



Luxembourg

# **EIBIS 2016**

EIB Group Survey on Investment and Investment Finance 2016

**Country Overview** 



EIB Group Survey on Investment and Investment Finance Country Overview: Luxembourg © European Investment Bank (EIB), 2016. All rights reserved.

### About the EIB Investment Survey (EIBIS)

The EIB Group Survey on Investment and Investment Finance is a unique, EU-wide, annual survey of 12,500 firms. It collects data on firm characteristics and performance, past investment activities and future plans, sources of finance, financing issues and other challenges that businesses face. Using a stratified sampling methodology, EIBIS is representative across all 28 member States of the EU, as well as for firm size classes (micro to large) and 4 main sectors. It is designed to build a panel of observations to support time series analysis, observations that can also be linked to firm balance sheet and profit and loss data. EIBIS has been developed and is managed by the Economics Department of the EIB, with support to development and implementation by Ipsos MORI. For more information see: http://www.eib.org/eibis.

### About this publication

This Country Overview is one of a series covering each of the 28 EU Member States, plus an EU-wide overview. These are intended to provide an accessible snapshot of the data. For the purpose of these publications, data is weighted by value-added to better reflect the contribution of different firms to economic output. Contact: eibis@eib.org.

#### About the Economics Department of the EIB

The mission of the EIB Economics Department is to provide economic analyses and studies to support the Bank in its operations and in the definition of its positioning, strategy and policy. The Department, a team of 30 economists, is headed by Debora Revoltella, Director of Economics.

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#### Disclaimer

The views expressed in this publication are those of the authors and do not necessarily reflect the position of the EIB.

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Ipsos Public Affairs works closely with national governments, local public services and the not-for-profit sector, as well as international and supranational organizations. Its c.200 research staff in London and Brussels focus on public service and policy issues. Each has expertise in a particular part of the public sector, ensuring we have a detailed understanding of specific sectors and policy challenges. This, combined with our methodological and communications expertise, helps ensure that our research makes a difference for decision makers and communities.





# EIBIS 2016 – COUNTRY OVERVIEW

# Luxembourg

The annual EIB Group Survey on Investment and Investment Finance (EIBIS) is an EU-wide survey of 12 500 firms that gathers quantitative information on investment activities by both SMEs and larger corporates, their financing requirements and the difficulties they face.

As the EU bank, the EIB Group responds to the need to accelerate investment to strengthen job creation and long-term competitiveness and

sustainability across all 28 EU member States. EIBIS helps the EIB to contribute to a policy response that properly addresses the needs of businesses, promoting investment.

This country overview presents selected findings based on telephone interviews with 150 firms in Luxembourg in 2016 (July-October). **Note:** The results are weighted by value-added, reflecting firms' contribution to the economy.

## **Key results**

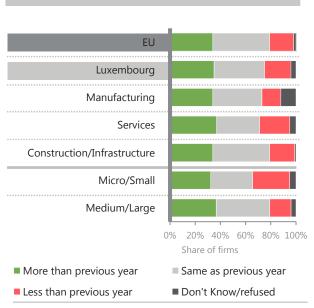
Investment outlook:	<b>Overall positive outlook</b> driven mostly by larger corporates in infrastructure and construction sectors. Smaller firms, and companies operating in manufacturing and service sectors, seem to face a challenging investment environment and, on balance, expect a contraction in investment activity.
Investment activity:	88% of firms invested in the last financial year, however the investment intensity (investment per employee) is below EU-wide levels.
	intensity (investment per employee) is below to-wide levels.
	<b>Overall 13% of firms report having invested too little</b> with significant investment mismatch in the manufacturing sector. Average share of state-of-the-art machinery and equipment is in line with the EU aggregates. Overall firms' share of building stock in Luxembourg that is considered to meet high efficiency standards is 32%, also in line with the average for the EU (40%).
<b>Investment barriers:</b>	Unavailability of staff with right skills and uncertainty about the
	<b>future</b> are perceived to be the main long-term barriers to investment, in line with the EU-wide trends.
External finance:	<b>2% of firms are finance constrained</b> : this is the proportion of firms either dissatisfied with the amount of finance they received, had an application rejected, thought borrowing costs would be too high or were discouraged from applying. This includes only micro and small enterprises who had their applications rejected.
Firm performance:	<b>Firms have higher productivity</b> , except in the manufacturing sector, and productivity levels are varying more within sectors compared to the EU average.



# INVESTMENT DYNAMICS

- The share of firms investing is in line with the EU as a whole, while the intensity of investment (investment per employee) is lower than the average for the EU.
- The share of firms investing stands at 67% among companies in the manufacturing sector, 93% among those in the services sector and 92% in the construction and infrastructure sector.
- Intensity of investment (investment per employee) for micro and small firms is EUR 6,000 and for medium and large firms it is EUR 2,846.

# Investment activity in last financial year compared to previous



**Base:** All firms who invested in the last financial year Q. Overall was this more, less or about the same amount of investment as in the previous year?

### Investment activity in last financial year



**Base:** All firms (excluding don't know/refused responses) \*The blue bars indicate the proportion of firms who have invested in the last financial year.

A firm is considered to have invested if it spent more than EUR 500 per employee on investment activities.

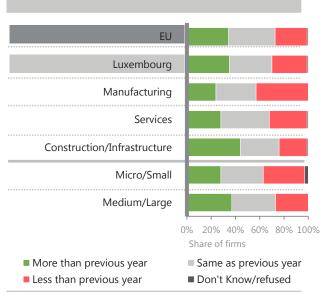
Investment intensity is the median investment per employee of investing firms.

- Compared to 2014, 35% of firms increased their investment activities in 2015, which is similar to the EU average. The net balance suggests investment expansion across all sectors and firm sizes.
- Around one in five firms (21%)
   reduced investment activity in
   2015, with the proportion being
   29% among micro and small
   enterprises and 17% among
   medium and large companies.



- Overall, investment outlook in Luxembourg remains in line with the EU aggregates.
- In net terms, micro and small firms as well as manufacturing and service sectors expect an investment contraction. Firms in the construction and infrastructure sectors expect a net increase in investment on balance.
- The positive investment outlook can be attributed to medium and large firms who on balance expect to invest more than in the last year.

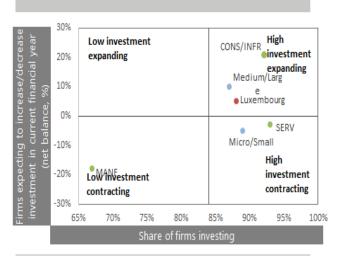
### **Expected investment in current financial** year compared to last one



Base: All firms

Data is derived from two questions: firms who had invested in the last financial year were asked if they expect to invest more, around the same amount or less than last year; firms who had not invested in the last financial year were asked if they had already invested, or expect to invest in the current year

## **Investment cycle**



Base: All firms

Share of firms investing shows the percentage of firms with investment per employee greater than EUR 500.

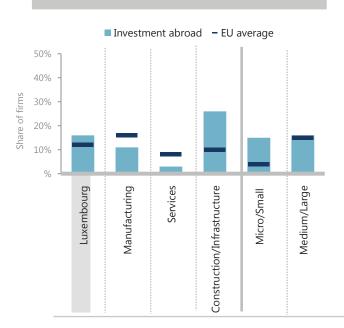
- Luxembourg is in the 'high investment; expanding' quadrant in the investment cycle.
- Micro and small companies, and firms in the service sector still enjoy relatively high levels of investment, but expect a contraction. A contraction is also expected by firms in the manufacturing sector, where the investment activity is already low.



# **INVESTMENT ACTIVITY**

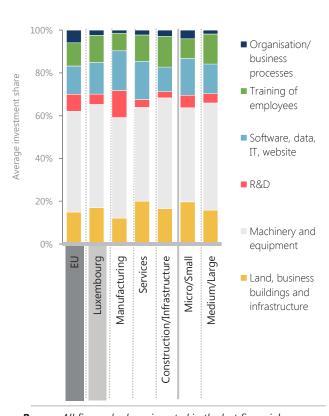
 The overall distribution of activity between the main investment areas of companies in Luxembourg are in line with the EU standards, although minor differences can be spotted.

#### **Investment abroad**



**Base:** All firms who invested in the last financial year Q. In the last financial year, has your company invested in another country?

### **Investment areas**



**Base:** All firms who have invested in the last financial year (excluding don't know/refused responses)

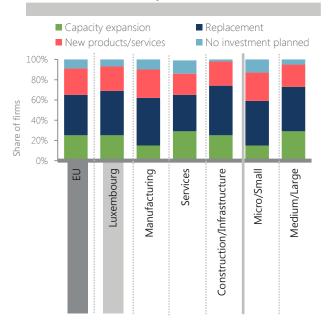
Q. In the last financial year, how much did your business invest in each of the following with the intention of maintaining or increasing your company's future earnings?

- Despite the international character of the Luxemburgish economy, only 16% of companies in Luxembourg invest abroad, which is in line with the EU average of 12%.
- The foreign investments are driven mostly by the construction and infrastructure sectors.



- Firms in Luxembourg on average allocated nearly 60% of their investment as a means to replace existing buildings, machinery, equipment and IT.
- A fifth (20%) of investment was used to expand capacity and 14% of activity went towards engaging in development of new products or services.

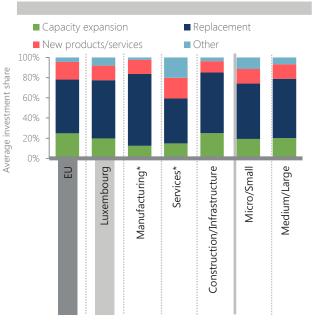
## **Future investment priorities**



**Base:** All firms (excluding don't know/refused responses)

Q. Looking ahead to the next 3 years, which of the following is your investment priority (a) replacing existing buildings, machinery, equipment, IT (b) expanding capacity for existing products/services (c) developing or introducing new products, processes, services?

### Purpose of investment in last financial year



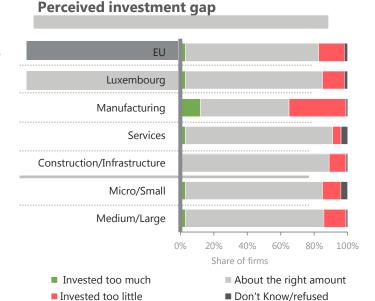
**Base:** All firms who invested in the last financial year (excluding don't know/refused responses)
Q. What proportion of total investment was for (a) replacing existing buildings, machinery, equipment, IT (b) expanding capacity for existing products/services (c) developing or introducing new products, processes, services? \*Caution: very small base size of less than 30

- Looking ahead, 44% of companies in Luxembourg see replacement as their investment priority; this followed by around 25% of firms putting emphasis on capacity expansion and the development of new products, processes and services.
- This pattern is relatively consistent across sectors and firm sizes.



# **INVESTMENT NEEDS**

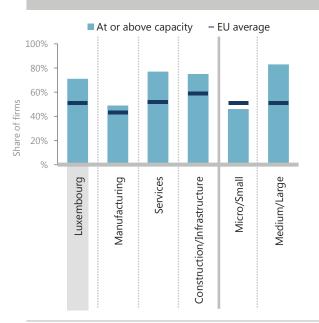
- Overall, the share of companies reporting that they invested too little over the last three years is 13%, in line with the EU average.
- Over a third (34%) of manufacturing firms, 10% of construction and infrastructure firms and 5% of services firms reported investing too little.



**Base:** All firms (excluding 'Company didn't exist three years ago' responses)

Q. Looking back at your investment over the last 3 years, was it too much, too little, or about the right amount to ensure the success of your business going forward?

## Share of firms at or above full capacity



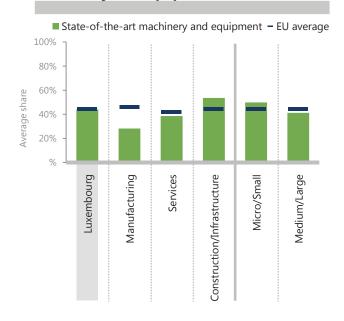
- **Base:** All firms (data not shown for those operating somewhat or substantially below full capacity)
- Full capacity is the maximum capacity attainable under normal conditions e.g., company's general practices regarding the utilization of machines and equipment, overtime, work shifts, holidays etc.
- Q. In the last financial year, was your company operating above or at maximum capacity attainable under normal circumstances?

- More than 70% of companies in Luxembourg report they operated at or above capacity in the last financial year, nearly 20 percentage points above the EU average.
- Higher than average capacity utilization is reported among medium and large firms.



- The average share of the state-ofthe-art machinery and equipment owned by firms in Luxembourg is in line with the EU average (44% both).
- Among firms in construction/ infrastructure, the average stands at 54%, among firms in the services sector it is 39% and in the manufacturing sector the average is 28%.

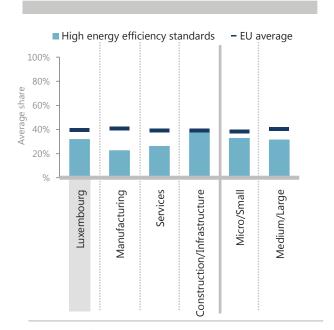
# Average share of state-of-the-art machinery and equipment



Base: All firms

Q. What proportion, if any, of your machinery and equipment, including ICT, would you say is state-of-the-art?

# Average share of building stock meeting high energy efficiency standards



Base: All firms

Q. What proportion, if any, of your commercial building stock satisfies high or highest energy efficiency standards?

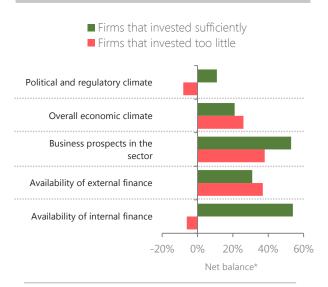
 Firms in Luxembourg say the share of their building stock that meets high efficiency standards is 32%, in line with the average for the EU (40%).



## **INVESTMENT CONSTRAINTS**

- Overall, the investment sentiment remains largely positive. Companies in Luxembourg seem to be have a more optimistic short-term view on the political and regulatory climate than the EU average.
- On balance, firms in Luxembourg report that none of the potential short-term barriers are a significant obstacle to investment.

# Short term influences by investment performance

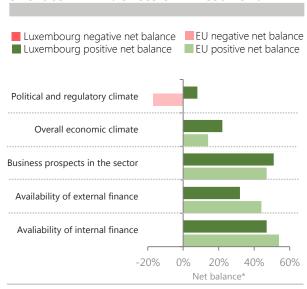


**Base:** All firms who have planned to invest in the current financial year and who invested too much, about the right amount or too little in the last financial year (excluding don't know/refused/company didn't exist three years ago responses)

Q. How do each of the following affect your ability to carry out your planned investment. Does it affect it positively or negatively, or make no difference at all?

\* Net balance is the share of firms seeing a positive effect minus the share of firms seeing a negative effect 8





**Base:** All firms who have planned to invest in the current financial year

Q. How do each of the following affect your ability to carry out your planned investment. Does it affect it positively or negatively, or make no difference at all?

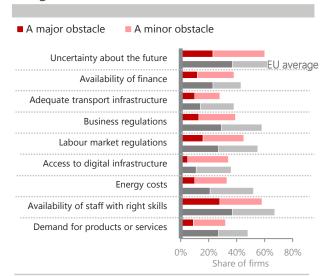
\*Net balance is the share of firms seeing a positive effect minus the share of firms seeing a negative effect

 Companies that invested too little over the last three years report that the political and regulatory climate as well as availability of internal finance are the main short-term constraints to invest, unlike firms who invested sufficiently and who see these factors more positively.



 The two main long-term obstacles to investment are uncertainty about the future and lack of skills. These are in line with the EU-wide trends.

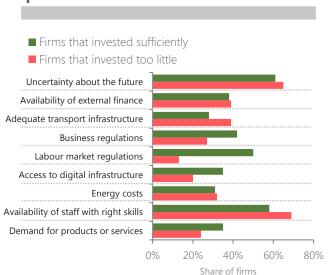
### Long term barriers to investment



**Base:** All firms (data not shown for those who said not an obstacle at all/don't know/refused)

Q. Thinking about your investment activities in Luxembourg, to what extent is each of the following an obstacle? Is a major obstacle, a minor obstacle or not an obstacle at all?

# Long term barriers by investment performance



**Base:** All firms who invested too much, about the right amount or too little in the last financial year (excluding don't know/refused/company didn't exist three years ago responses), data shown for firms who said each was a major or minor obstacle

Q. Thinking about your investment activities in Luxembourg, to what extent is each of the following an obstacle? Is it a major obstacle, a minor obstacle or not an obstacle at all?

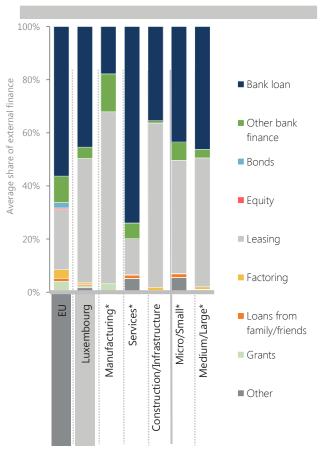
- The lack of skills and (lack of) adequate transport infrastructure are relatively more often mentioned as the main investment obstacles by firms who feel they have invested too little, compared with firms saying they have invested adequately.
- On the contrary, labour market regulations, access to digital infrastructure, business regulations and demand factors are considered as bigger obstacles by firms who
   invested sufficiently.



# INVESTMENT FINANCE

- The majority of investment (61%) is financed by internal funds, while 38% is financed via external finance, and there is very little intra-group funding (representing just 1% of investment).
- Leasing is the most common type of external finance (accounting for 47%), followed by bank lending (45%).
- Firms appear to be satisfied with external finance, although 10% report they are very dissatisfied with the collateral requirements.

# Type of external finance used for investment activities



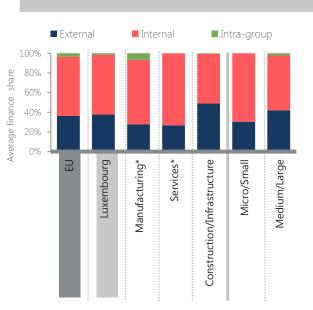
**Base:** All firms who used external finance in the last financial year (excluding don't know/refused responses)

Q. Approximately what proportion of your external finance does each of the following represent?

10

\*Caution: very small base size of less than 30

## Source of investment finance



**Base:** All firms who invested in the last financial year (excluding don't know/refused responses)
Q. Approximately what proportion of your investment in the last financial year was financed by each of the following?
\*Caution: very small base size of less than 30

#### Satisfaction with external finance



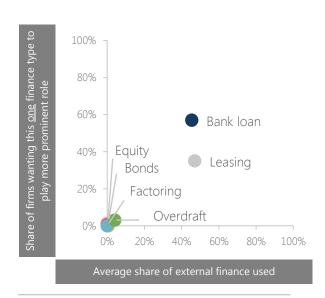
**Base:** All firms who used external finance in the last financial year (excluding don't know/refused responses)

Q. How satisfied or dissatisfied are you with ...?



- Companies in Luxembourg report bank loans as the type of external financing they would like to continue using.
- However, they would like leasing to play a relatively less prominent role in their funding than it currently does.

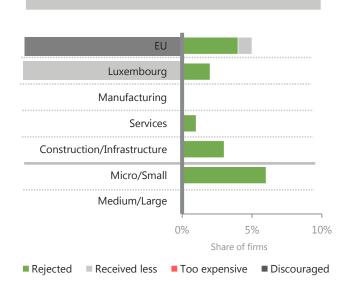
# Types of finance used versus the one type of finance firms want to use more



**Base:** All firms who used external finance in the last financial year (excluding don't know/refused responses)

Data is derived from two questions: firms were first asked about the types of external finance used in the last financial year and then which one type of external finance they would want to have a more prominent role over the next 3 years

### Share of finance constrained firms



Base: All firms

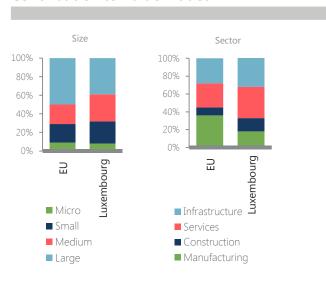
Finance constrained firms include: those dissatisfied with the amount of finance obtained (received less), firms that sought external finance but did not receive it (rejected) and those who did not seek external finance because they thought borrowing costs would be too high (too expensive) or they would be turned down (discouraged)

- Overall, around 2% of companies appear to be credit constrained in Luxembourg. These are solely the companies whose applications for external finance were rejected.
- No manufacturing companies or medium/large firms reported any problems with access to external finance.



# PROFILE OF FIRMS

#### Contribution to Value-Added

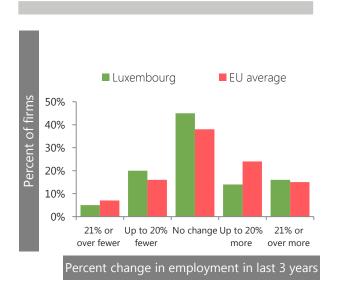


Base: All firms

The charts reflects the relative contribution to value-added by firms belonging to a particular size class / sector in the population of firms considered. That is, all firms with 5 or more employees active in the sectors covered by the survey. Micro: 5-9 employees; Small: 10-49; Medium: 50-249; Large: 250+.

- The breakdown of companies in Luxembourg by size and sector is in line with the EU average profile in terms of their contribution to value-added
- The employment dynamics in Luxembourg are modestly skewed towards employment reduction.
- Productivity of nearly 40% of service firms, and 55% of infrastructure firms, is in the top EU productivity quantile, substantially above the EU averages.

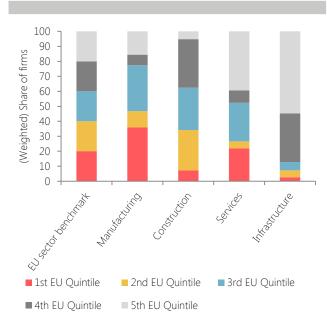
### **Employment dynamics in last 3 years**



**Base:** All firms (excluding don't know, refused and missing responses)

Q. Thinking about the number of people employed by your company, by how much has it changed in the last 3 years?

## Distribution of firms by productivity class

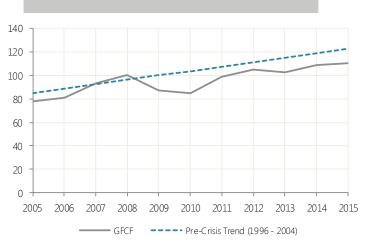


Share of firms by productivity class (Total Factor Productivity). Productivity classes are sector specific; they are defined on the basis of the entire EU sample (for a particular sector).



# MACROECONOMIC INVESTMENT CONTEXT

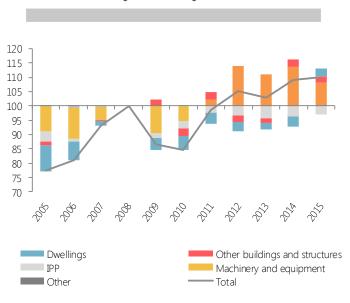
### **Investment Dynamics over time**



The graph shows the evolution of total Gross Fixed Capital Formation. (in real terms); against the series 'pre-crisis trend. The data has been index to equal 100 in 2008. Source: Eurostat .

- The aggregate investment in Luxembourg quickly recovered after the 2008 contraction and is around 10% above 2008 levels.
   Nevertheless, the investment dynamics seem to be disconnected from the pre-crisis trend.
- The largest investments are observed in machinery and equipment, followed by dwellings.

### **Investment Dynamics by Asset Class**



The graph shows the evolution of total Gross Fixed Capital Formation. (in real terms); by asset class. The data has been index d to equal 100 in 2008. Source: Eurostat.



# EIBIS 2016 – COUNTRY TECHNICAL DETAILS

The final data are based on a sample, rather than the entire population of firms in Luxembourg, so the percentage results are subject to sampling tolerances. These vary with the size of the sample and the percentage figure concerned.

## Approximate sampling tolerances applicable to percentages at or near these levels

	EU	Luxembourg	Manufacturing	Services	Construction/ Infrastructure	Micro/ Small	Medium/ Large	EU vs Country		Micro/Small vs Medium/Large
	: (12483)	(150)	(34)	(41)	(75)	(86)	(64)	(12483 vs 150)	: (34 vs 75)	(86 vs 64)
10% or 90%	1.0%	6.0%	12.4%	11.1%	8.5%	5.9%	8.3%	6.1%	15.0%	10.2%
30% or 70%	1.5%	9.2%	18.9%	17.0%	13.0%	9.0%	12.7%	9.3%	22.9%	15.5%
50%	1.7%	10.0%	20.7%	18.5%	14.2%	9.8%	13.9%	10.1%	25.0%	17.0%

## **Glossary**

Investment	A firm is considered to have invested if it spent more than EUR 500 per employee on investment activities with the intention of maintaining or increasing the company's future earnings.
Investment cycle	Based on the expected investment in current financial year compared to last one, and the proportion of firms with a share of investment greater than EUR 500 per employee.
Productivity	Total factor productivity is a measure of how efficiently a firm is converting inputs (capital and labor) into output (value-added). It is estimated by means of an industry-by-industry regression analysis (with country dummies).
: Manufacturing sector	Based on the NACE classification of economic activities, firms in group C (manufacturing).
Construction sector	Based on the NACE classification of economic activities, firms in group F (construction).
Services sector	Based on the NACE classification of economic activities, firms in group G (wholesale and retail trade) and group I (accommodation and food services activities).
Infrastructure sector	Based on the NACE classification of economic activities, firms in groups D and E (utilities), group H (transportation and storage) and group J (information and communication).
SME	Firms with between 5 and 249 employees.
: Large firms	Firms with at least 250 employees.



# EIBIS 2016 – COUNTRY TECHNICAL DETAILS

### **Base sizes**

Base definition and page reference	n.	Luxembourg	Manufacturing	Services	Construction / Infrastructure	Micro / Small	Medium / Large
: All firms, p. 3, p. 6, p. 7, p. 9, p. 11, p. 12, p. 13	12483	150	34	41	75	86	64
All firms (excluding don't know/refused responses), p. 2	11838	141	32	36	73	81	60
All firms (excluding those who have no investment planned/don't know/refused responses), p. 5	12159	146	34	38	74	83	63
All firms (excluding 'Company didn't exist three years ago' responses), p. 6	12453	150	34	41	75	86	64
All firms (excluding don't know, refused and missing responses), p. 13	12162	146	34	41	71	86	60
All firms who invested in the last financial year, p. 2	12281	149	33	41	75	86	63
All firms who invested in the last financial year, p. 4	10881	137	31	34	72	76	61
All firms who have invested in the last financial year (excluding don't know/refused responses), p. 4	10060	135	30	33	72	74	61
All firms who have invested in the last financial year (excluding don't know/refused responses), p. 5	9682	112	25	25	62	61	51
All firms who invested in the last financial year (excluding don't know/refused responses), p. 10	9093	90	19	22	49	53	37
All firms who have planned to invest in the current financial year and who invested too much, about the right amount or too little in the last financial year (excluding don't know/refused/company didn't exist three years ago responses), p. 8	10536	136	N/A	N/A	N/A	N/A	N/A
All firms who used external finance in the last financial year (excluding don't know/refused responses), p. 10, p. 11	4344	48	9	9	30	23	25

## **Percentage rounding**

Percentages with value of less than 0.5 but greater than zero have not been shown in the charts.



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