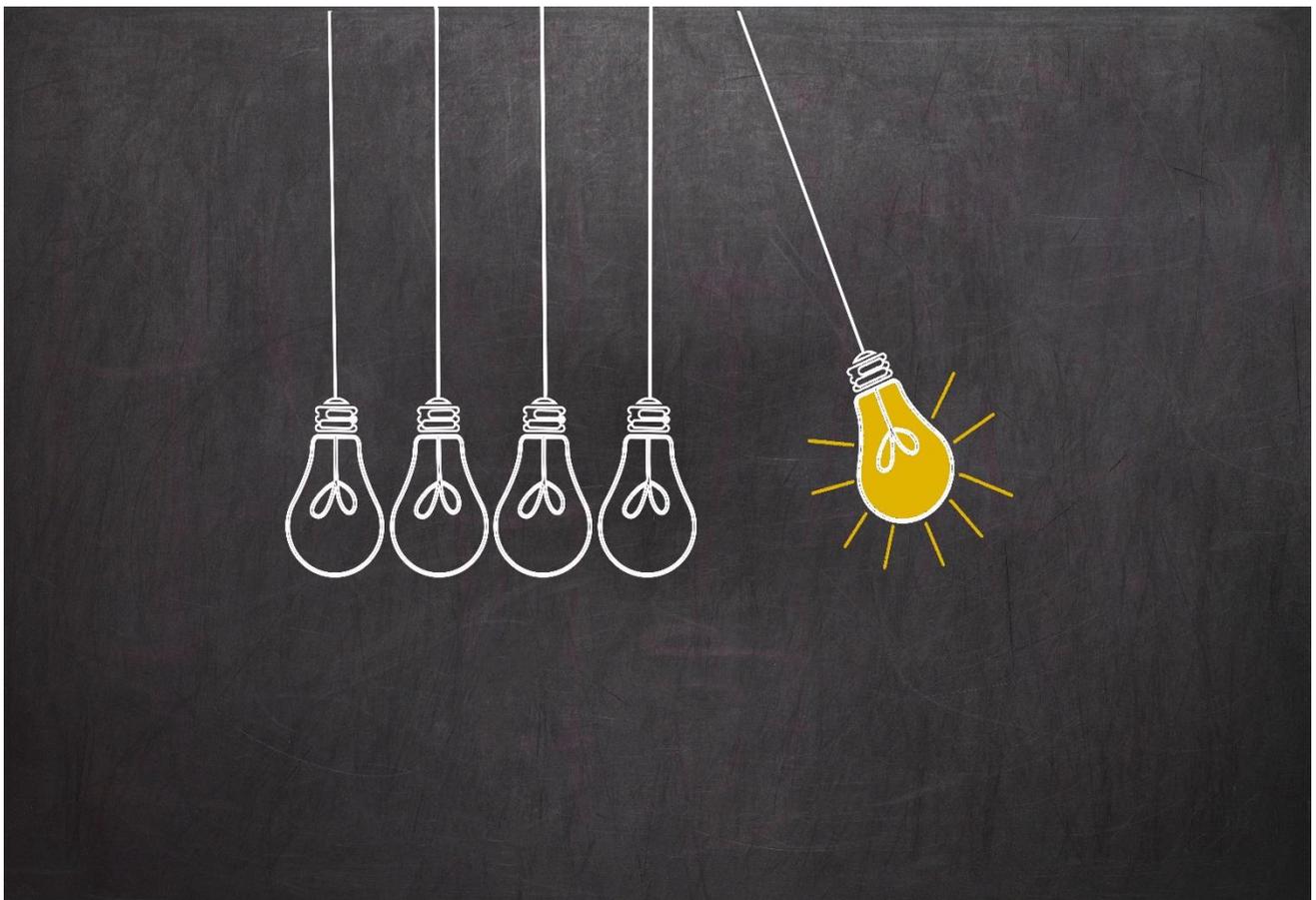


VALUE CREATION ANALYSIS FOR PRIVATE EQUITY FUNDS IN NORWAY  
2017  
**Seed, Venture and Buyout**



## Preface

On behalf of the Norwegian Venture Capital & Private Equity Association (NVCA), Menon Economics has conducted an analysis of value creation and employment in Norwegian enterprises where private equity funds have ownership shares. The analysis has made use of register data for Norwegian enterprises, which we have followed over a 15-year period from 2001 to 2016. We also evaluate the funds' maneuvering room with regards to new investments during the coming 1-3 years in terms of how much capital there is available for investment in funds that have already been established.

We thank Rikke Eckhoff Høvding in NVCA for an interesting assignment. The authors are responsible for all content in this report.



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## Summary

In this analysis, we study the extent of the activities of Norwegian enterprises owned by private equity funds in terms of value creation and employment. The analysis can be summed in the following key points:

- Today's portfolio companies had a total value creation<sup>1</sup> of NOK 37.2 billion in 2016. This amounts to 1.6 percent of GDP for mainland Norway<sup>2</sup>.
- The companies owned or part-owned by private equity funds employ approximately 68 900 persons. The figure is based on wage costs for Norwegian companies and employment in Norway, and in other countries.
- ICT, petroleum and retail dominate the investments of private equity funds in Norway. Petroleum was the biggest industry in 2009, but has now been passed by ICT, which has doubled its value creation since 2009.
- The development of the companies in the period before and after private equity funds took ownership shows that the portfolio companies experienced significant growth after the private equity fund invested. This is especially true for the earliest phases, where the growth rate changes following the fund's investment. The result is a clear indication that private equity funds contribute to the further development of Norwegian growth companies by supplying capital and expertise.
- Norwegian and foreign private equity funds have NOK 23.2 billion in available capital for new investments. Buyout funds stand for NOK 18.6 billion of this, and venture funds for NOK 4.6 billion. It is likely that the capital of the buyout funds will be invested during the coming 3-4 years, while the venture funds often have a somewhat longer investment phase.

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<sup>1</sup> Value creation: Companies that pay wages to the employees, tax to the state and profit to the owners generate added value for society. This added value created by the companies is reflected in the value creation measure calculated by the sum of earnings before interests, taxes, depreciations and amortizations (EBITDA) and wage costs. With this measure, it is possible to calculate the portfolio companies' social return, for example in the form of share of GNP.

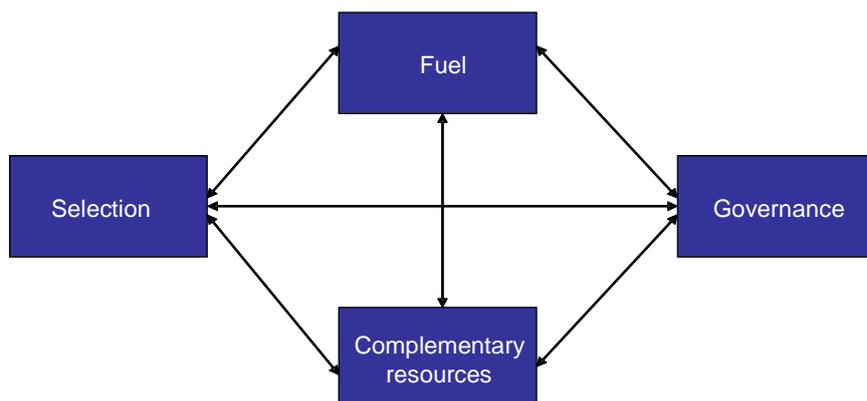
<sup>2</sup> Calculated on the basis of GNP for mainland Norway in 2016, base value (Statistics Norway)

# 1. Introduction

A distinguishing feature of private equity funds is that the owners participate actively in the development of the portfolio companies through continual strategic development in close cooperation with management. These funds specialize in different phases of a company's lifecycle, and are characterized by the fact that ownership entails active involvement in the company's operation, normally over a period of 3-10 years.

In this study, we operate with a rough categorization of the private funds in two groups: Early stage funds and buyout funds. Early stage funds range from investments in start-up companies which do not consist of much more than an entrepreneur's idea for an innovative product, to small and medium-sized companies that have already established themselves in a market, but where there is large potential for further expansion. The common denominator for this phase is that the private equity fund believes in the company and wishes to support it with capital and advice in exchange for ownership shares to realize the product's commercial potential. Buyout funds specialize in more mature companies where the challenge is to revitalize the company through restructuring, but also expansion. In contrast to the early stage funds, which normally own minority stakes in the company, buyout funds normally own a majority of the shares, so they have full control over the company.

The contribution of private equity funds to economic development and growth can be linked to the owners' four value-increasing roles:



First of all, private equity contributes to economic development by choosing to supply capital to those companies with the largest potential (selection). At the same time, the funds contribute to the companies' development both by supplying the portfolio companies with capital over time (fuel) and other resources and expertise – such as industry experience or networks – that the company did not already have (complementary resources). The expertise of the fund is passed on through active participation in the board of directors and other forms of contact with the company's management. The funds take an active role in strategic issues related to the company's further development, such as the recruitment of key personnel, establishing contact with major customers and strategic cooperation partners, and helping to raise further capital from the fund itself and other investors if necessary. In addition, the fund has an important governance role by setting clear targets and establishing good routines and procedures with management so that owners, management and employees pull in the same direction (governance).

In this article, we put a spotlight on the significance of private equity funds in the Norwegian business and industry sector in terms of both employment and value creation. Not least, we present a study of the private equity funds' available resources for investments during the coming 1-3 years.

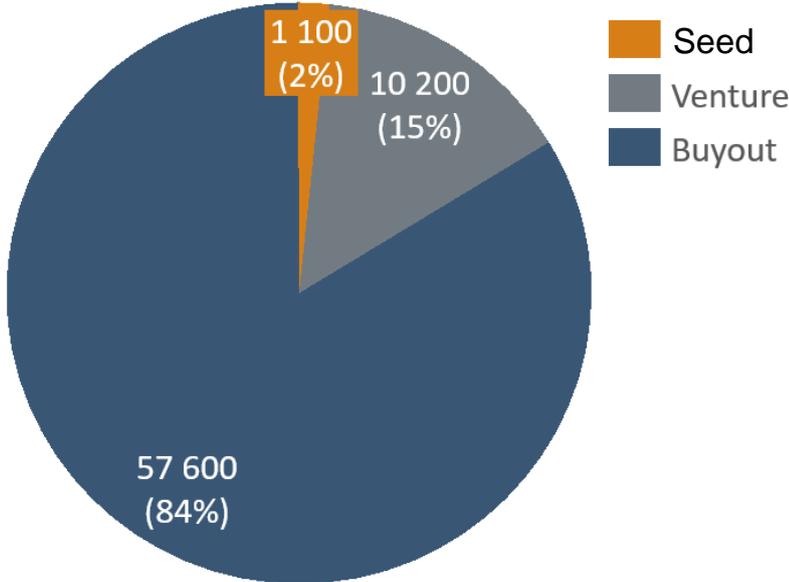
## 2. Private equity's value creation in Norwegian business and industry

In this part of the article, we illustrate the significance of private equity funds for Norwegian business and industry in terms of employment and value creation, and show how this is distributed over different development stages and industry sectors. The analysis of the companies in the current portfolio is based on the newest available accounting figures for the financial year 2016. The study comprises 386 Norwegian companies owned by Norwegian or foreign private equity funds.

### 2.1. Employment

In 2016, the portfolio companies of the current private equity funds employed almost 68 900 persons. Most of these are employed in the buyout segment, because this segment consists of large, established companies. The venture and seed segments consist of early stage companies that focus on technology development and the first steps in the commercialization process, and therefore employment is naturally much lower in these segments. The figure below shows the distribution between the different phases.

Figure 1 Employees in Norwegian portfolio companies by phase in 2016. Source: Menon

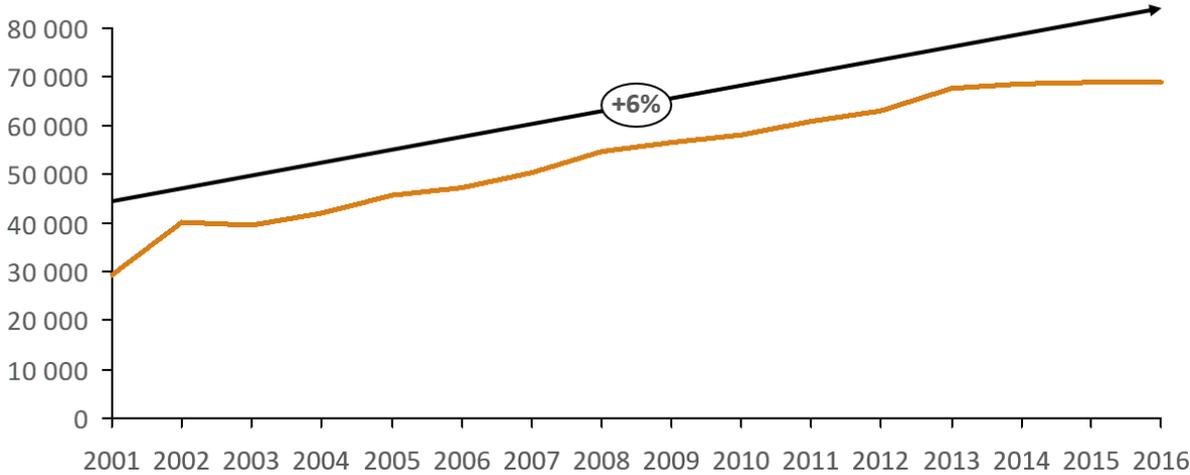


The employees are distributed between 386 companies in total. Most companies belong to the venture segment, 175 in all. In the buyout segment, we find 148 and in the seed segment 63 companies.

There has been steady growth in employment among today's portfolio companies during the last 10-year period. Average employment growth per year in the portfolio companies has been 6 percent since 2001. This growth has resulted in an additional 20 000 jobs in these companies compared to the situation 10 years ago, and 40 000 more than 15 years ago. This illustrates that companies owned by private equity funds are successful in expanding their activities and creating jobs. During the last year, employment growth has slowed down somewhat; the natural explanation for this is that many of the portfolio companies deliver products and services

to Norwegian petroleum production, a sector that has experienced significant pressure to make efficiency improvements after the dramatic fall in the oil price in 2014.

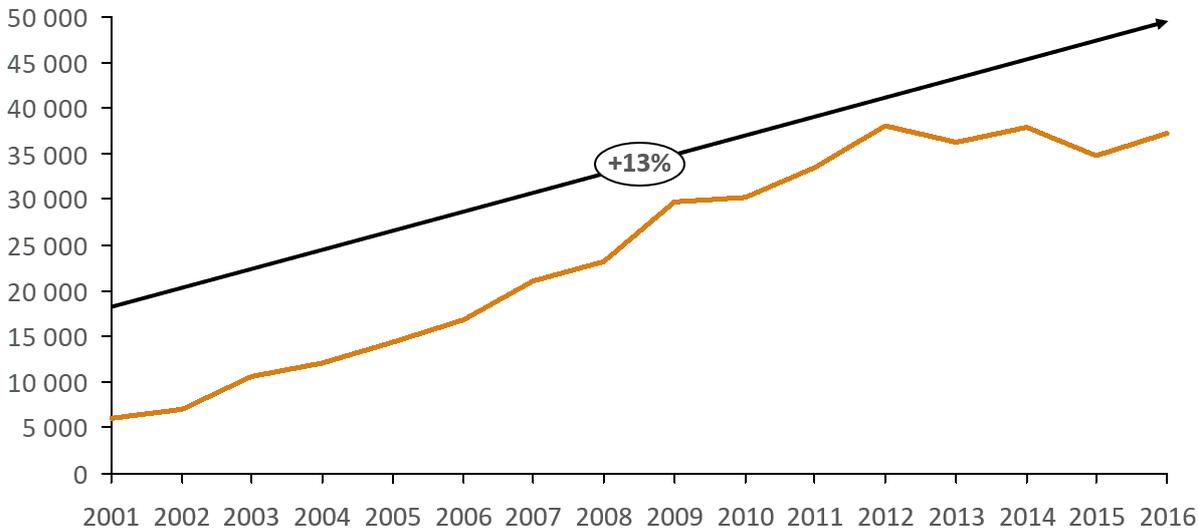
**Figure 2. Employees in Norwegian portfolio companies 2001-2016. Source: Menon Economics**



**2.2. Value creation**

Total value creation by the companies in the portfolio of Norwegian private equity funds in 2016 was NOK 37.2 billion. Value creation from Norwegian portfolio companies has shown a declining trend between 2012 and 2015. The main reason for this fall is a weaker development in the profitability of some major companies within the offshore supply industry. This fall is most pronounced for 2015, but the past year showed positive growth for the industry again. Despite the weaker development during the last couple of years, the portfolio companies have had formidable growth in value creation of on average 13 percent per year over the last 15 years. The numbers are a clear indication that private equity is an important engine for value creation in the Norwegian business and industry sector.

**Figure 3 Value creation in Norwegian portfolio companies. Current prices. 2001-2016. Source: Menon**



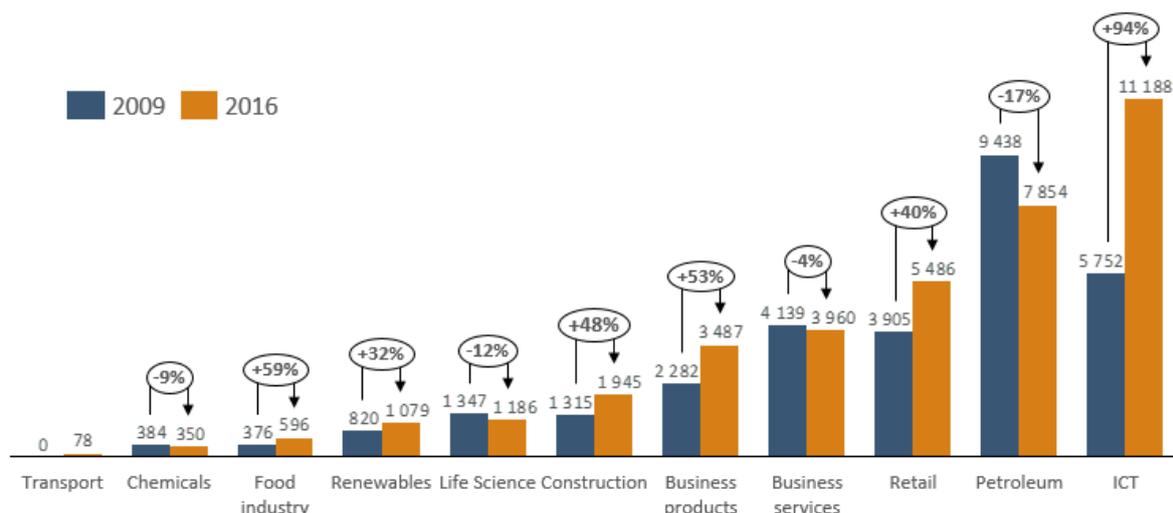
### 2.3. Development by industry sector

ICT, petroleum and retail dominate the investments of private equity funds in Norway. The figure below shows value creation by industry in 2009 and 2016, and the percentage change for the individual industries over the whole period. Petroleum was the biggest industry in 2009, but has now been passed by ICT. The ICT-industry is a big contributor to value creation in the portfolio companies of private equity funds, and has almost doubled its value creation since 2009.

Most industries have grown over the period. Retail, industry products and the construction industry have all grown by more than 40 percent over the period. The development has not been equally positive for the oil and gas industry. Here, value creation fell by 17 percent between 2009 and 2016. Industrial services, life science and chemicals have also experienced a decrease, of 4, 12 and 9 percent respectively.

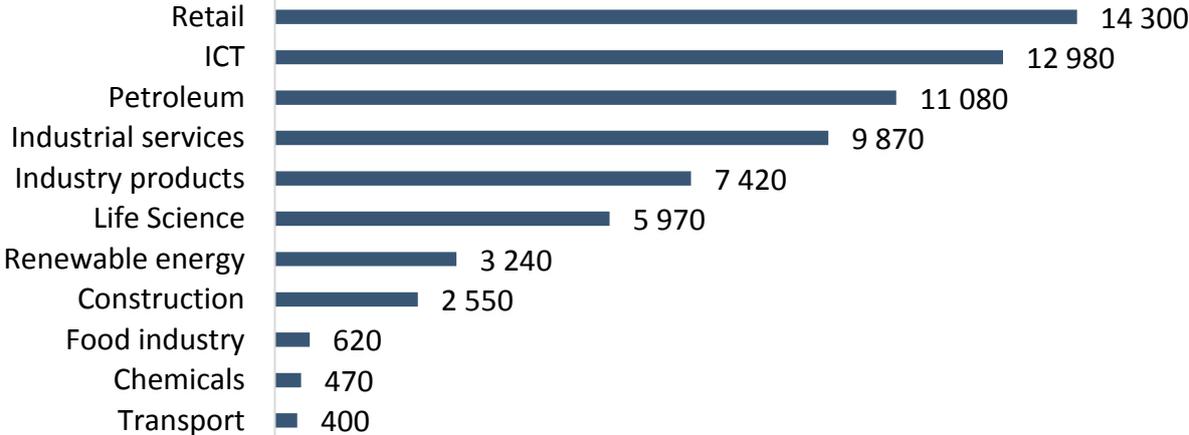
The variations in development show that there is often significant risk related to the investments that are made. In addition, it is important to point out that a negative development in value creation does not have to mean a negative development in profitability. The analysis does for example not take into account that individual parts of a company may be sold off. This will result in reduced value creation, because overall activity in the company will shrink.

Figure 4 Value creation by industry in 2009 and 2016. NOK million. Percentage change during the whole period is circled. Source: Menon



The dominance of ICT, petroleum and retail is also reflected in the employment statistics. Approximately one fifth of all employees in the portfolio companies worked in the retail sector in 2016. ICT and petroleum stood for a respective 19 and 16 percent of total employment in Norwegian portfolio companies.

Figure 5 Employees in Norwegian portfolio companies by industry in 2016. Source: Menon

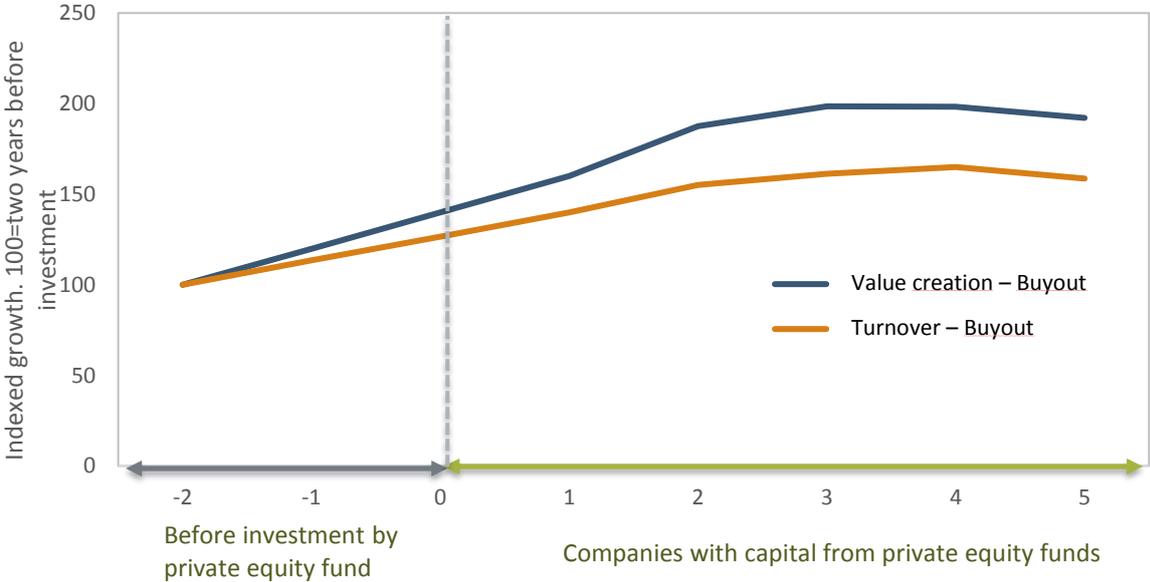


### 3. Development before and after investment by private equity funds

When private equity funds invest in companies, one of the primary goals is to create growth by supplying the companies with expertise and financial resources. The figures below show the development in value creation and turnover for early stage and buyout companies, respectively, before and after a private equity fund invested in the company. The investment year is year zero. Our baseline for the companies is two years before the private equity fund invests in the company. This value is set to 100, which then allows us to look at yearly growth from this starting point.

In the buyout segment, turnover and value creation move more or less in parallel until one year after the first investment in the company. From year two and three, the figure shows a step change in the growth rate for value creation, while turnover keeps growing at the same rate as before the private equity fund invested in the company. It is interesting to see that the portfolio companies are growing also before the private equity funds get involved; this shows that the private equity funds focus on growth companies. The stronger growth in value creation after the private equity fund invests in the company can be explained by the fact that the buyout funds have a strong focus on efficiency improvements to improve the bottom line, in addition to increasing sales. The figure shows that growth slows in years four and five. This is typical towards the end of the ownership period for the buyout funds. Growth in turnover also declines somewhat, but less than value creation. This may be related to the portfolio company having matured during the ownership period, while much of the growth potential has already been exploited.

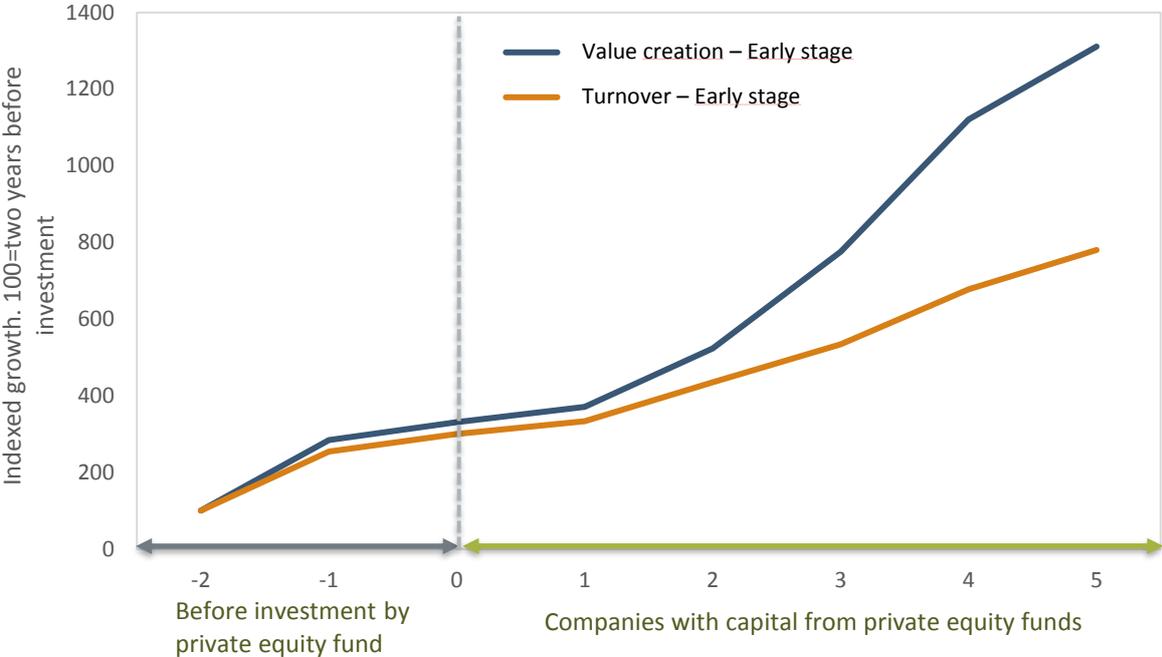
**Figure 6 Growth rate before and after private equity funds have invested in the company, buyout (fixed prices).**  
 Source: Menon



It is natural that companies in the early stage segment show stronger growth than in the buyout segment, since these are relatively small companies that are being supplied with capital to make them grow. This is also reflected in the figure below. Before the private equity fund invests and until one year after investment, the growth rate in both turnover and value creation is fairly similar. After two years, however, we see that growth in turnover and value creation picks up, and the growth rate increases. It is interesting that we can see such a clear effect on

both turnover and value creation so quickly after the investment and after the implementation of potential changes in strategy. The growth in value creation speeds up even more after three years and then decreases slightly after year four. Turnover shows even growth from about one year after investment.

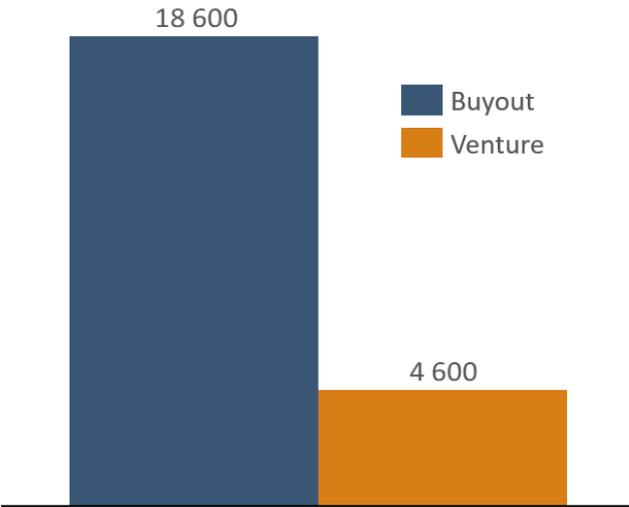
**Figure 7 Growth rate before and after private equity funds have invested in the company, early stage segment (fixed prices)**  
Source: Menon



## 4. Available capital for new investments in Norway

Norwegian and foreign private equity funds have NOK 23.2 billion in available capital for new investments. The figure below shows that buyout funds stand for NOK 18.6 billion of this, and venture funds for NOK 4.6 billion. The majority of these resources is concentrated in the hands of a few players. As far as available capital in the buyout segment is concerned, a large share of the available capital is managed by players with a presence and dedicated teams in Norway. With regards to venture capital, the public investment fund Investinor is a key actor. Here, it is worth noting that our figures are an estimate, and that investments in Norwegian companies may turn out to be both larger or smaller in the coming years. It is likely that the capital of the buyout funds will be invested during the coming 3-4 years, while the venture funds often have a somewhat longer investment phase.

Figure 8 Available capital for new investments. NOK million. Source: NVCA and Menon



According to our assessment, the estimate for available venture capital corresponds to a somewhat higher investment level than we have seen in recent years, when yearly investment was between NOK 500 million and 1 billion. Much of this is capital from state-owned or publicly funded actors. Since foreign players without an office in Norway are not included in this study, the activity level will look somewhat lower for buyout when dividing available capital for the buyout funds over a period of three years. At the same time, several new funds will be established and more new capital will be raised in the years to come. This means there is reason to believe that the activity level will stay the same or increase in the future.

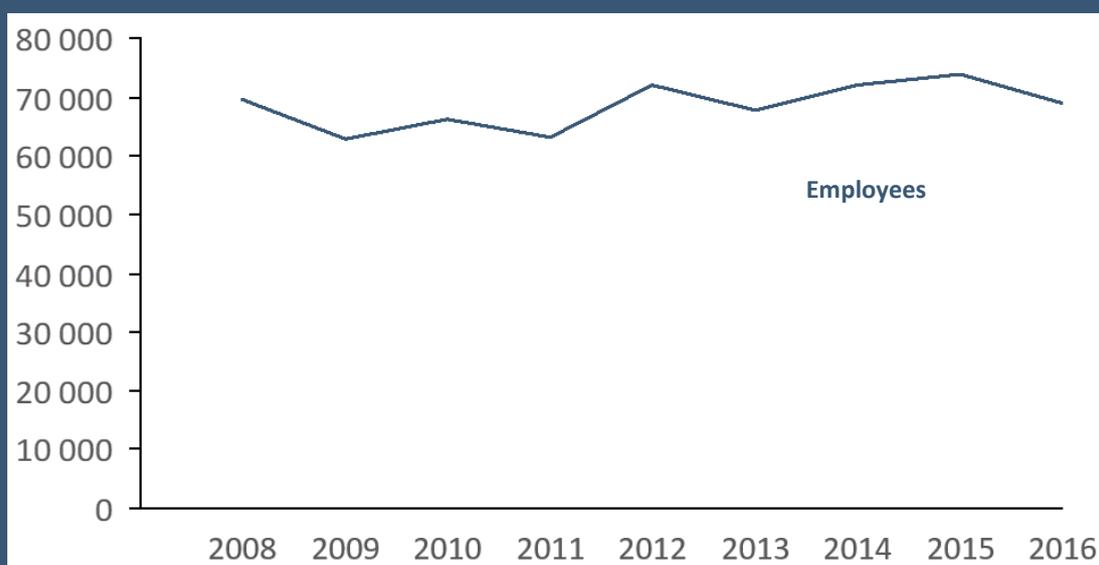
### **About our study on available capital for investments in Norway**

To obtain the most up-to-date and correct data, NVCA in November 2017 conducted a survey amongst the fund managers that have an office in Norway. The actors were asked to report available capital and estimate how big a share of this was likely to be invested in Norway. The survey was sent to 25 managers, of which 17 responded.

For those funds that did not respond to the survey, Menon has estimated the remaining capital. The estimate is based on 23 funds that still have capital available for new investments. The calculations of remaining capital are based on committed capital minus the funds' accumulated investments and management costs from establishment up to and including 2017. In the calculation of management fees, we have assumed a level of 2 percent of committed capital per year. The private equity firms report the funds' investments to NVCA via Invest Europe's pan-European platform on a yearly basis. Even so, there will be some investments that are never reported, which means that investment figures will be somewhat underestimated. Due to this, we have adjusted the investment amounts up by 15 percent to make allowance for underreporting.

### Current figures in the light of value creation analyses from previous years

Private equity funds have a limited lifespan and usually take ownership shares in companies for a period of 5-15 years. This means that the size of the portfolio owned by private equity funds will vary over time. In periods when a fund has made many investments, the portfolio will grow significantly, and in periods with many sales, it will be reduced. In this study, we take this source of variation into account by tracking the same portfolio companies over time. In the figure below, however, we have looked at the total portfolio from earlier years compared to the current portfolio, measured in number of employees and value creation. The number of employees in the portfolio companies was 69 500 in 2008 and has been relatively stable throughout all years. The number of employees in 2016 was 68 900.



Value creation in the portfolio of the private equity funds has grown relatively steadily since 2008 and up to 2012, followed by a slight decrease in the past four years. Value creation in 2016 is approximately NOK 4.7 billion higher than in 2008. Some of this growth is however due to price inflation in this period. The fall since 2012 is mainly related to lower activity in the offshore supply industry.

