Annual report on the performance of portfolio companies, IX

November 2016

EY
Building a better working world

Annual report on the performance of portfolio companies, IX - November 2016

Contents

The report comprises four sections:

1
Objectives and fact base
P3

2
Summary findings
P13

3
Detailed findings
P17

4
Basis of findings
P45

Foreword

This is the ninth annual report on the performance of portfolio companies, a group of large, Private Equity (PE) - owned UK businesses that met defined criteria at the time of acquisition. Its publication is one of the steps adopted by the Private Equity industry following the publication of guidelines by Sir David Walker to improve transparency and disclosure, under the oversight of the Private Equity Reporting Group (PERG).

The report comprises information and analysis to assess the potential effect of Private Equity ownership on several measures of performance of the portfolio companies. This year, the report covers 60 portfolio companies as at 31 December 2015 (2014:62), as well as a further 69 portfolio companies that have been owned and exited since 2005. The findings are based on aggregated information provided on the portfolio companies by the Private Equity firms that own them – covering the entire period of Private Equity ownership. This year, data was received covering 53 portfolio companies, a compliance rate of 88%, a decline from last year of 92%. On many measures of performance, the data on the current portfolio is combined with data from portfolio companies exited in 2015 and earlier, which provides over 100 data points, typically measuring performance over several years.

With a large number of portfolio companies, a high rate of compliance, and nine years of information, this report provides comprehensive and detailed information on the effect of Private Equity ownership on many measures of performance of an independently determined group of large, UK businesses.

This report has been prepared by EY at the request of the BVCA and the PERG. The BVCA has supported EY in its work, particularly by encouraging compliance amongst its members and non-members; the BVCA and the PERG have also provided comments on early drafts to EY. As in prior years, we welcome comments and suggestions on this report to the contact details at the end of this report.

Yours faithfully,
EY

1

Objectives and fact base

Objectives and fact base

Q&A

What are the objectives of this report?

The objective of this annual report is to present independently prepared information to inform the broader business, regulatory and public debate on the impact of Private Equity ownership on large, UK businesses.

What are the distinctive features of the Private Equity business model?

The distinctive features of the private equity business model include controlling ownership of its portfolio company investments, the use of financial leverage, and its long-term investing horizon.

What are the criteria used to identify portfolio companies and how are they applied?

Portfolio companies are identified at the time of their acquisition, on basis of criteria covering their size by market value, the scale of their UK activities and the remit of their investors. The criteria and their application are independently determined by the PERG.

How robust is the data set used in this report?

The aggregated data in this report covers 91% of the total population of portfolio companies. This year, compliance for the current portfolio companies was 53 of 60, or 88%.

How accurate are the individual portfolio company submissions?

The portfolio company submissions are drawn from key figures disclosed in published, independently audited, annual accounts.

The data returned to EY is checked for completeness and iterated with the Private Equity firms as required.

What are the objectives of this report?

The objective of this annual report is to present independently prepared information to inform the broader business, regulatory and public debate on the impact of Private Equity ownership on large, UK businesses.

This study by EY reports on the performance of the large, UK businesses (the portfolio companies) owned by Private Equity investors that meet the criteria determined by the PERG. It forms part of the actions implemented by the Private Equity industry to enhance transparency and disclosure as recommended in the guidelines proposed by Sir David Walker.

By aggregating information on the businesses that meet a defined set of criteria at the time of their acquisition, there is no selectivity or performance bias in the resulting data set. This is the most accurate way of understanding what happens to businesses under Private Equity ownership.

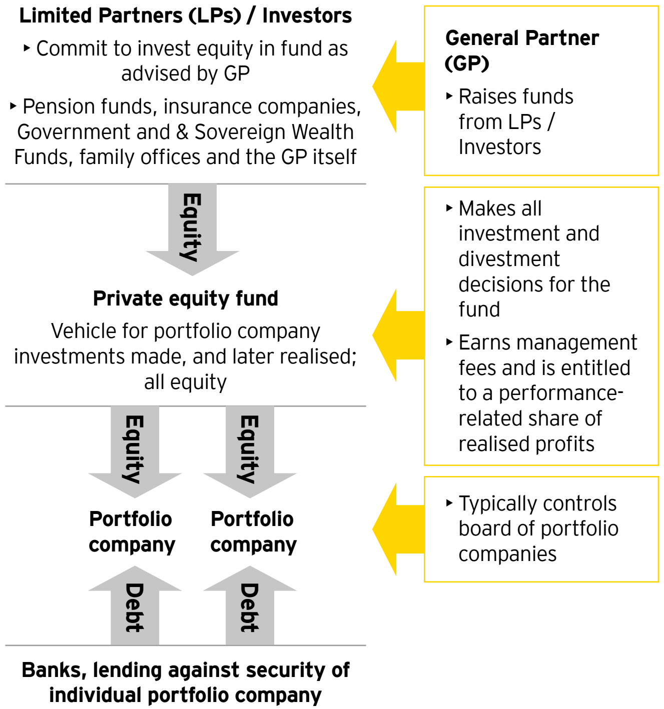
Key questions of interest to the many stakeholders in the portfolio companies that are addressed in this report include:

- Do portfolio companies create jobs?
- How is employee compensation affected by PE ownership: pay, terms and pension benefits?
- Do portfolio companies increase or decrease investment: capital expenditure, R&D, in bolt-on acquisitions or disposals?
- What are the levels of financial leverage in the portfolio companies and how does this change over time?
- How does productivity change under PE ownership: labour and capital?
- Do companies grow during private equity ownership?
- How do private equity investors generate returns from their investments in the portfolio companies? How much is attributable to financial engineering, public stock market movement, and strategic and operational improvement?

The findings of this report constitute a unique source of information to inform the broader business, regulatory and public debate on the impact of Private Equity ownership, by evidencing if and how its distinctive features (including investment selection, governance, incentives and financial leverage) affect the performance of large, UK businesses.

What are the distinctive features of the private equity business model?

The distinctive features of the private equity business model include ownership of its portfolio company investments, the use of financial leverage, and its long term investing horizon.



Ownership of portfolio companies

- The private equity fund typically acquires all or a majority of the equity in its portfolio companies giving it (as advised by GP) control of the board, strategy, management and operations of the company.
- Most other financial investors (e.g., hedge funds, public equity funds) acquire minority shareholdings with no direct influence over management or strategy.

Use of financial leverage

- In acquiring portfolio companies third party debt is used and this is secured on the portfolio company itself, alongside equity provided by the private equity fund.
- The leverage levels applied to portfolio company investments are typically higher than public company benchmarks

Long term

- LPs make an investment commitment to a Private Equity fund of c.10 years.
- Typically equity capital is invested for the for first 5 years and realised in the second 5 years.
- Typical investment horizon of 3–7 years per portfolio company investment (average in this study is 6 years).
- There are restrictions on withdrawing commitments from the fund, thereby allowing a long term investment period. This is in contrast to many other financial investors (e.g., hedge funds, public equity funds) who invest in publicly traded shares that have few restrictions on buying or selling that have few restrictions on buying or selling.

What are the criteria used to identify portfolio companies, and how are they applied?

Portfolio companies are identified at the time of their acquisition, based on criteria covering their size by market value, the scale of their UK activities, and the remit of their investors. The criteria and their application are independently determined by the PERG.

The criteria for identifying portfolio companies, and their application, are determined by the PERG (see privateequityreportinggroup.co.uk for details of composition and remit).

A portfolio company, at the time of its acquisition, was:

- "Acquired by one or more private equity firms in a public to private transaction where the market capitalisation together with the premium for acquisition of control was in excess of £210 million, and either more than 50% of revenues were generated in the UK or UK employees totalled in excess of 1,000 full time equivalents"; or
- "Acquired by one or more private equity firms in a secondary or other non-market transaction where enterprise value at the time of the transaction is in excess of £350 million, and either more than 50% of revenues were generated in the UK or UK employees totalled in excess of 1,000 full time equivalents"; and where.
- Private equity firms are those that manage or advise funds that own or control portfolio companies, or are deemed after consultation on individual cases by the PERG, to be 'private equity like' in terms of their remit and operations.

The companies, and their investors, that meet the criteria were identified by the BVCA, and then approved by the PERG.

As in prior years, the portfolio companies that volunteered to comply with the disclosure aspect of the guidelines, but did not meet all of the criteria above at acquisition, are excluded from this report.

What are the criteria used to identify portfolio companies, and how are they applied?

In 2010, the criteria used to determine the Portfolio Companies were changed by the PERG, by lowering the entry enterprise value threshold.

Movements in the number of portfolio companies

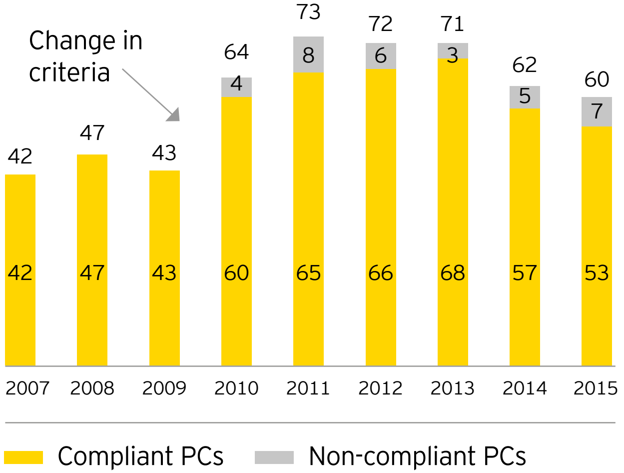
	Exits 2005-06	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total exits
At 1st January		**37**	**42**	**47**	**43**	**64**	**73**	**72**	**71**	**62**	
Portfolio Companies introduced / excluded with changes in PERG criteria					12	4		(1)	-	-	
Acquisitions of Portfolio Companies		10	5	-	11	8	7	10	7	11	
Exits of Portfolio Companies	(9)	(5)	-	(3)	(2)	(3)	(8)	(10)	(16)	(13)	(69)
Portfolio Companies at 31st December		**42**	**47**	**43**	**64**	**73**	**72**	**71**	**62**	**60**	
Exits and re-entrants		1	-	-	1	1	3	5	-	1	
Number of exits by IPO		-	-	-	-	-	1	3	8	5	

- This brought in a total of 16 new Portfolio Companies. In 2012, the PERG decided that one ‘PE-like’ investor entity that owned two Portfolio Companies had restructured in such a way that it was no longer ‘PE-like’. In 2013, the PERG decided that one Portfolio Company, that had made significant disposals and was as a result well below the size criteria, would be excluded from the population.
- The effect of Private Equity ownership on a business is evaluated from the date of acquisition to the date of exit. The date of exit is defined as the date of completion of a transfer of shares which means that the Private Equity fund no longer has control, or, in the case of IPO onto a public stock market, the date of first trade.

How robust is the data set used in this report?

The aggregated data in this report covers 91% of the total population of portfolio companies. This year, compliance for the current portfolio companies was 53 of 60, or 88%.

Number of portfolio companies on 31 December and compliance



- Private Equity firms were requested to complete a data template. For each of their portfolio companies, for the purposes of preparing this report. Individual portfolio company submissions are reviewed by EY and accepted or rejected depending on their completeness.
- Compliance by portfolio companies has been above 90% in all bar two years, 2011 and the current year, at 89% and 88%, respectively. In many measures of performance, data on portfolio companies owned and exited is also included. Of this group of 69 former portfolio companies, 14 relate to exits in the period 2005-07 who were not required to submit the full data template. Compliance of the rest is 52 out of 56 or 93%. Therefore on this measure of the current portfolio and exits (CP+exits), the total number of data points is 116 and there is data reported on 105, a compliance rate of 91%.
- For returns attribution, which is only measured on exits, compliance is 64 out of 69 or 93%.
- The main reason for non-compliance is the inclusion of certain portfolio companies of 'private equity like' investors, who are not BVCA members.

How robust is the data set used in this report?

Portfolio companies (on 31 December 2015)

Portfolio Company	GP(s)
Advanced Computer Systems	**Vista Equity Partners**
Affinity Water	Infracapital
Airwave Solutions	Macquarie
Ambassador Theatre Group	Providence Equity Partners, (Exponent Private Equity)
Annington Homes	Terra Firma
Anglian Water Group	3i, (Colonial First State Global Asset Mnagement, Canadian Pension Plan Investment Board, Industry Funds Management)
Ascential (previously Top Right Group)	Apax
Associated British Ports	Borealis, (GIC, Canada Pension Plan Investment Board, Hermes Infrastructure, Kuwait Investment Authority)
Biffa	Bain Capital Credit, (Babson Capital, Angelo Gordon & Co, Avenue Capital)
Brakes Group	Bain Capital, (Fresh Direct)
Callcredit Information Group	GTCR
Camelot	**Ontario Teachers' Private Capital**
Care UK	Bridgepoint
Chime Communications[2]	Providence Equity Partners, (WPP)
Civica	OMERS PE
David Lloyd Leisure	TDR Capital
Domestic and General Group	CVC Capital Partners
Edinburgh Airport	Global Infrastructure Partners

Portfolio Company	GP(s)
Enserve	Cinven
Expro	Goldman Sachs
Fat Face	Bridgepoint
Fitness First	Oaktree Capital Management, (Marathon Capital)
Four Seasons Health Care	Terra Firma
Gala Coral	Apollo Global Management, (Cerberus, Park Square Capital, York Capital Management)
Gatwick Airport	Global Infrastructure Partners, (Abu Dhabi Investment Authority, CalPERS, National Pension Scheme of Korea, Future Fund)
HC-One*	**Safanad, Formation Capital & management**
Host Europe Group	Cinven
Infinis[2]	Terra Firma
Keepmoat	TDR Capital, (Sun Capital)
London City Airport	Global Infrastructure Partners, (Highstar Capital)
Moto[3]	USS
Motor Fuel Group[2]	Clayton Dubiler & Rice
Mydentist (previously Integrated Dental Holdings)	The Carlyle Group, (Palamon Capital Partners)
National Car Parks	Macquarie
New Day	Varde Partners
Northgate Information Solutions*[1]	**KKR**
Northgate Public Services	Cinven
Odeon & UCI Cinemas	Terra Firma

Portfolio companies in **bold** text are those GPs and portfolio companies that have not complied with reporting requirements for the 2015 study.
Notes: * indicates where the GP has provided an explanation for non-compliance: 1) Company has complied previously. 2) Company is new to population. 3) Company is a re-entrant due to change of *ownership*.

How robust is the data set used in this report?

Portfolio companies (on 31 December 2015)

Portfolio Company	GP(s)
PA Consulting Group²	The Carlyle Group
Parkdean Holidays*²	**Alchemy Partners, Electra Partners**
Pizza Express²	Hony Capital
Premium Credit²	Cinven
Pret a Manger	Bridgepoint
Prezzo²	TPG Capital
Priory Group	Advent International
RAC	The Carlyle Group, (GIC)
R&R Ice Cream	PAI Partners
Sky Bet²	CVC Capital Partners
South Staffordshire Water	KKR
Stonegate Pub Company	TDR Capital
TES Global (previously TSL Education)	TPG Capital
Thames Water	Macquarie
The Vita Group	TPG
Trainline²	KKR
Travelodge	Goldman Sachs (GoldrenTree Asset Management, Avenue Capital Group)
Village Urban Resorts	**KSL Capital**
Viridian Group*	**Arcapita**
Voyage Healthcare	Partners Group, (Duke Street, Tikehau)
Vue Cinemas	OMERS PE
Young's Seafood (previously Findus Group)	Lion Capital, (Highbridge Capital management, Bain Capital Credit)

Exits of portfolio companies during 2015

Portfolio Company	GP(s)
Amdipharm Mercury (AMCo)	Cinven
Birds Eye Iglo	Permira
British Car Auction	Clayton Dubiler & Rice
CenterParcs	Blackstone
DFS	Advent International
Eversholt Rail	3i, Morgan Stanley, STAR Capital
John Laing	Henderson
Moto	Macquarie
New Look	Permira, Apax
RAC	Carlyle, (GIS)
Trader Media	Apax
Virgin Active	CVC
WorldPay	Advent International, Bain Capital

Portfolio companies in **bold** text are those GPs and portfolio companies that have not complied with reporting requirements for the 2015 study.
Notes: * indicates where the GP has provided an explanation for non-compliance: 1) Company has complied previously. 2) Company is new to population. 3) Company is a re-entrant due to change of *ownership*.

How accurate are the individual portfolio company submissions?

The portfolio company submissions are drawn from key figures disclosed in the published, independently audited, annual accounts.

- The BVCA and EY contacted the Private Equity firms in June 2016 and requested a standard data template to be completed for each portfolio company. For exits, the same data template was updated for the final year of Private Equity ownership, as well as data required to complete the returns attribution analysis. While it is the responsibility of the Private Equity firm to ensure compliance, in many cases the portfolio company submitted the information directly to EY.
- All of the portfolio companies have annual accounts which have been independently audited. Completion of the data template drew on information available in company accounts, and further information that was prepared from portfolio company and Private Equity firm sources. This data enabled analysis, inter alia, of the impact of acquisitions and disposals, and movements in pension liabilities and assets. The data template incorporates a number of in-built consistency and reconciliation checks, and also requires key figures to be reconciled to figures in the annual accounts.
- The data templates returned to EY were checked for completeness, and iterated with the Private Equity firms as required. EY undertook independent checks on a sample of the returns against published company accounts. This found no material discrepancies. Data gathering was completed in November 2016.

2

Summary findings

Summary findings

Q&A

How long does private equity invest in the portfolio companies?

- The average timeframe of PE investment in the portfolio companies is 5.8 years, i.e., from initial acquisition to exit. The current portfolio companies have been owned for an average of 4.4 years.
- Many of the findings in this report are based on measurement over the entire period of PE ownership of the portfolio companies, i.e., from initial acquisition to latest date or exit, whilst others are a year-on-year comparison.

Do portfolio companies create jobs?

- Reported employment has grown by 2.7% per annum under PE ownership. Underlying organic employment (removing the effect of bolt-on acquisitions and partial disposals) has grown by 1.5% per annum.
- Annual employment growth at the portfolio companies is slightly ahead of private sector benchmarks of 1.4% growth (organic) and 2.5% growth (reported).
- Organic employment growth at the portfolio companies has been faster in the last two years, averaging c.3% per annum, consistent with economy-wide benchmarks.
- There is a wide range growth and decline in organic employment at the individual portfolio company level – reflecting many factors. The overall PE effect is measured by the aggregate result.

How is employee compensation affected by PE ownership: pay, terms and pension benefits?

- Average employment cost per head has grown under PE ownership by 2.1% per annum.
- Employee compensation growth under PE ownership is slightly behind the UK private sector benchmark, at 2.1% versus 2.4% annual growth.
- Year-on-year growth in average employment cost per head was 2.3% in 2015, above the long term trend but behind the UK private sector benchmark of 3.3%.
- Almost half of the jobs in the portfolio companies are for part time work with annual compensation less than £12,500, over double the proportion of the UK private sector. This is explained by a sector focus on consumer services and healthcare where there is a higher mix of part time work.
- 5.5% of jobs in the portfolio companies are on zero-hour contracts, lower than the economy-wide benchmark of 5.8%. For the portfolio companies, when the impact of one sector is excluded, this falls to 0.1%.
- There have been few changes to existing company defined benefit pension schemes under PE ownership.

Summary findings

Q&A

Do portfolio companies increase or decrease investment: in capital expenditure, in R&D, in bolt-on acquisitions or disposals?

- Investment at the portfolio companies has grown by 1.6% to 7.6% per annum across a number of measures.
- The portfolio companies have grown operating capital employed at a slower rate than public company benchmarks, at 1.6% per annum versus 4.3% per annum.
- Annual growth in key measures of investment at the portfolio companies is variable, ranging from -3.9% to 4.4% annual growth in operating capital employed, albeit positive in all years except 2009-10.
- Measured by effect on revenue, 47% of the current portfolio companies have made net bolt-on acquisitions while 9% have made net partial disposals, showing investment in bolt-on acquisitions ahead of partial disposals.
- PE investors, in aggregate, have used free cashflow and additional third party debt to increase investment in the current portfolio companies by £22.8 billion, increasing the leverage ratio from 6.2x at acquisition to 6.8x at latest date.

How does productivity change under PE ownership: labour and capital?

- Labour and capital productivity have grown under PE ownership, by 2.0%-2.4% and 6.4% per annum, respectively.
- Annual growth in labour productivity in the portfolio companies at between 2.0% and 2.4% is on a par with public company and economy-wide benchmarks.
- Capital productivity growth in the portfolio companies exceeds public company benchmarks, at 6.4% versus 0.1% growth per annum.

Summary findings

Q&A

Do private equity-owned companies grow?

- The portfolio companies have grown reported revenue at 5.8% per annum and profit at 4.6% per annum; organic revenue and profit growth are both 3.6% per annum.
- Revenue and profit growth at the portfolio companies is ahead of public company benchmarks by 3.1 percentage points and 2.1 percentage points per annum, respectively.
- The portfolio companies have grown organic revenue and profit in every year of PE ownership, with faster growth in 2015 versus 2014, at 4.8% and 7.5%, respectively.

What are the levels of financial leverage in portfolio companies?

- The current portfolio companies have an average leverage ratio of 6.8x net debt to EBITDA, up from 6.2x at the time of acquisition.
- Portfolio companies have much higher levels of financial leverage than public companies, 6.5x net debt to EBITDA versus 2.4x, respectively.

How do private equity investors generate returns from their investments in the portfolio companies: how much is attributable to financial engineering, public stock market movement, and strategic and operational improvement?

- The equity return from portfolio company exits are 4.3x the public company benchmark; half of this is due to PE strategic and operational improvement and the other half from additional financial leverage.
- While the results vary over time, the components of gross return from PE strategic and operational improvement, and additional financial leverage are more significant than the underlying public stock market return.

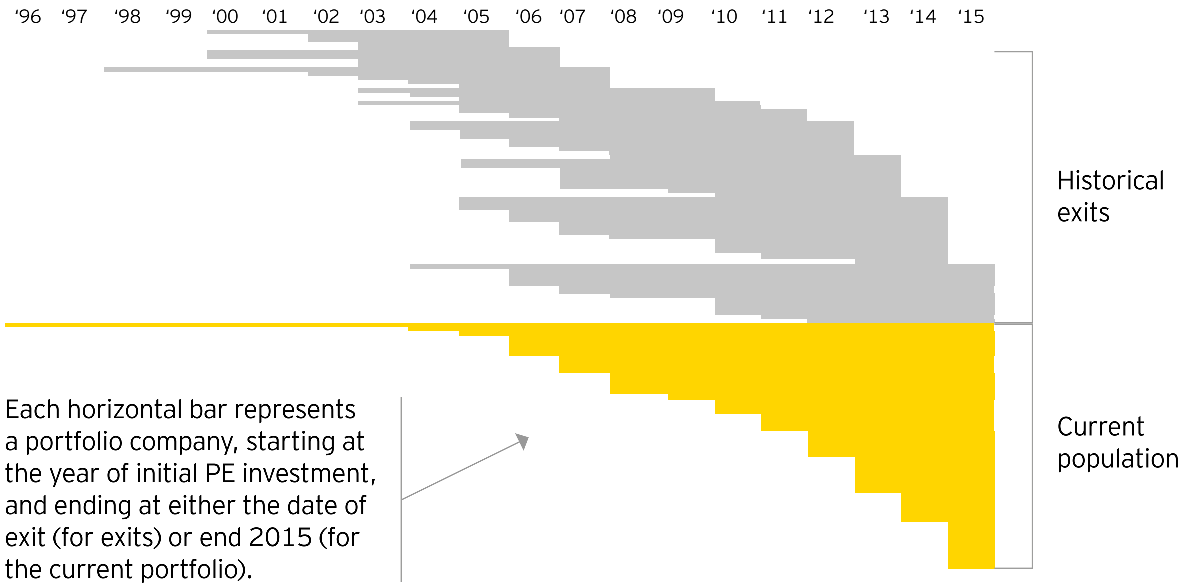
3

Detailed findings

What is the timeframe for private equity investments in the portfolio companies?

The average timeframe of PE investment in the portfolio companies is 5.8 years, i.e., from initial acquisition to exit. The current portfolio companies have been owned for an average of 4.4 years.

Length of ownership of portfolio companies by PE investors



Each horizontal bar represents a portfolio company, starting at the year of initial PE investment, and ending at either the date of exit (for exits) or end 2015 (for the current portfolio).

The private equity business model seeks to achieve an investment return to its investors (pension funds, insurance funds etc) by realising greater equity proceeds through the sale, and in dividends through ownership of portfolio companies, than its initial equity investment at the time of acquisition.

The Private Equity business model is long term:

- for the 69 portfolio companies that have been exited over the past eleven years, the average length of ownership is 5.8 years.
- for the current group of 60 portfolio companies, measured at 31 December 2015, the average length of PE ownership is 4.4 years.

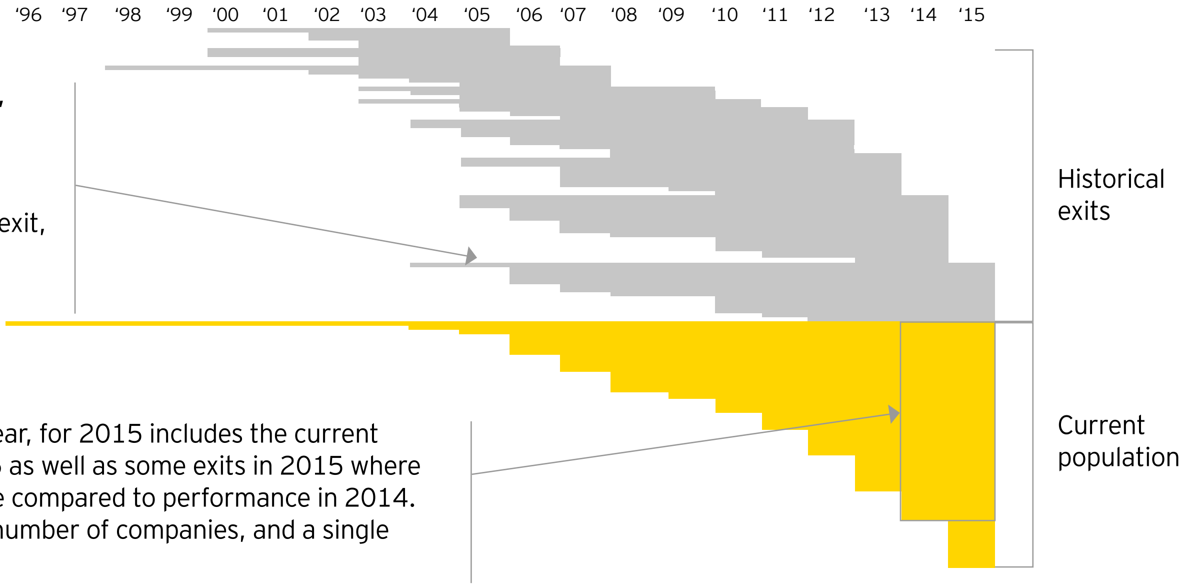
Note: The data set for company exits includes investments realised starting 2005 vs 2007 for the main data set

What is the timeframe for private equity investments in the portfolio companies?

Many of the findings in this report are based on measurement over the entire period of PE ownership of the portfolio companies, i.e. from initial acquisition to latest date or exit, whilst others are a year-on-year comparison.

Length of ownership of portfolio companies by PE investors

Measurement 1: CP + Exits, includes current portfolio companies and exits and measures from date of acquisition to latest date or exit, i.e., the entire blue and grey areas respectively.



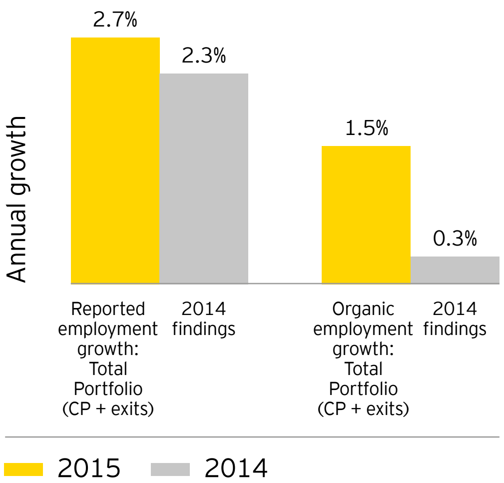
Measurement 2: Year-on-year, for 2015 includes the current portfolio companies in 2015 as well as some exits in 2015 where performance in 2015 can be compared to performance in 2014. This is a subset of the total number of companies, and a single time period.

Note: The data set for company exits includes investments realised starting 2005 vs 2007 for the main data set

Do portfolio companies create jobs?

Reported employment has grown by 2.7% per annum under PE ownership. Underlying organic employment (removing the effect of bolt-on acquisitions and partial disposals) has grown by 1.5% per annum.

Reported Employment Growth and Organic Employment Growth

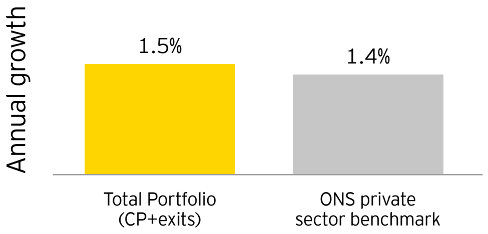


- Looking at both current portfolio companies and exits, at the time of acquisition of these companies by PE investors there were 577K jobs (including both UK and international locations), and at the latest year end or date of exit there were 675k jobs, an increase of c.100K jobs. This increase can also be represented as an annual growth rate of 2.7%.
- The reported employment data is consistent with the information disclosed in the annual reports made available by all portfolio companies. As part of the data-gathering for this report, additional data is obtained from each portfolio company to isolate the effect of bolt-on acquisitions and partial disposals. The underlying rate of organic employment growth is 1.5%, or about 45% of the total.
- Both growth rates demonstrate improvement over last year's report with 2.3% and 0.3% annual growth rates, respectively, reflecting faster employment growth in the past two years.

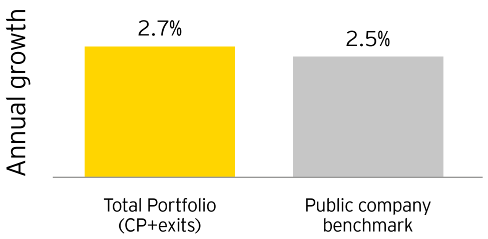
Do portfolio companies create jobs?

Annual employment growth at the portfolio companies is slightly ahead of private sector benchmarks of 1.4% growth (organic) and 2.5% growth (reported).

Organic employment growth vs UK private sector benchmarks



Reported employment growth vs. public company benchmark

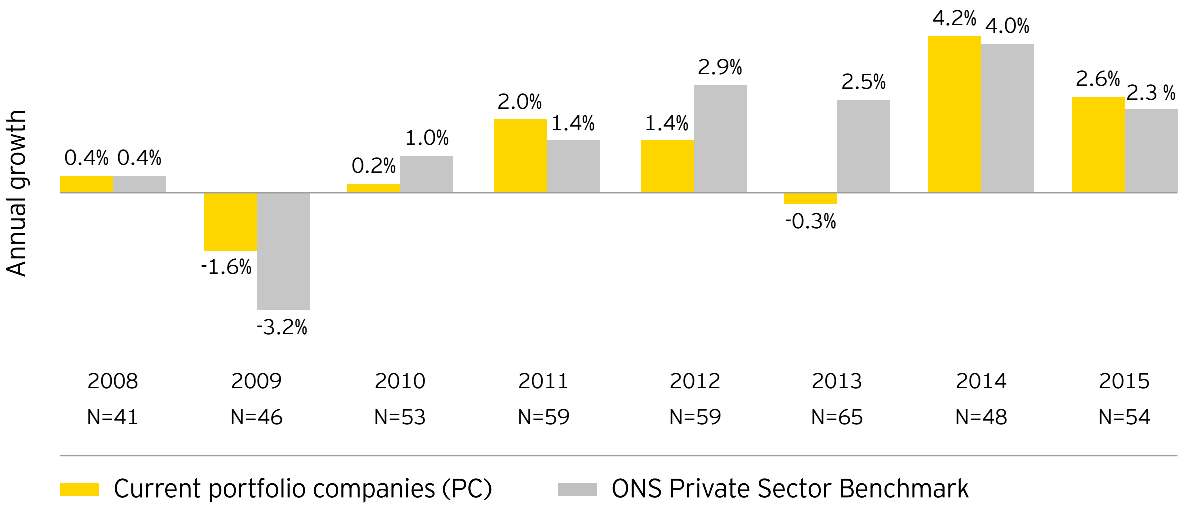


- Organic employment growth can be benchmarked to ONS statistics which report on economy wide employment trends. Using data for private sector employment growth, and matching to compare relevant time periods, the 1.5% organic employment growth rate is comparable to the UK private sector employment growth as a whole of 1.4%.
- It should be noted that the private sector benchmark includes companies of all sizes. The limited data on private sector employment trends by company size (since 2010 only) shows that large companies (defined as >250 employees) have achieved slower employment growth than the private sector overall. This suggests that on a more comparable basis the portfolio companies are performing ahead of benchmarks.
- Reported employment growth, while not the best test of employment growth, can be compared to public companies, whose figures also include the effects of bolt-on acquisitions and partial disposals.
- The reported employment growth of the portfolio companies of 2.7% per annum is slightly above a size, sector and time matched public company benchmark of 2.5% per annum. See ‘Basis of findings’ for description of preparing the public company benchmark.

Do portfolio companies create jobs?

Organic employment growth has been faster in the last two years, averaging c.3%, consistent with economy-wide benchmarks.

Organic employment growth, year-on-year vs. UK private sector benchmark

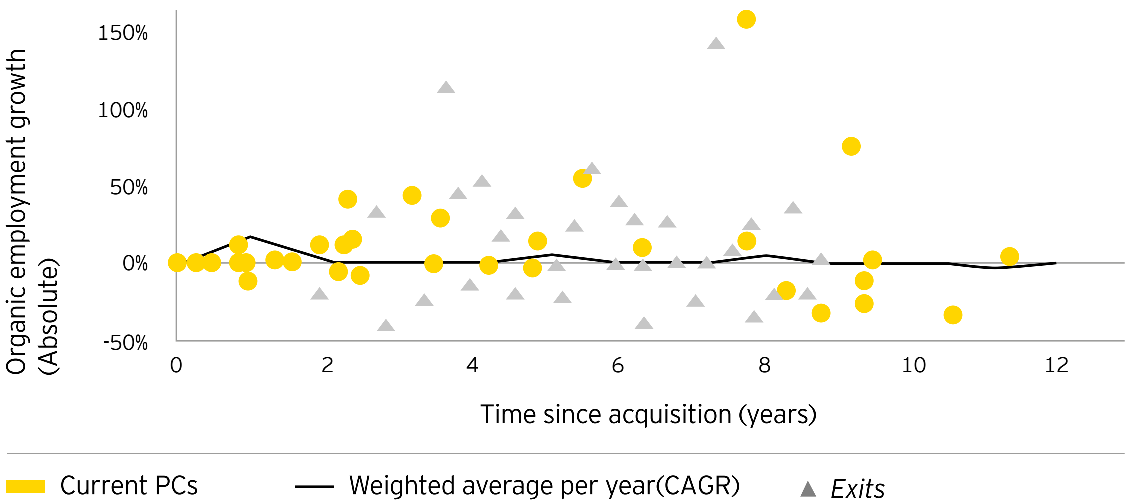


- In addition to analysing the long term trend in organic employment at the portfolio companies, the year-on-year growth rates have been calculated, and compared to benchmarks.
- The year-on-year organic employment growth rates have been more positive than the long term result in both 2014 and 2015, well above the long term trend of 1.3%. This is also reflected in the private sector benchmark data, with the portfolio companies following similar growth rates over these two years.
- As noted in prior years' reports, the reduction in employment in the portfolio companies in 2009 was less than in the UK private sector as a whole, albeit recovery in 2010 was slower. The decline in organic employment growth in 2013 was due to actions taking place in a small number of larger portfolio companies.

Do portfolio companies create jobs?

There is a wide range of growth and decline in organic employment at the individual company level – reflecting many factors. The overall PE effect is measured by the aggregate result.

Organic employment growth by portfolio company over time



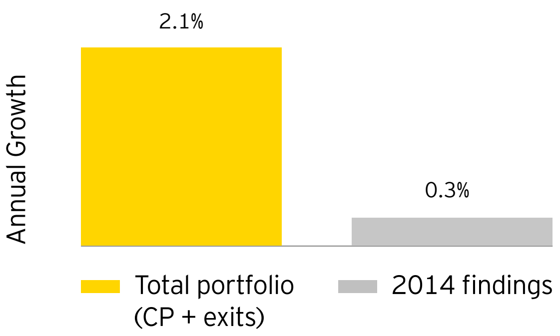
- At the individual portfolio company level, there is a wide range of outcomes on organic employment growth. Some portfolio companies show high levels of employment growth, whilst others show high levels of decline in employment. This range of individual company outcomes reflects many factors including market conditions, expansion or reduction in capacity, and focus on growth or productivity.
- The aggregated effect (the correct way to assess the effect of PE ownership on the performance of the portfolio companies) is net growth in organic employment.

1. Chart excludes 3 outliers with employment growth >200%.
2. Absolute employment growth measures as change in employment from time of investment to exit / latest date, divided by employment at time of investment.

How is employee compensation affected by PE ownership?

Average employment cost per head has grown under PE ownership by 2.1% per annum.

Growth in average employment cost per head



- There is no easy, single measure of like-for-like change in employee compensation in large companies, due to changes in the composition of companies, numbers of employees at differing pay levels and terms, taxes, company and individual performance, as well as annual base pay awards.

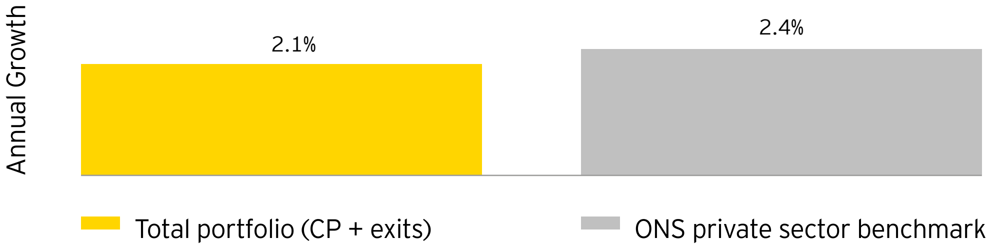
- We have analysed average employment cost per head as the best proxy for employee compensation. On this measure the portfolio companies have grown by 2.1% per annum under the entire period of Private Equity ownership, an increase on the 0.3% reported in last year's report. Part of the increase in the latest year may be explained by increased employment taxes and levies that are included in this measure of compensation cost per head. See also note 1.

1. Change between 2014 and 2015 is in part due to a change in methodology. Adjusted figures for 2014 would show growth in employment cost at 1.2%.

How is employee compensation affected by PE ownership?

Employee compensation growth under PE ownership is slightly behind the UK private sector benchmark, at 2.1% versus 2.4% annual growth.

Growth in employment cost per head

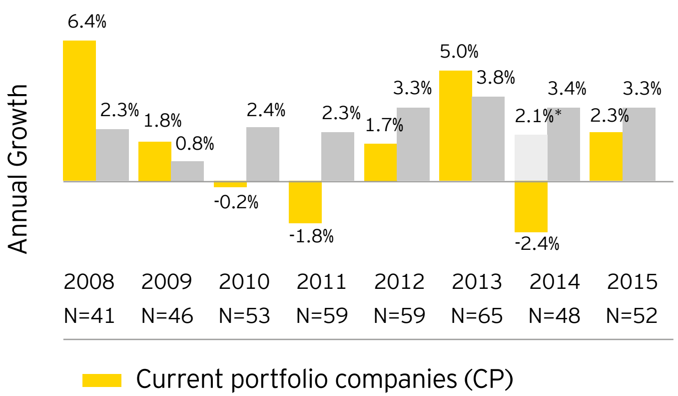


- A stable pattern of employment cost growth in the UK private sector has resulted in an overall growth at 2.4%, slightly ahead of the overall growth for the portfolio companies at 2.1%, where the growth has been more variable.

How is employee compensation affected by PE ownership?

Year-on-year growth in average employment cost per head was 2.3% in 2015, above the long-term trend but behind the UK private sector benchmark of 3.3%.

Year-on-year average employment cost per head growth



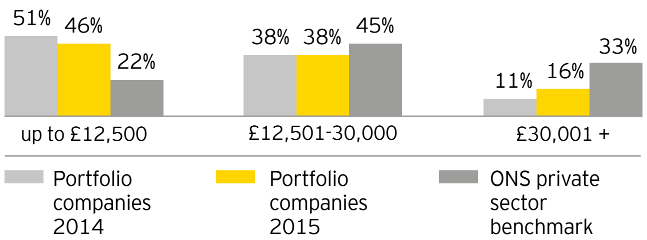
- The year-on-year growth in average employment cost per head for the portfolio companies is variable, particularly when compared to the stable pattern of average compensation increases in the UK private sector as a whole since the downturn in 2009.
- In 2015, average employment cost per head in the portfolio companies grew, but was behind the private sector by 1.0 percentage point. In previous years, however, growth has been much more variable.
- In 2014, the growth rate for the portfolio companies was negative 2.4%, compared with a private sector benchmark of 3.4%. There were two outliers that affected the result for PE companies, due mostly to change in mix of workforce rather than like-for-like changes. The chart shows the effect of removing these two outliers, leading to a revised figure of growth of 2.1% in that year.
- In 2013, the average employment cost in the portfolio companies grew faster than the private sector benchmark, whilst in the prior three years growth in the portfolio companies was slower than the benchmark, and negative in 2010 and 2011.

1. *2014 denotes y-o-y % growth excluding two outliers

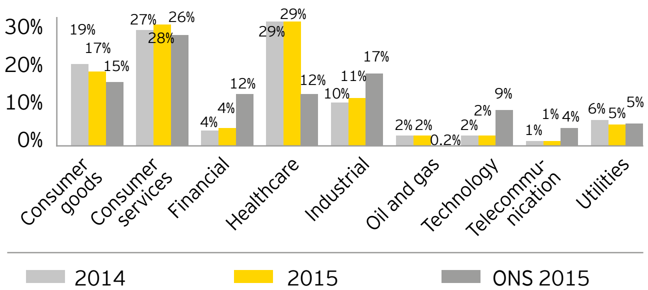
How is employee compensation affected by PE ownership?

Almost half of the jobs in the portfolio companies are for part time work with annual compensation less than £12,500, over double the proportion of the UK private sector. This is explained by a sector focus on consumer services and healthcare where there is a higher mix of part time work.

Percentage of Portfolio Company UK jobs by annual compensation band



Percentage of Portfolio Company UK jobs by sector

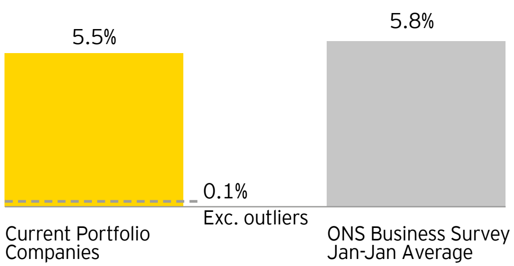


- Data on employment by annual compensation has been required from the portfolio companies since 2014 – in order to further understand employment trends and practices.
- The portfolio companies have a high mix of part time jobs earning less than £12,500 per annum, which reduced slightly in 2015 to represent 46% of total jobs. This remained well above the UK private sector as a whole where 22% of jobs are in this compensation range.
- One reason for the large number of part time jobs in the portfolio companies is the sector mix, with the portfolio companies over-represented in consumer services (e.g., restaurants) and healthcare (e.g., care homes) where part time working is significant. 57% of jobs in the portfolio companies are in these two sectors, versus 38% in the UK private sector.
- Excluding these two sectors from the portfolio company dataset, the salary band distribution shifts significantly to only 20% of jobs in the lowest salary band, 50% in the middle and 30% in the highest band – much closer to the UK private sector benchmark.

How is employee compensation affected by PE ownership?

5.5% of jobs in the portfolio companies are on zero-hours contracts, slightly lower than the economy-wide benchmark of 5.8%; when the impact of one sector is removed, this falls to 0.1%.

Percentage of UK jobs under zero-hours contracts, 2015

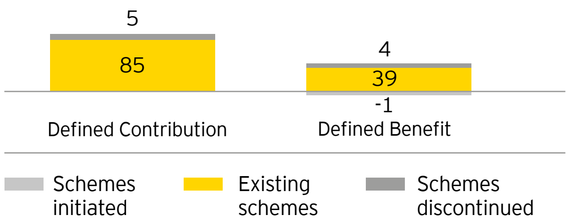


- In addition to data on employment by compensation band, since 2014 the portfolio companies have disclosed the number of jobs on zero-hour contracts.
- Across 53 portfolio companies in 2015, 5.5% of UK jobs were on zero-hours contracts. This is slightly below the national average based on data from ONS which shows that the proportion of all UK employees on zero-hours contracts is 5.8%.
- Within the portfolio companies, there is a significant concentration of use of zero-hours contracts, with five companies active in the healthcare sector each having a significant proportion of their employees on zero-hours contracts. It is understood that this form of employment is more common in the private healthcare sector. Excluding these five companies, the percentage of portfolio company employees on zero-hours contracts falls to 0.1%, which is well below the rate for the UK as a whole.

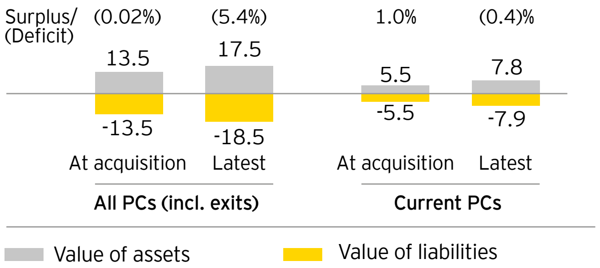
How is employee compensation affected by PE ownership?

There have been few changes to existing company defined benefit pension schemes under PE ownership.

Changes to pensions schemes under PE ownership (PCs and Exits)



Defined benefit pension schemes: liabilities / assets over time (£bn)

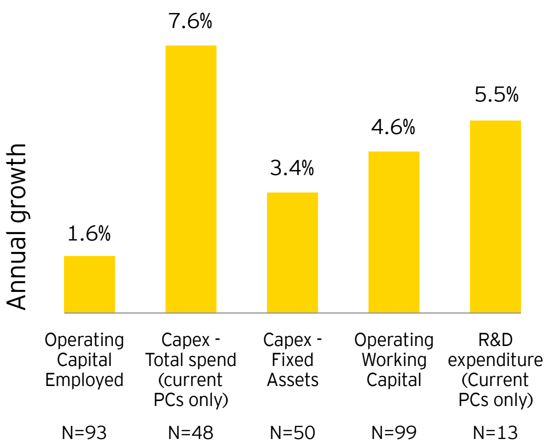


- Another element of employee compensation is pensions. The Pensions Regulator is responsible for reviewing pension arrangements including at the time of change in ownership. To date, 7 of the 40 portfolio companies where a defined benefits (DB) scheme was in place prior to acquisition, have sought approval from the regulator at the time of their investment.
- Under private equity ownership, there have been few changes to existing company DB pension schemes. In addition to the cessation of one DB pension scheme, six DB schemes were closed to accruals for existing members, and two for new members.
- While the assets of defined benefit pension schemes have grown under the period of private equity ownership, liabilities have grown faster resulting in an increase in the accounting deficit, i.e., liabilities in excess of assets.
- For the current portfolio companies, this effect is less pronounced where the pensions accounting surplus of 1% at the time of acquisition has turned into a deficit of (0.4)% at latest date.

Do portfolio companies increase or decrease investment?

Investment at the portfolio companies has grown by 1.6% to 7.6% per annum across a number of measures.

Growth in investments since acquisition

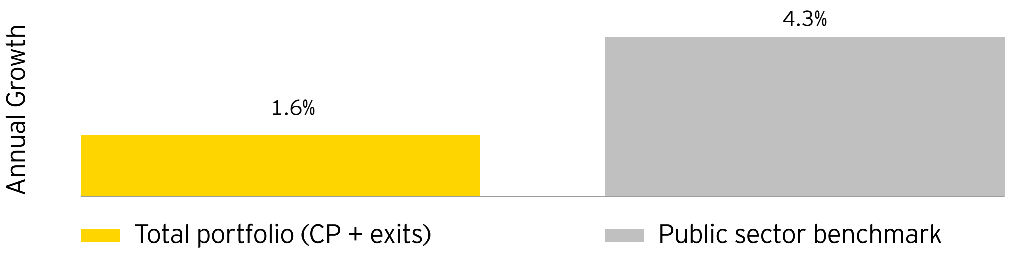


- There has been growth in several measures of investment at the portfolio companies whilst under private equity ownership.
- Operating capital employed comprises tangible fixed assets (property, plant and equipment) and operating working capital (stock, trade debtors and creditors).
- The aggregate growth rate of 1.6% comprises organic growth (80% of the total) and the net effect of bolt-on acquisitions less partial disposals (20% of the total).
- Total capital expenditure has grown by 7.6%. This includes investment in brands, intellectual property and other intangible assets, some of which relates to bolt-on acquisitions. The tangible fixed asset capital expenditure relates to investment in property, plant and equipment, and has grown at 3.4%.
- In aggregate, operating working capital has grown by 4.6% per annum.
- 13 of the current portfolio companies quantify investments in R&D, several of those are in the industrials and technology sectors. For this group, total R&D expenditure grew by 5.5% per annum under private equity ownership.

Do portfolio companies increase or decrease investment?

The portfolio companies have grown operating capital employed at a slower rate than public company benchmarks, at 1.6% per annum versus 4.3% per annum.

Growth in operating capital employed since acquisition

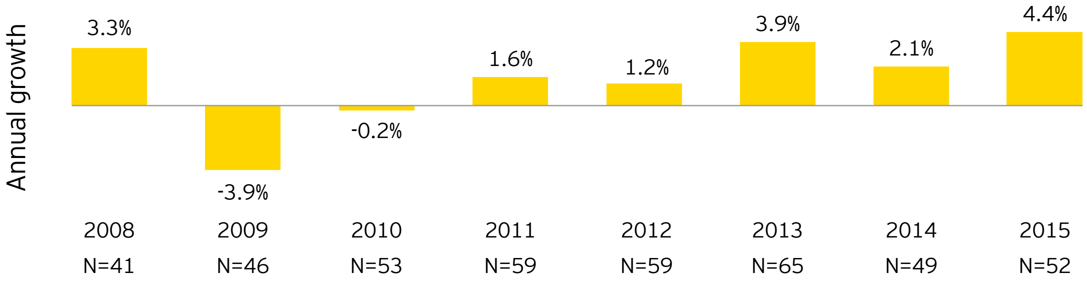


- The portfolio companies, in aggregate, have grown operating capital employed by 1.6% per annum during the entire period of Private Equity ownership. In comparison, the public company benchmark shows higher growth in operating capital employed of4.3% per annum.

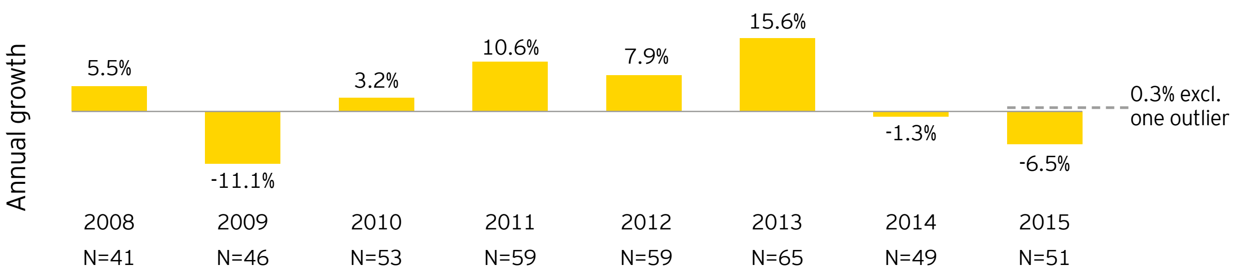
Do portfolio companies increase or decrease investment?

Annual growth in key measures of investment at the portfolio companies is variable, ranging from -3.9% to 4.4% annual growth in operating capital employed, albeit positive in all years except 2009-10.

Year-on-year growth in operating capital employed



Year-on-year growth in capital expenditure on tangible assets

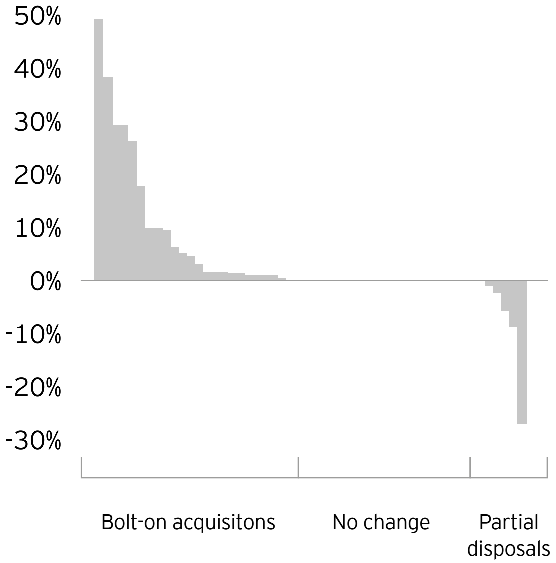


- The year-on-year growth in operating capital employed at the portfolio companies shows variation, in part linked to the overall economic landscape.
- In 2009-10, when the UK economy was most fragile, the portfolio companies tightened their control of operating capital employed, e.g., by reducing capital expenditure (see below).
- From 2011, the Portfolio Companies have steadily increased operating capital employed, in 2011-13 by boosting capital expenditure and in 2014-15 from growth in working capital.
- Overall capital expenditure on tangible assets has fluctuated quite significantly year-on-year.
- Due to the size of the portfolio the overall figures can be skewed by a significant increase or reduction in capital expenditure by one company. For example, by excluding one company for which capital expenditure dropped to a marginal figure in 2015, the overall growth shifts from -6.5% to a 0.3%.

Do portfolio companies increase or decrease investment?

47% of the current portfolio companies have made net bolt-on acquisitions while 9% have made net partial disposals, showing investment in bolt-on acquisitions ahead of partial disposals.

Level of acquisition and disposals, revenue impact



- In addition to investment in existing businesses, there can be investment in bolt-on acquisitions, as well as release of funds through partial disposals.
- The data provided by the portfolio companies enables the effects of bolt-on acquisitions and partial disposals to be measured in operating capital employed. However, the total of tangible fixed assets and working capital does not provide a consistent view of the actual cash invested or realised, as goodwill, which is not captured as part of this dataset, constitutes a significant part of an individual investment, particularly in service related industries.
- The chart shows one measure to calibrate the relative significance of bolt-on acquisitions and partial disposals, being revenue growth or decline relative to the first year amount. On a net basis, 25 of the 53 portfolio companies (or 47%) have, to date, grown revenue by investments in bolt-on acquisitions, while 5 portfolio companies (9%) have reduced revenue by partial disposals. As already commented, the overall result is more investment in bolt-on acquisitions than release of funds from partial disposals. 23 portfolio companies (43%) have had no M&A activity under their current private equity owners to date.
- There are relatively few portfolio companies where bolt-on acquisitions or partial disposals are material in size relative to the original portfolio company. In the current population, 5 of 53 portfolio companies have made acquisitions that have increased revenue by more than 25%, and only one portfolio company has made a disposal of more than 25%.

Do portfolio companies increase or decrease investment?

PE investors, in aggregate, have used free cashflow and additional third party debt to increase investment in the current portfolio companies by £22.8 billion, increasing the leverage rates from 6.2x to 6.8x at latest date.

Movements in net debt, acquisition to latest date (current PCs)

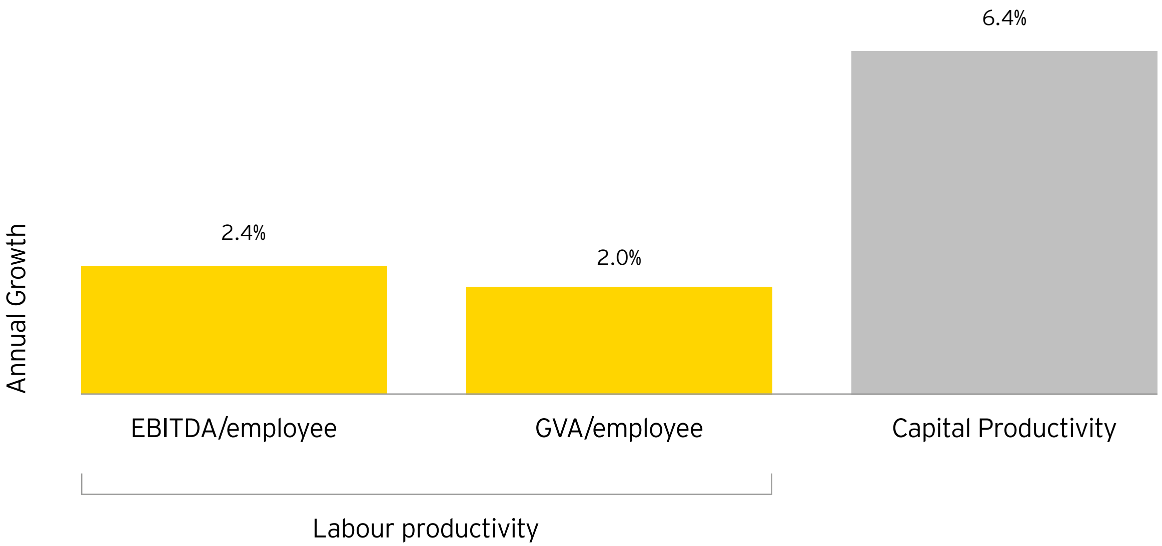
Net debt (£bn)	Acquisition to latest date	Net debt / EBITDA
Opening net debt	35.1	6.2
Debt-funded acquisitions (net)	22.8	
Net funds to equity investors	4.6	
Operating cash flow post investing and funding charges	(12.5)	
Change in net debt	14.9	
Net debt at latest date	50.0	6.8

- Analysing the cashflows of the portfolio companies allows scrutiny of the sources and uses of funds during the period of Private Equity ownership.
- Since acquisition, the current portfolio companies have generated £12.5bn of free cashflow, i.e., after most investing, financing and tax payments. These funds could have been returned to investors by paying dividends, or by paying off third party debt. While there have been some payments to equity investors, £4.6bn, this has been more than offset by an aggregate £22.8bn investment in bolt-on acquisitions.
- To fund this investment in the portfolio companies, third party debt has increased, by a net £14.9bn.
- As net debt has grown faster than profit (or EBITDA), the leverage ratio of net debt to EBITDA has increased.

How does productivity change under PE ownership?

Labour and capital productivity have grown under PE ownership, by 2.0-2.4% and 6.4% per annum, respectively.

Growth in labour productivity and capital productivity since acquisition



Economic impact is a function of both changes in productivity and growth in resources.

To assess the performance of the portfolio companies on labour productivity, two measures have been analysed:

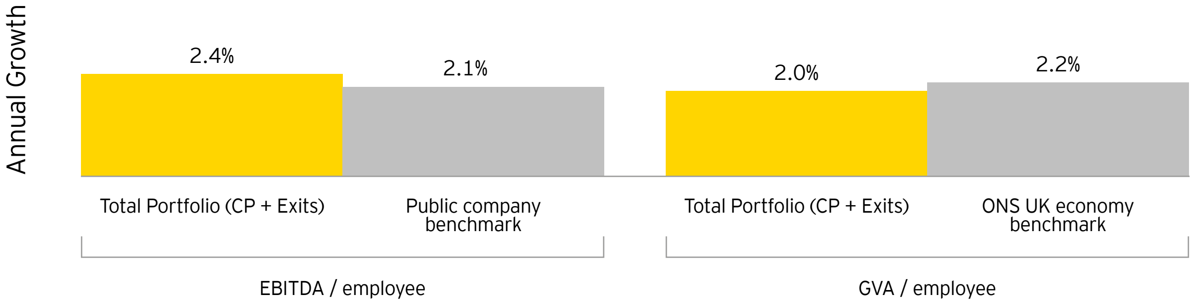
- Profit (or EBITDA) per employee, which can be benchmarked to public companies. On this measure, the portfolio companies have grown labour productivity by 2.4% per annum.
- Gross Value Added (GVA) per employee, which is preferred by economists and can be benchmarked to the UK private sector. On this measure, the portfolio companies have grown labour productivity by 2.0% per annum.

Capital productivity is measured as revenue over operating capital employed. The portfolio companies have grown capital productivity by 6.4% per annum.

How does productivity change under PE ownership?

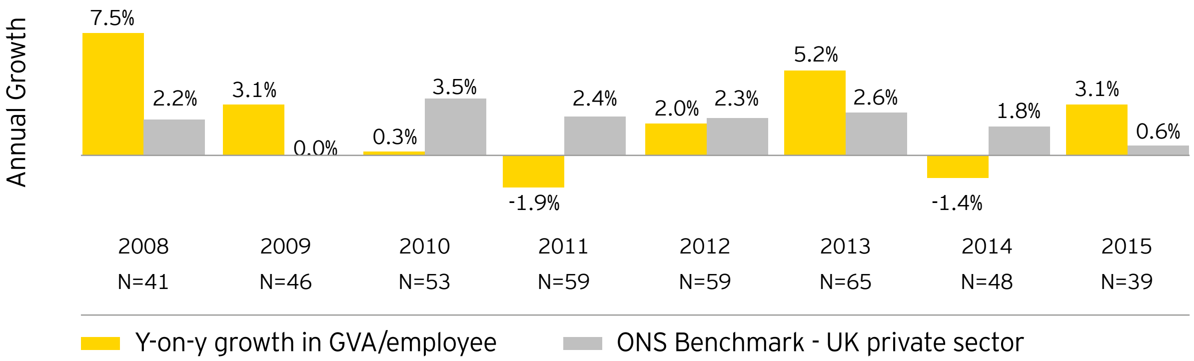
Annual growth in labour productivity in the portfolio companies at between 2.0% and 2.4% is on a par with public company and economy-wide benchmarks.

Growth in Profit per employee and Gross Value Added / employee since acquisition



- On a profit per head metric, the portfolio companies have seen comparable growth in labour productivity to the public company benchmark.
- Equally, the GVA per employee has grown at similar rates to the UK economy.

Year-on-year growth in GVA / employee, PCs vs private sector benchmark

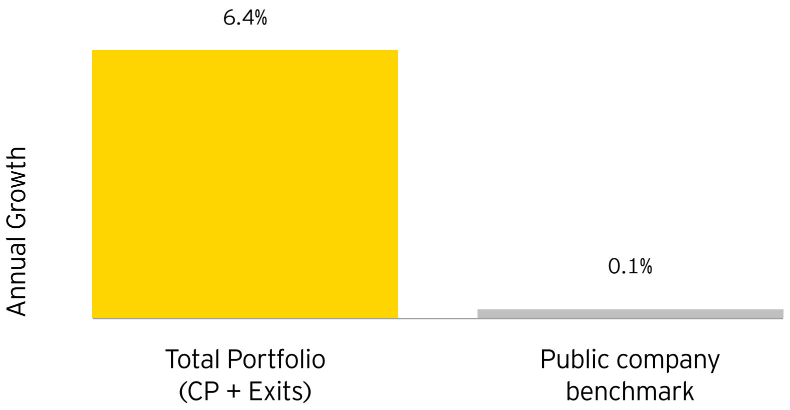


- Productivity growth in the portfolio companies was strong in 2015, and well ahead of the private sector benchmark, in contrast to 2011 and 2014 when on both counts the reverse was true.
- As with other measures in this report, the year-on-year growth in GVA / employee varies in the portfolio companies, versus a more consistent trend in the UK private sector benchmark.

How does productivity change under PE ownership?

Capital productivity growth in the portfolio companies exceeds public company benchmarks, by 6.4% versus 0.1% growth per annum.

Growth in capital productivity since acquisition

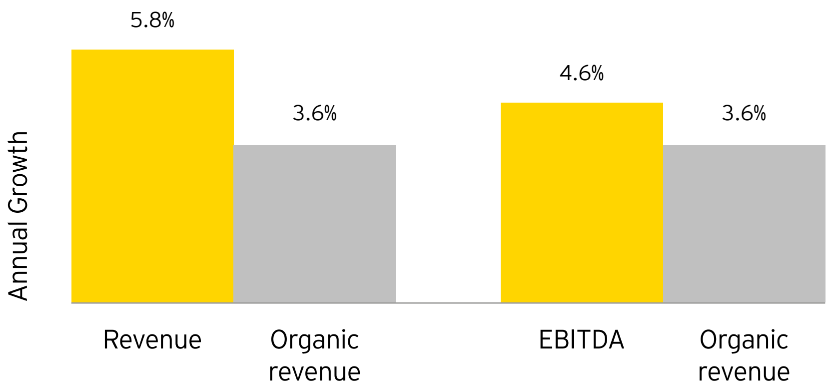


- On a profit per head metric, the portfolio companies have seen comparable growth in labour productivity to the public company benchmark.
- Equally, the GVA per employee has grown at similar rates to the UK economy.
- Productivity growth in the portfolio companies was strong in 2015, and well ahead of the private sector benchmark, in contrast to 2011 and 2014 when on both counts the reverse was true.
- As with other measures in this report, the year-on-year growth in GVA / employee varies in the portfolio companies, versus a more consistent trend in the UK private sector benchmark.

Do private equity owned companies grow?

The portfolio companies have grown reported revenue at 5.8% per annum and profit at 4.6% per annum; organic revenue and profit growth are both 3.6% per annum.

Reported and organic revenue and EBITDA growth since acquisition

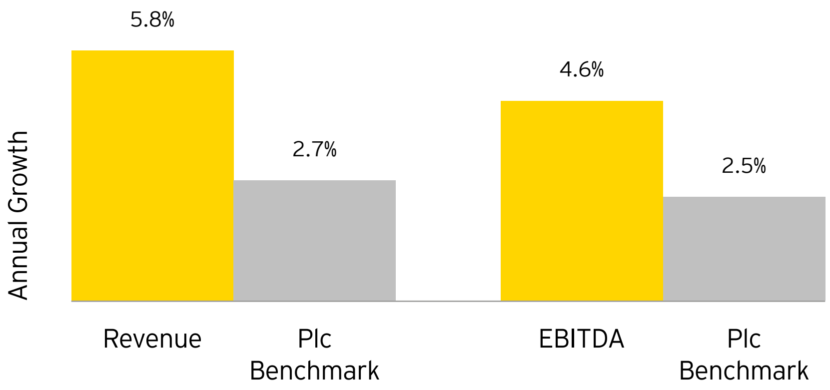


- Reported revenue and profit (EBITDA) growth over the entire period of private ownership to date average 5.8% for revenue and 4.6% for profit.
- 62% of revenue growth and 78% of profit growth comes from underlying organic growth, with the rest due to the net effect of bolt-on acquisitions.

Do private equity owned companies grow?

Revenue and profit growth at the portfolio companies is ahead of public company benchmarks by 3.1 and 2.1 percentage points per annum, respectively.

Revenue and EBITDA growth since acquisition

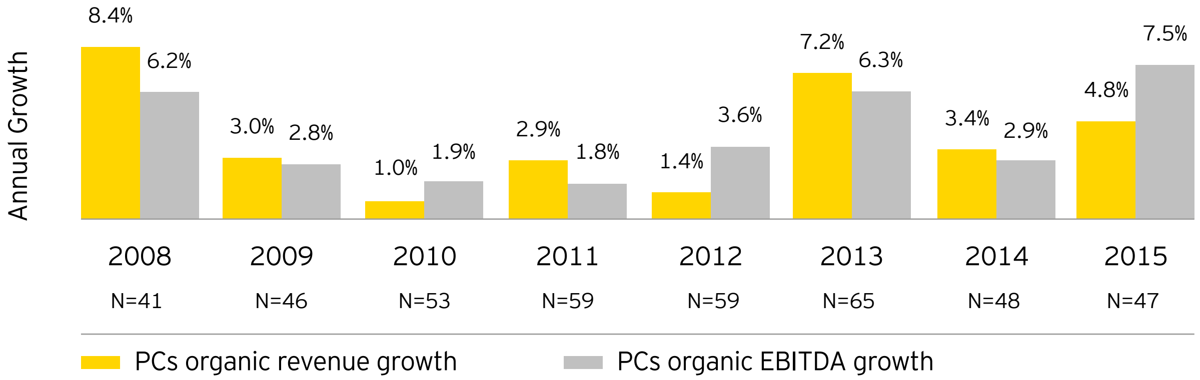


- Reported revenue growth of the portfolio companies averages 5.8% per annum since acquisition, explained by more growth in capital productivity than growth in operating capital employed, including acquisitions.
- These factors also explain the faster revenue growth than the public company benchmark of 2.7%.
- In terms of reported EBITDA growth, for the portfolio companies this averages 4.6% per annum, also faster than the public company benchmark of 2.5% per annum.

Do private equity owned companies grow?

The portfolio companies have grown organic revenue and profit in every year of PE ownership, with faster growth in 2015 versus 2014, at 4.8% and 7.5%, respectively.

Year-on-year organic revenue and EBITDA growth

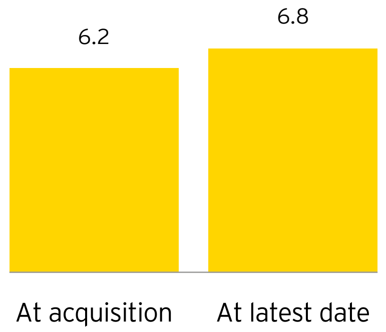


- 2015 was one of the fastest years for organic growth, with almost 5% revenue and 7.5% profit growth.
- The year-on-year growth in organic revenue and EBITDA shows a variable pattern, reflecting the broader economy trend, company specific factors and change in portfolio sector mix.

What are the levels of financial leverage in the portfolio companies?

The current portfolio companies have an average leverage ratio of 6.8x net debt to EBITDA, up from 6.2x at the time of acquisition.

Opening and Latest Net Debt to EBITDA ratio, current portfolio companies

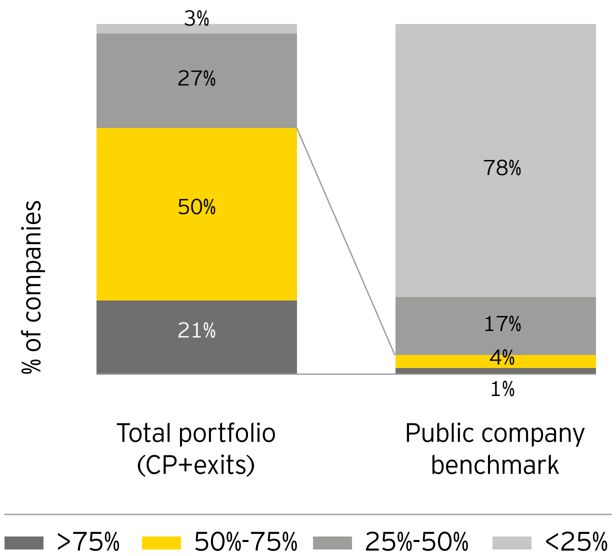


- A common measure of financial leverage is the ratio of net debt to EBITDA.
- For the current portfolio companies, the leverage ratio averaged 6.2x at the time of initial investment by the current private equity owners. As previously noted, there has been investment in the portfolio companies, funded by cashflow and additional third party debt, meaning that net debt to EBITDA at the latest date has grown to 6.8x.

What are the levels of financial leverage in the portfolio companies?

Portfolio companies have much higher levels of financial leverage than public companies, 6.5x net debt to EBITDA versus 2.4x, respectively.

Comparison of leverage ratios (net debt/ (net debt + equity value)

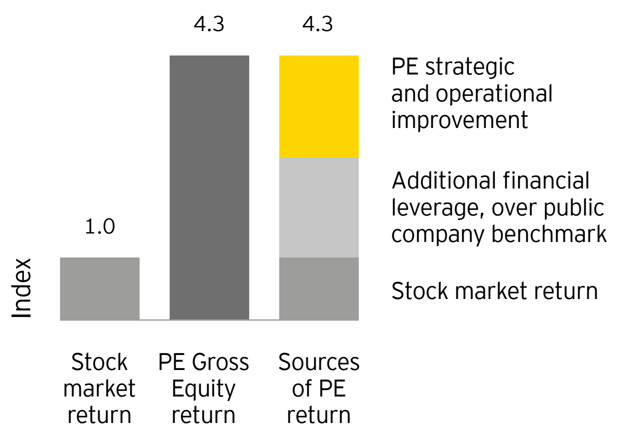


- One distinctive feature of the Private Equity business model is that it typically uses greater financial leverage than most public companies. More debt and less equity at the time of investment increases the effect of change in enterprise value at exit on equity return, both up and down.
- On the metric of net debt to EBITDA, the portfolio companies (PC+exits) averaged 6.5x, compared to a public company benchmark of 2.4x, showing much higher levels of financial leverage in the portfolio companies.
- Using a market value-based measure of financial leverage, i.e., net debt / enterprise value, allows a visual comparison of the differences. While almost three quarters of the portfolio companies have leverage ratios of more than 50%, this is true for only 5% of PLCs, where three quarters of companies have leverage ratios of below 25%.
- It is noted that, unlike public companies, increased financial leverage is not expected to be a long term feature of the portfolio companies, i.e., post the investment period of the private equity investor the financial leverage may change – reflecting the capital structure of its new owners.

How do private equity investors generate returns from their investments in the portfolio companies?

The equity return from portfolio company exits are 4.3x public company benchmark; half of this is due to PE strategic and operational improvement and the other half from additional financial leverage.

Equity Returns and Sources of Return, portfolio company exits 2005-15



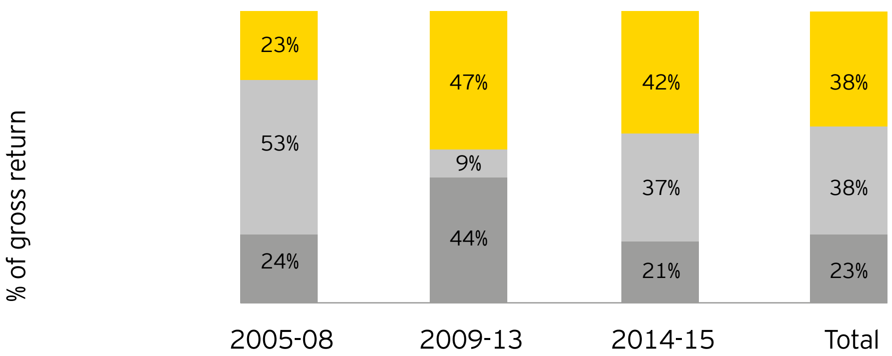
- The portfolio companies owned and exited by their PE owners achieved an aggregate gross equity investment return significantly in excess of benchmarked public companies, by a factor of 4.3x, i.e., the same equity invested in public companies matched by sector and over the same timeframe as each portfolio company investment.
- For public and private equity, this is a measure of gross return so before the fees and charges incurred by investors.
- The source of the private equity return over and above public company return comprises the amount attributable to additional financial leverage and private equity strategic and operational improvement.
- While additional leverage generates a material contribution to the equity return, there is an equal amount of the investment return that relates to the strategic and operational improvement of the portfolio companies during private equity ownership, i.e., over and above that achieved by the public companies in the same sector and timeframe.

1. Weighted average

How do private equity investors generate returns from their investments in the portfolio companies?

While the results vary over time, the components of the gross return from PE strategic and operational improvement and additional financial leverage are more significant than the underlying public stock market return.

Returns attribution, Portfolio Company exits 2005-15



	2005-08	2009-13	2014-15	Total
N=	13	23	28	64
Ave. hold time (yrs)	4.1	5.9	6.6	5.8

PE strategic & operational improvement | Stock market return 2 | Stock market return

- Analysing the sources of private equity returns over time, here expressed by year of exit of the portfolio companies, shows some variation but also a consistent element of PE strategic and operational improvement.
- The benefit of additional leverage has reduced in the more recent exits, in part reflecting longer hold periods.

1. Weighted average

4

Basis of findings

Basis of findings

Q&A

How is the portfolio company data aggregated?

The findings in this report are aggregated across all portfolio company data points, to give insights into the systematic effects of Private Equity ownership of the portfolio companies.

Is the profile of the portfolio companies skewed by sector or size?

The portfolio companies are skewed towards the consumer services and healthcare sectors, accounting for 57% of employment versus 38% in the UK private sector as a whole; the portfolio companies are smaller than the public company benchmark used in this report.

How are the benchmarks derived and calculated?

The benchmarks used in this report are compiled from published information, then matched by sector and timeframe to individual portfolio companies, and aggregated using the same methodology as aggregating portfolio company results.

What is the returns attribution methodology?

The returns attribution methodology separates out the effects of additional leverage and public stock market performance to test for evidence of outperformance by Private Equity investments in the portfolio companies.

How is the portfolio company data aggregated?

The findings in this report are aggregated across all portfolio company data points, to give insights into the systematic effects of Private Equity ownership of the portfolio companies.

- The most accurate way of assessing the effect of Private Equity ownership on the portfolio companies is to aggregate all of the data to present a single, overall result. Given the independent control of portfolio company selection criteria, the size of the population, and the high degree of compliance, these aggregated findings provide insight into several key questions asked about the effect of Private Equity ownership on large, UK businesses.

- Aggregating the data across all of the portfolio company data points avoids the bias that originates from selective use of either the best or the worst on any measure — which may be correct individually but is not the right basis of a generalised view on the effect of Private Equity ownership.

- Most of the findings presented in this report are a measure of 'CP+exits', i.e., the current portfolio companies and portfolio companies owned and exited over the period of this study, or 'year-on-year', i.e., this year's data compared with the prior year's data for the same group of portfolio companies.

- Many growth measures, including revenue, profit, organic employment, capital expenditure and cash flow, require full year comparison to full prior year to avoid the error inherent in annualising partial year figures. This means that there is a delay from the time of acquisition by Private Equity investors to when these year-on-year results can be incorporated in the analysis.

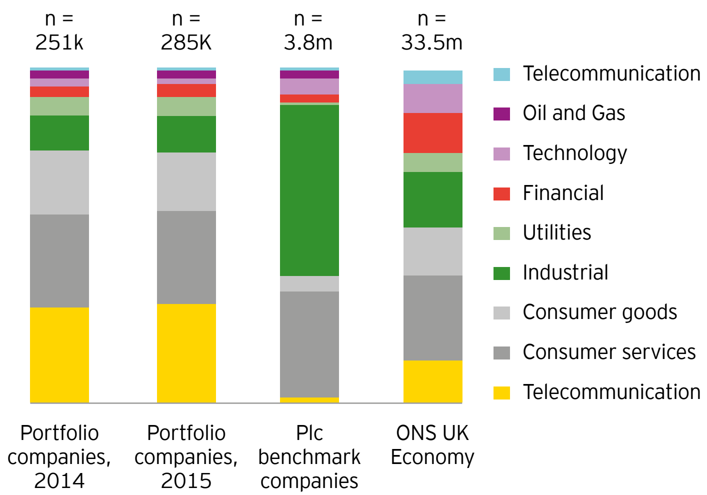
- In all findings, the figures presented include all the data points from the portfolio companies, except in specific situations where it is not possible to include individual companies, e.g., not provided in data template, a negative starting figure on growth rates, where this is noted on the chart - In some measures in some years, the calculated average is affected by one or two of the largest portfolio companies. In a few instances, this is deemed to distort the overall result, in which case the actual result is presented unchanged, and a separate bar or line added to show the result if the outlier(s) are excluded.

- Average growth rates, a frequent performance measure in this report, are weighted averages in order to best measure economic impact, e.g., employment growth rates are weighted on number of employees at acquisition. If numerical averages are used, this is noted - It should be noted that for the 'CP+exits' measure, there is a calculation of average growth rates over different time periods across the portfolio companies which creates some inherent inaccuracy. To avoid any significant distortion, the calculated average growth rate is tested against the simple check of percentage total change in factor / average length of holding period.

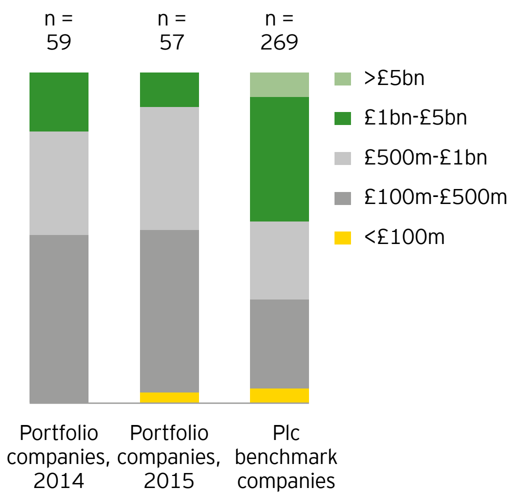
Is the profile of the portfolio companies skewed by sector or size?

The portfolio companies are skewed towards the consumer services and healthcare sectors, accounting for 57% of employment versus 38% in the UK private sector as a whole; the portfolio companies are smaller than the public company benchmark used in this report.

Industry sector mix by employment: portfolio companies, Plc benchmark companies and UK economy private sector



Company size mix by number of companies: portfolio companies and Plc benchmark companies



- The portfolio companies are active across a wide range of industry sectors, the mix of which has changed as the composition of the portfolio companies evolves.
- Of the current portfolio companies, 57% of employment is in the consumer services and healthcare sectors, compared to 38% in the UK economy. Conversely, portfolio company employment in the industrials sector is 8% of the total, compared to 17% for the UK economy as a whole.
- The Plc benchmark group has been selected on size set at the largest and smallest deal sizes in the entire portfolio company group (CP+exits) from all companies listed on the London market.
- Within this range, the population of portfolio companies are smaller in terms of revenue size, with a large share of companies below £500m in annual revenues, and relatively few above £1bn.

How are the benchmarks derived and calculated?

The benchmarks used in this report are compiled from published information, then matched by sector and timeframe to individual portfolio companies, and aggregated using the same methodology as aggregating portfolio company results.

Sector	Current portfolio companies	PLCs in sector benchmark
Consumer services	15	69
Healthcare	5	14
Utilities	6	8
Consumer goods	7	18
Industrial	8	87
Technology	4	36
Financial	5	20
Oil & gas	1	14
Tele-communications	2	3
Total	53	269

Public company benchmark

- There are no readily available benchmarks on company performance to compare to the portfolio companies. Public company benchmarks are prepared as follows:
  - All 631 primary listed companies on the London Stock Exchange (LSE) at 31 December 2015.
  - Excluded on basis of no sector overlap: 292 in Basic Materials and Equity Investment Trusts, OEICs and other financial or non-comparable sector entities (e.g., Real Estate Investment & Services, Real Estate Investment Trusts, Banks, Equity and Non-Equity Investment Instruments), 40 companies with market capitalisation <£210m, the size threshold for take-privates in the PERG criteria, 30 companies with market capitalisation >£11bn (the market capitalisation of the largest portfolio company over the period of this study).
  - This results in 269 public companies in the benchmark group, with a sector composition as shown in the table.
- Public company data is sourced from Capital IQ and aggregated at the sector level to produce sector benchmarks for each measure over time. Sector benchmarks are matched to individual portfolio companies, by sector and also over the same timeframe. The overall public company benchmark result is then aggregated in the same way as for the portfolio companies, e.g., using the same weighting factors.

UK Private Sector benchmark

For the UK private sector benchmarks, data is sourced from ONS reports. Time periods are matched for each portfolio company, and then the result is aggregated – again in the same way as for the portfolio companies, e.g., using the same weighting factors.

What is the returns attribution methodology?

The returns attribution methodology separates out the effects of additional leverage and public stock market performance to test for evidence of outperformance by Private Equity investments in the portfolio companies.

- One of the most common measures of investment return used by Private Equity investors is equity multiple, i.e., equity realised divided by equity invested, before all fund level fees and charges. This data, not typically disclosed, is provided on the portfolio company data templates.
- To analyse the sources of any investment return, the 'returns attribution' calculation analyses the gross equity multiple and attributes any equity gain (or loss) into three components:
  - Additional leverage: This is the effect of equity multiple of the additional leverage PE firms place on a company above the average public company sector levels. To calculate this effect, the capital structure of each investment is adjusted to match the average leverage levels of public company sector benchmarks — typically this reduces the amount of debt, and increases the amount of equity and therefore reduces the equity return. The adjusted capital structure also takes into account interest savings over the holding period as well as the changes in net debt that took place during ownership; any leveraged dividends received by equity investors are moved to the date of exit, and the exit capital structure adjusted for dividends. The difference between original investment equity multiple and the adjusted equity multiple is the effect of additional leverage.
  - Market returns: This is the effect of the equity multiple of underlying gain in the sector, that an investor could have achieved by investing in public stock markets. This effect is calculated by determining the Total Shareholder Return (TSR) earned in the public company benchmark sector over the same timeframe as the Private Equity investment, which captures sector earnings growth, valuation multiple changes and dividend payments. The public stock market return TSR is converted into an equivalent equity multiple figure and then compared to the investment return after the adjustment for additional leverage, i.e., both have the same capital structure.
  - PE strategic and operational improvement: This is the component of the equity multiple that is not explained by additional leverage, or public stock market returns, so it captures all the incremental effects of PE ownership vs. public company benchmark performance, i.e., in earnings growth, valuation multiple change and dividends. The component of the equity multiple for PE strategic and operational improvement is calculated by subtracting the market return from the equity multiple adjusted for additional leverage.
- Consistent with other analyses in this report, the benchmarks and calculations are applied at the individual portfolio company level, and then aggregated to produce the overall findings presented in this report.
- It should be noted that there is no standard methodology for the returns attribution calculation. The methodology in this report has been discussed with the PERG, and the Global Capital Committee of the BVCA, and their comments incorporated.

EY | Assurance | Tax | Transactions | Advisory

About EY
EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

Ernst & Young LLP

The UK firm Ernst & Young LLP is a limited liability partnership registered in England and Wales with registered number OC300001 and is a member firm of Ernst & Young Global Limited.

Ernst & Young LLP, 1 More London Place, London, SE1 2AF.

EYG no: 04233-164GBL
ED None

In line with EY's commitment to minimise its impact on the environment, this document has been printed on paper with a high recycled content.

ey.com/ukv

Contacts

EY

Harry Nicholson
hnicholson@uk.ey.com

Hanne Mork
hmork@uk.ey.com

ey.com/uk

BVCA

Gurpreet Manku
gmanku@bvca.co.uk

Sundip Jadeja
sjadeja@bvca.co.uk

bvca.co.uk