The impact of private equity on European companies and workers: key issues and a review of the evidence. In: *Industrial Relations Journal* 39(6), pp. 548–568. <https://doi.org/10.1111/j.1468-2338.2008.00505.x>.

Wood, Geoffrey / Wright, Mike (2009): Private equity: A review and synthesis. In: *International Journal of Management Reviews*, 11(4), pp. 361–380.

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Since the last global financial crisis, private equity activities have increased again in Germany. This article provides an overview of developments between 2012 and 2018 from an employee perspective. It shows, among other things, the volume and sectoral focus of company takeovers, the new owners after the exit of the financial investors, and the proportion of companies in which parity co-determination is practised. It also examines the most active private equity companies, their funds, their returns and their use of tax havens.

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