



European
Investment
Bank

The EU bank

Luxembourg

Overview

EIB INVESTMENT SURVEY

2017

EIB Group Survey on Investment and Investment Finance Country Overview: Luxembourg

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About the EIB Investment Survey (EIBIS)

The EIB Group Survey on Investment and Investment Finance is a unique, EU-wide, annual survey of some 12 300 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 40 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 2017 – COUNTRY OVERVIEW

Luxembourg

The annual EIB Group Survey on Investment and Investment Finance (EIBIS) is an EU-wide survey of some 12 300 firms that gathers 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 177 firms in Luxembourg in 2017 (carried out between April and August).

Key results

Macroeconomic context	Luxembourg's economy is expected to grow above 4% in 2017. Employment growth is solid, with growth of resident employment accelerating, while unemployment is expected to fall further. Public finances are projected to remain sound in spite of the tax-decreasing reform.
Investment outlook	More firms increased than reduced investment in the last financial year. This positive outlook is expected to continue, but to a lesser extent and manufacturers are most confident of increasing investment activity in 2017.
Investment activity	91% of firms invested in the last financial year , increasing to 96% when looking at manufacturing firms, however the overall investment intensity (investment per employee) is lower than the EU average. The share of firms investing is modestly higher than in the last survey wave (88%) and than the EU average (84%).
Perceived investment gap	14% of firms report investing too little over the last three years , similar to the EU average (15%). The average share of state-of-the-art machinery and equipment in firms is above the EU average (50% versus 45%). The average share of building stock satisfying high energy efficiency standards is 37%, vis-à-vis 39% across the EU.
Investment barriers	Availability of skilled staff and uncertainty about the future continue to be perceived as the main barriers to investment (by 62% and 57% of firms respectively). Concerns about high business regulations is also frequently mentioned by firms in Luxembourg (52%).
External finance	Five per cent of firms are finance constrained , lower than the EU average of 7%. This is the proportion of firms dissatisfied with the amount of finance obtained, sought finance but did not receive it, did not seek finance because they thought borrowing costs were too high or they would be turned down.
Firm performance	Firms' productivity is similar to the EU benchmark. Infrastructure sector has a relatively high share of firms in the higher productivity classes. Large and medium size firms make a greater contribution to value added.

INVESTMENT DYNAMICS

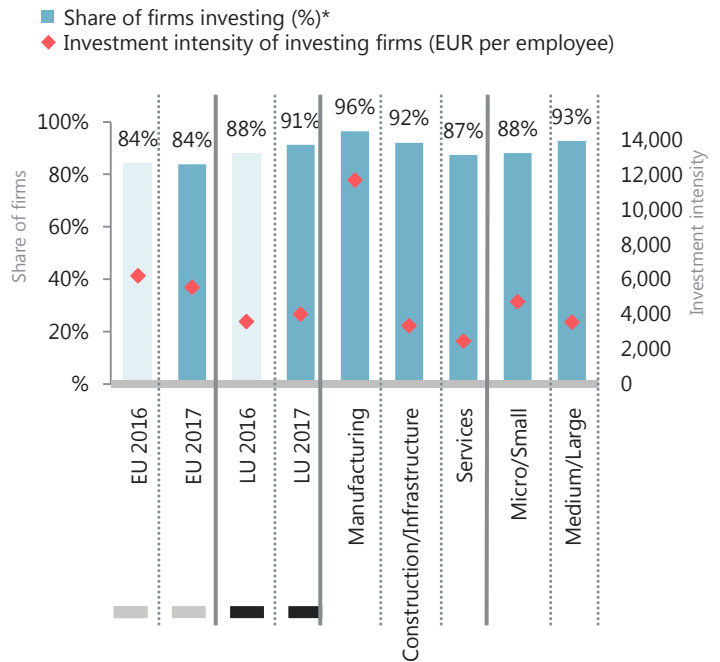
INVESTMENT ACTIVITY IN LAST FINANCIAL YEAR

Nine in ten firms in Luxembourg invested in the last financial year (91%), slightly more than in the previous survey wave.

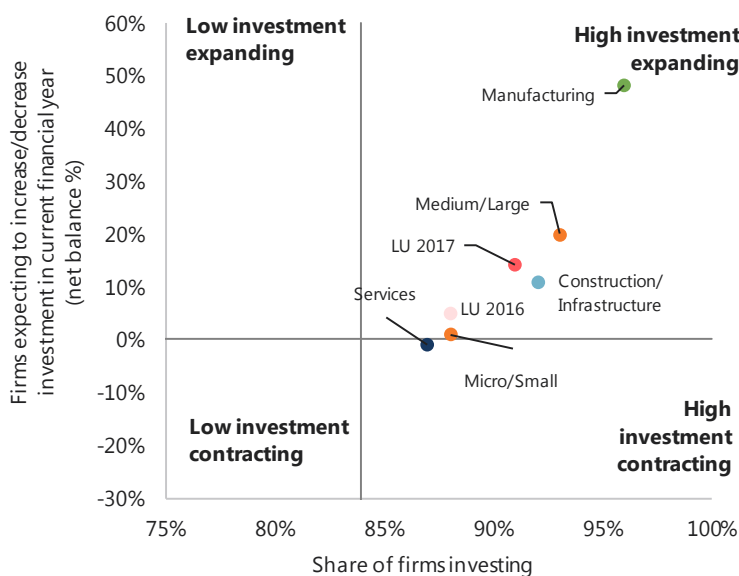
While the proportion of firms investing is higher than the EU average (84%), the intensity of investment (investment per employee) is lower than the average for the EU. However, it has modestly improved compared to the 2016 survey wave.

*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.
Investment intensity is reported in 2015 values (using the Eurostat GFCF deflator).

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



INVESTMENT CYCLE



The firms' investment activity reported in this survey wave places Luxembourg in the 'high investment expanding' quadrant on the investment cycle.

This is largely driven by medium/large firms, which show relatively high levels of investment and plan to expand investment in the current financial year. Micro/small companies are also expanding but at marginal levels.

Base: All firms

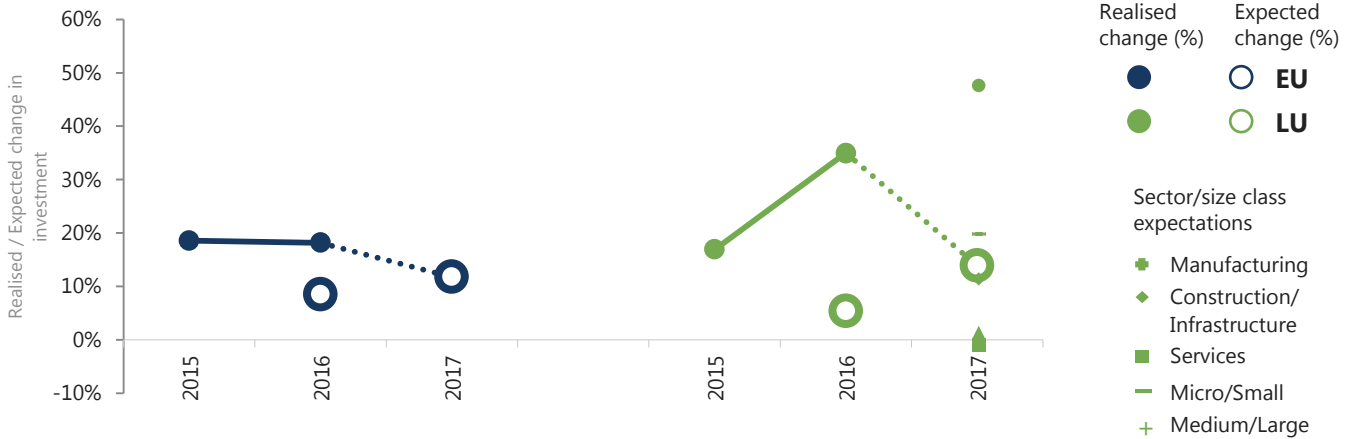
Share of firms investing shows the percentage of firms with investment per employee greater than EUR 500.

The y-axis line crosses x-axis on the EU average for 2016

INVESTMENT DYNAMICS

EVOLUTION OF INVESTMENT EXPECTATIONS

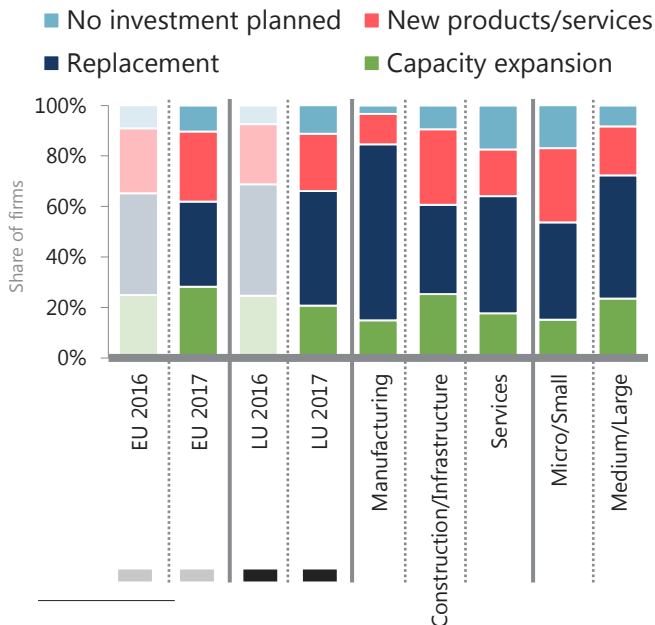
More firms in Luxembourg increased than reduced their investment activities in the last financial year. The share investing exceeded the investment expectations from the previous wave. In the current financial year, this positive outlook is expected to continue but to a lesser extent. Manufacturing sector firms appear most confident of increasing their investment activity in 2017.



Base: All firms

'Realised change' is the share of firms who invested more minus those who invested less; 'Expected change' is the share of firms who expect(ed) to invest more minus those who expect(ed) to invest less.

FUTURE INVESTMENT PRIORITIES



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

Q. Looking ahead to the next 3 years, which 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?

Looking ahead to the next three years, investment in the replacement of existing machinery, buildings, equipment and IT is most commonly named as a priority (by 45% of firms in Luxembourg).

Replacement is of particular importance to manufacturing firms, with seven in ten saying it is their investment priority.

Compared to the last survey wave, slightly more companies in Luxembourg have no investment activities planned.

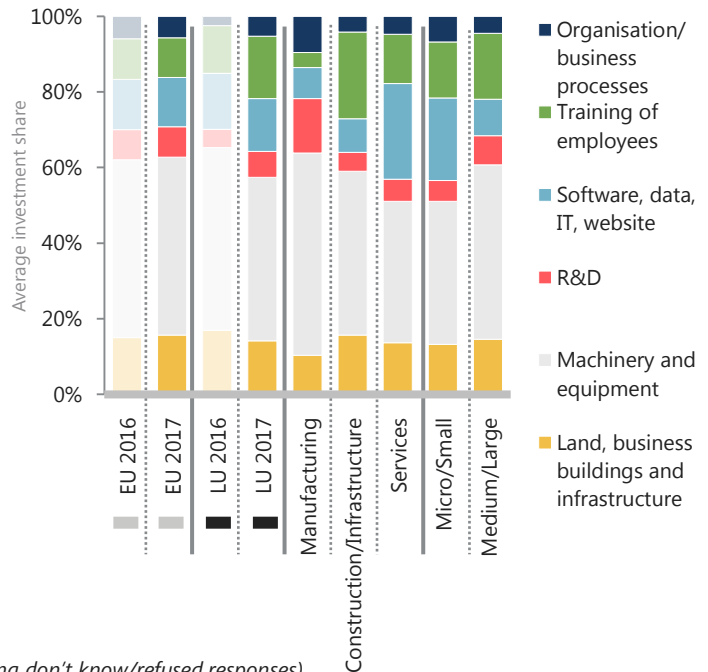
INVESTMENT FOCUS

INVESTMENT AREAS

Of the six investment areas asked about, the largest share of investment was in machinery and equipment (43%). The overall pattern is very similar to the 2016 survey wave and EU-wide findings, with the share invested in employee training increasing modestly from 13% to 17%. The share invested in intangibles is larger than the EU average.

Construction and infrastructure firms spent the highest share on training of employees (23%).

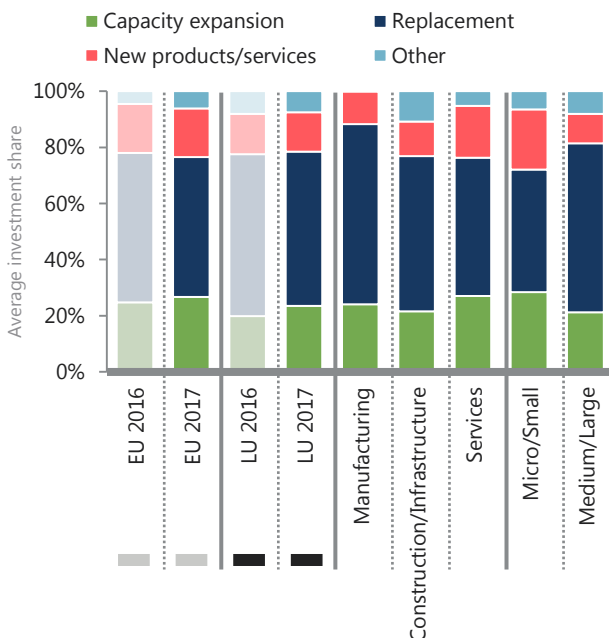
The service sector invested a higher share in software, data, IT and website activities (25%) than any others.



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?

PURPOSE OF INVESTMENT IN LAST FINANCIAL YEAR



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

Q. What proportion of total investment was for (a) replacing capacity (including existing buildings, machinery, equipment, IT) (b) expanding capacity for existing products/services (c) developing or introducing new products, processes, services?

The largest share of investment in Luxembourg is driven by the need to replace buildings, machinery, equipment and IT (55%), in line with the EU average and previous survey wave.

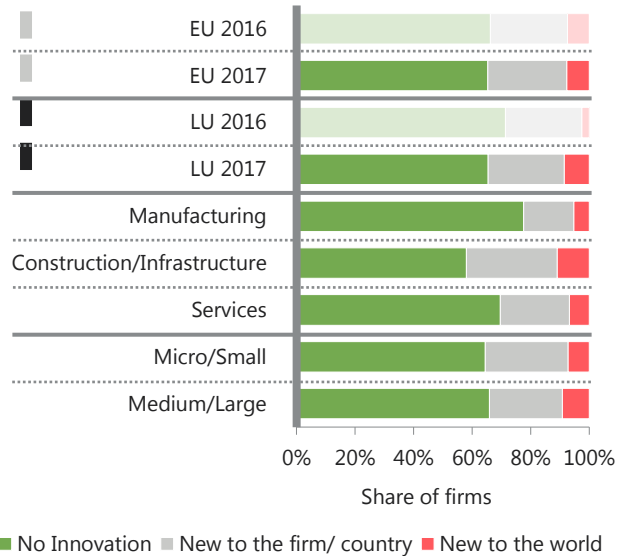
The purpose of investment is largely stable across sectors. Medium/large companies spent a higher proportion on replacement, compared with micro/small enterprises (60% against 44%, respectively).

INVESTMENT FOCUS

INNOVATION ACTIVITY

Among all firms, around a third (35%) developed or introduced new products, processes or services as part of their investment activities. This includes 9% who claimed the innovations were new to the global market.

This is largely consistent across size of firms as well as being in line with the EU average. It appears that the manufacturing firms are least likely to engage in innovation activities, compared with other sectors.

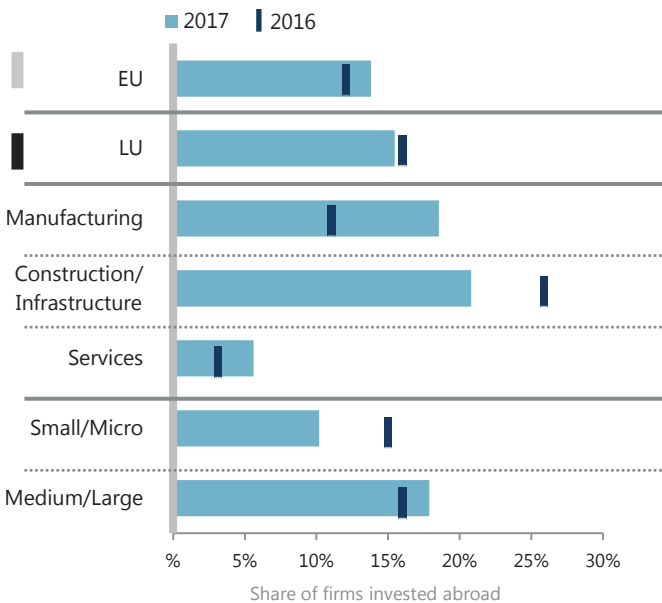


Base: All firms (excluding don't know/refused responses)

Q. What proportion of total investment was for developing or introducing new products, processes, services?

Q. Were the products, processes or services new to the company, new to the country, new to the global market?

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?

Among firms that invested in the last financial year, 15% had invested in another country. This is a similar proportion to the previous survey wave and in line with the EU average (14%).

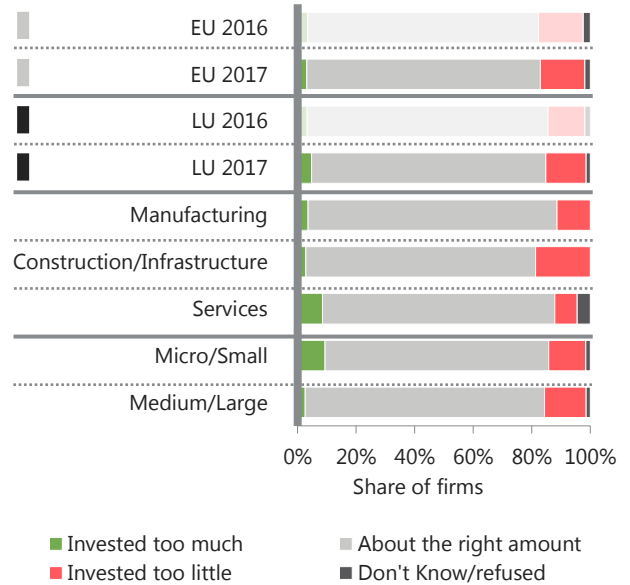
Services firms are the least likely to have invested abroad (6%) although the share of companies foreign-oriented in this sector has improved. Smaller shares of micro/small corporates and companies in construction/infrastructure sector invested abroad compared with the last survey wave.

INVESTMENT NEEDS

PERCEIVED INVESTMENT GAP

Around eight in ten firms believe investment over the last three years was about the right amount (79%). This is the same as the EU average and it is consistent across the survey waves.

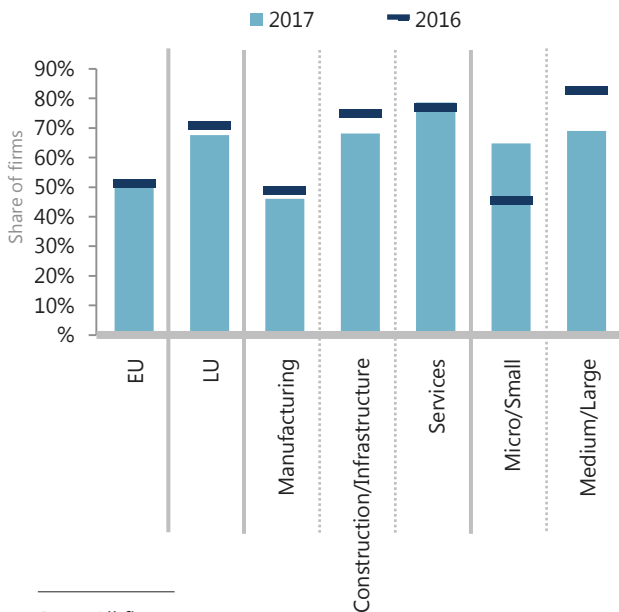
Construction and infrastructure firms are the most likely to have invested too little in the last three years (19%), with 8% of companies in service sector reporting excessive investment levels.



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?

SHARE OF FIRMS AT OR ABOVE FULL CAPACITY



Base: All firms

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?

Nearly seven in ten firms report operating at maximum capacity in the last financial year (68%). This puts Luxembourg above the EU average of 53%.

Firms within the service sector (79%) are more likely than manufacturing firms (46%) to report operating at or above full capacity. The trend is largely stable across the survey waves, with exceptions of construction/infrastructure sector and medium/large corporates which reported more than 7pp and 14pp drops, respectively.

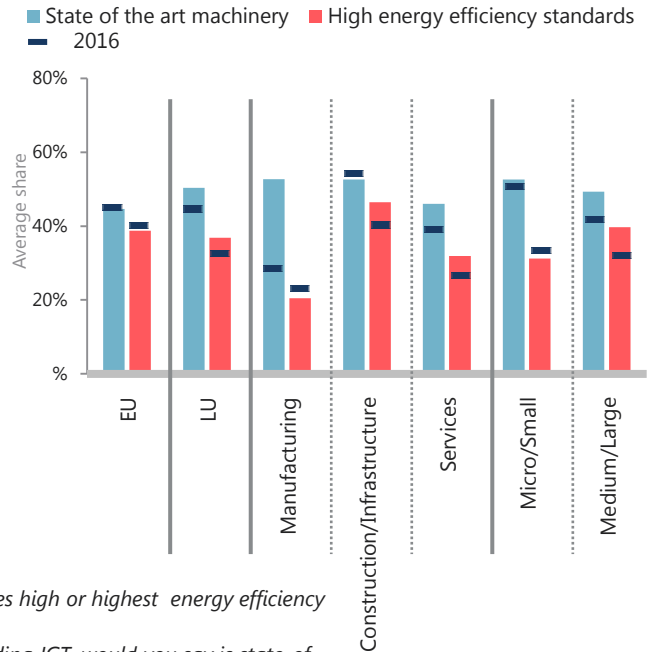
INVESTMENT NEEDS

SHARE OF STATE OF THE ART MACHINERY AND BUILDING STOCK MEETING HIGH ENERGY EFFICIENCY STANDARDS

The average share of machinery and equipment in firms that is perceived to be state-of-the-art is 50% compared with 45% across the EU.

On average, just over one-third of firms' building stock in Luxembourg satisfies high energy efficiency standards (37%), similar to the EU average of 39%.

In comparison with last year the share of state-of-the-art machinery has almost doubled among the manufacturing firms (28% vs 53%).



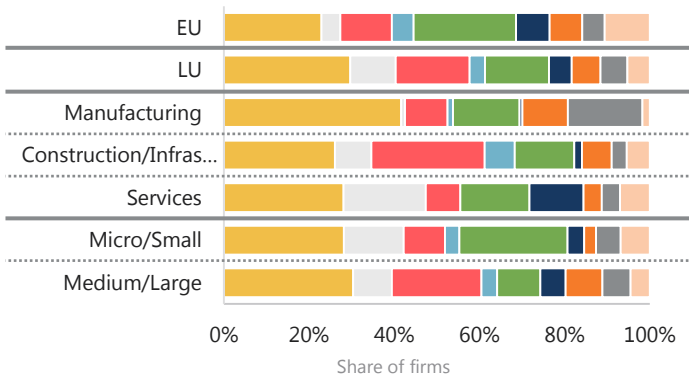
Base: All firms

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

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

PUBLIC INVESTMENT PRIORITIES

- Transport infrastructure
- ICT infrastructure
- Professional training/HE
- Energy supply/distribution
- None/DK/Refused
- Public transport
- Childcare/schools
- Hospitals/care
- Social housing



Eight areas of public investment were read out to respondents who were asked which one they thought should be the priority over the next 3 years.

Three in ten firms cited transport infrastructure (30%) as the priority for investment over the next three years. This was followed by ICT infrastructure (17%) and professional training/HE (15%) All other areas were selected by one in ten firms or fewer.

Opinion among construction/infrastructure firms was more divided with equal proportions prioritising transport infrastructure and ICT infrastructure.

Base: All firms

Q. From your business' perspective, if you had to prioritise one area of public investment for the next 3 years, which one would it be?

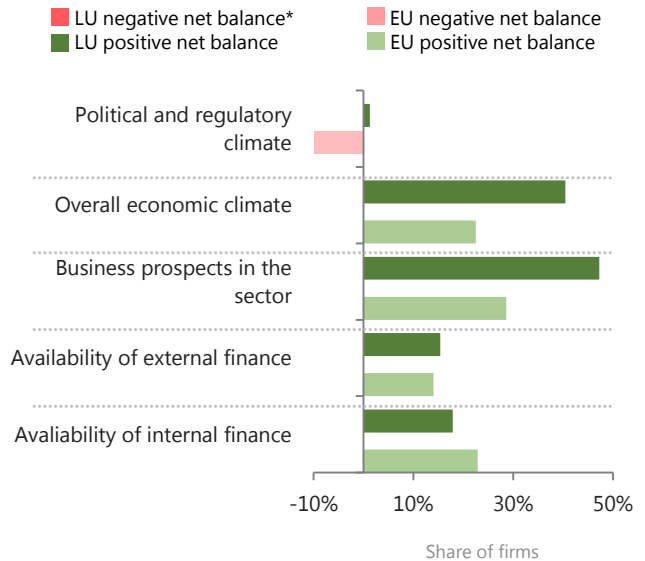
DRIVERS AND CONSTRAINTS

SHORT TERM INFLUENCES ON INVESTMENT

On balance, slightly more firms in Luxembourg expect the political and regulatory climate to improve than deteriorate in the next 12 months. This is in contrast to firms throughout the EU which are more negative, on balance.

Firms in Luxembourg are particularly positive about the overall economic climate and business prospects within their sectors, compared with the EU averages.

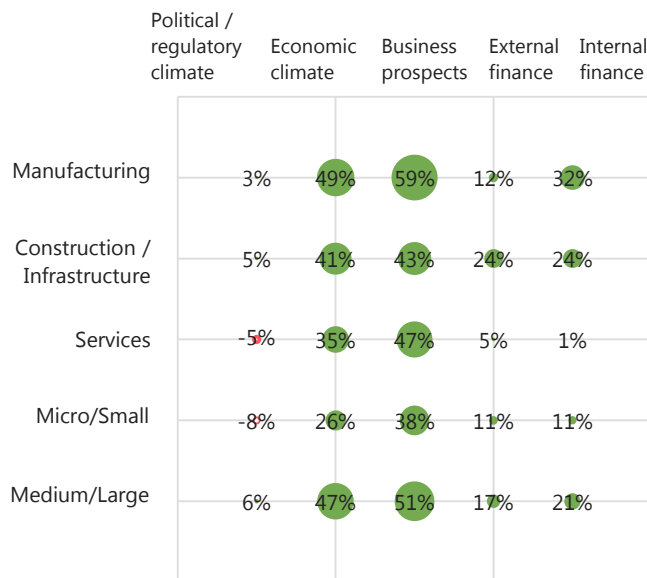
**Net balance is the share of firms expecting improvement minus the share of firms expecting a deterioration*



Base: All firms

Q. Do you think that each of the following will improve, stay the same, or get worse over the next 12 months?

SHORT TERM INFLUENCES BY SECTOR AND SIZE (NET BALANCE)



Medium/large firms, and manufacturing sector firms, seem to be more positive about the economic climate and business prospects.

Companies in the construction/infrastructure sector are markedly more optimistic about external finance conditions, compared with other sectors.

Base: All firms

Q. Do you think that each of the following will improve, stay the same, or get worse over the next 12 months?

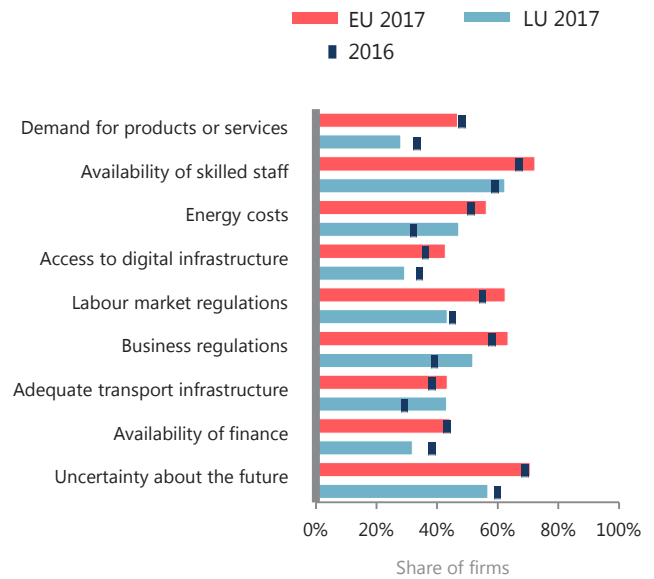
DRIVERS AND CONSTRAINTS

LONG TERM BARRIERS TO INVESTMENT

Around six in ten firms in Luxembourg consider the availability of skilled staff and uncertainty about the future and as obstacles to investment activities (62% and 57% respectively). Business regulations is the other area mentioned by over half of firms (52%) as a barrier.

While the overall pattern of results is similar to the EU, firms in Luxembourg are generally less likely to identify obstacles than their EU counterparts. This is particularly the case for demand for products/ services and access to digital infrastructure.

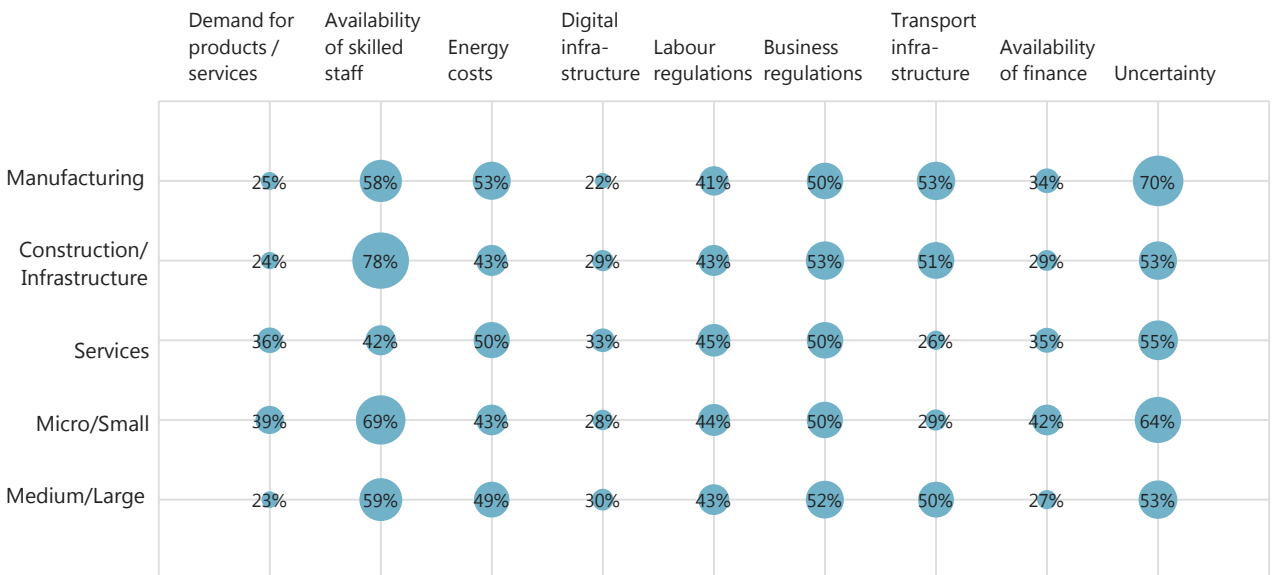
Availability of skilled staff is an especially large obstacle for construction and infrastructure sector firms (78%).



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 it a major obstacle, a minor obstacle or not an obstacle at all?

LONG TERM BARRIERS BY SECTOR AND SIZE



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

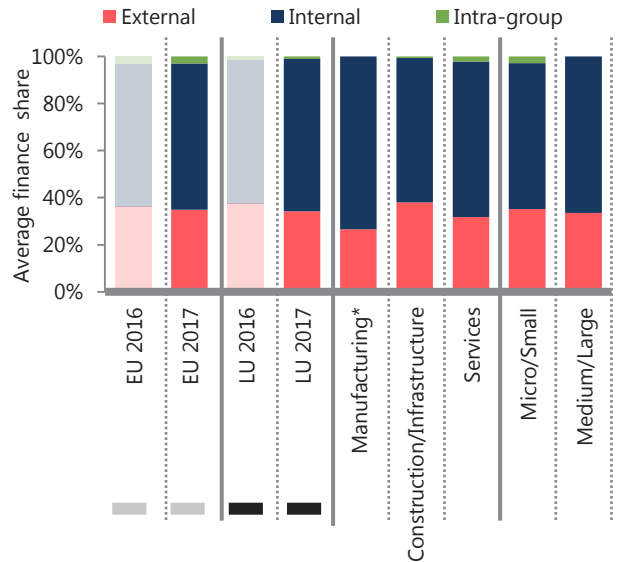
Q. Thinking about your investment activities in Luxembourg, to what extent is each of the following an obstacle? Is it a major obstacle, a minor obstacle or not an obstacle at all?

INVESTMENT FINANCE

SOURCE OF INVESTMENT FINANCE

Firms in Luxembourg fund the majority of their investment through internal funds (65%), with external finance making up 34% of investment. This is in line with the EU averages of 62% and 35%, respectively, and it is stable across the survey waves.

The same pattern is observed across different sectors and sizes of firms.



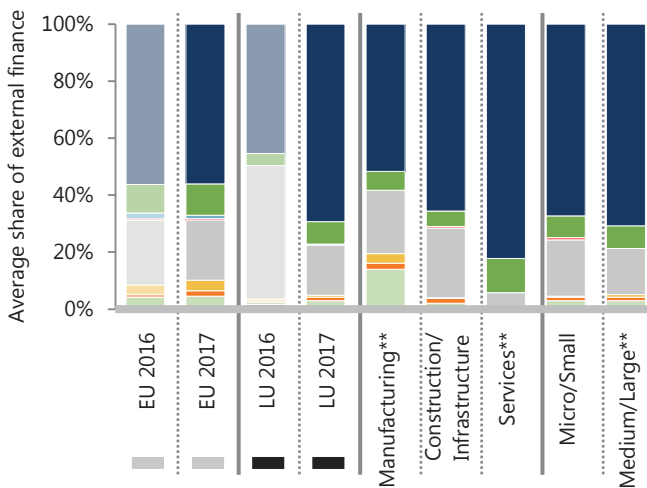
Base: All firms who invested in the last financial year (excluding don't know/refused responses)

*Caution very small base size less than 30

Q. What proportion of your investment was financed by each of the following?

TYPE OF EXTERNAL FINANCE USED FOR INVESTMENT ACTIVITIES

- Bank loan
- Equity
- Non-institutional loans*
- Other bank finance
- Leasing
- Grants
- Bonds
- Factoring
- Other



Bank loans, by some distance, account for the highest share of external finance (69%) followed by leasing (18%). Service sector firms are particularly reliant on bank loans, with few other sources of financing.

The pattern is stable across firm sizes.

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

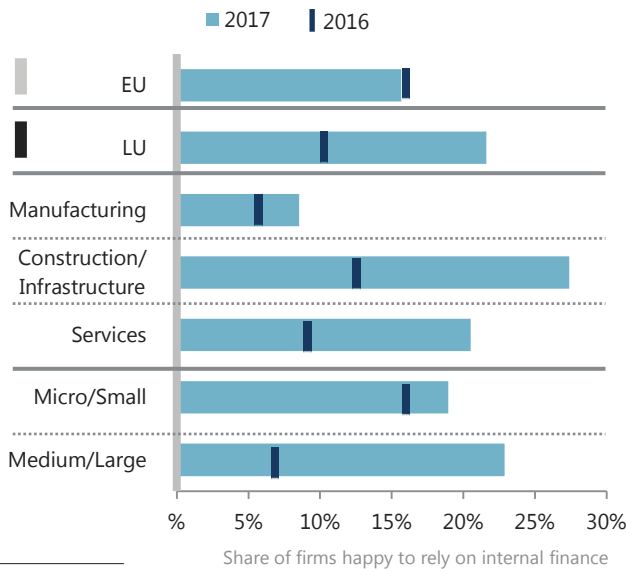
**Caution very small base size less than 30

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

*Loans from family, friends or business partners

INVESTMENT FINANCE

SHARE OF FIRMS HAPPY TO RELY EXCLUSIVELY ON INTERNAL SOURCES TO FINANCE INVESTMENT



Around one in five of firms in Luxembourg report that they did not need to apply for external finance as they were happy to use internal finance or didn't need the finance; twice as many as reported this in the last survey round.

This proportion is particularly visible in the construction/infrastructure sector, closely followed by services sector. Only 9% of companies in manufacturing sector say they are happy to rely exclusively on internal finance.

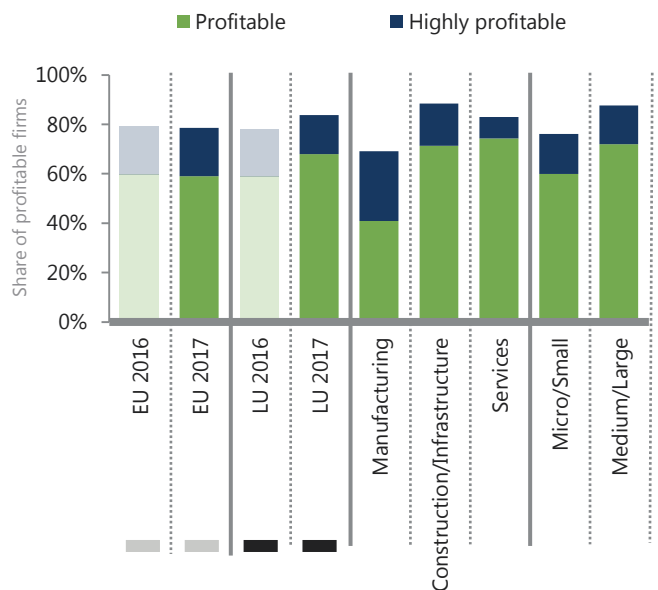
Base: All firms

Q. What was your main reason for not applying for external finance for your investment activities? Was happy to use internal finance/didn't need the finance (Unprompted)

SHARE OF PROFITABLE FIRMS

Around one in six firms in Luxembourg report being highly profitable (16%). This is slightly lower than last year (19%) and the EU average (20%).

Firms in the manufacturing sector are most likely to be highly profitable (28%), while the lowest proportion of highly profitable firms is in the service sector (9%).



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

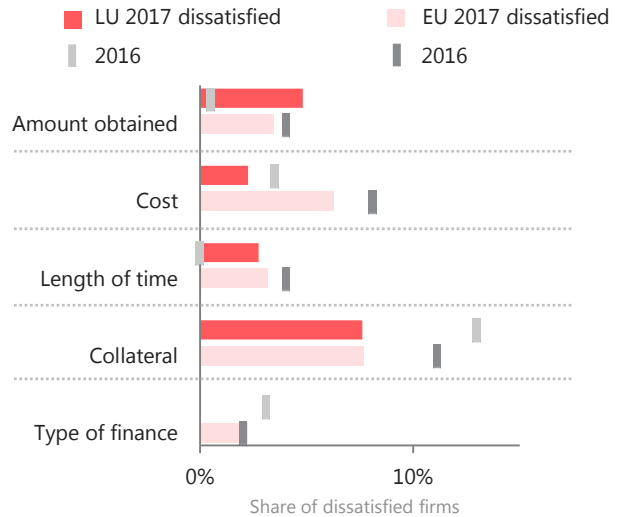
Q: Taking into account all sources of income in the last financial year, did your company generate a profit or loss before tax, or did you break even? Highly profitable is defined as profits/turnover of 10% or more

SATISFACTION WITH FINANCE

DISSATISFACTION WITH EXTERNAL FINANCE RECEIVED

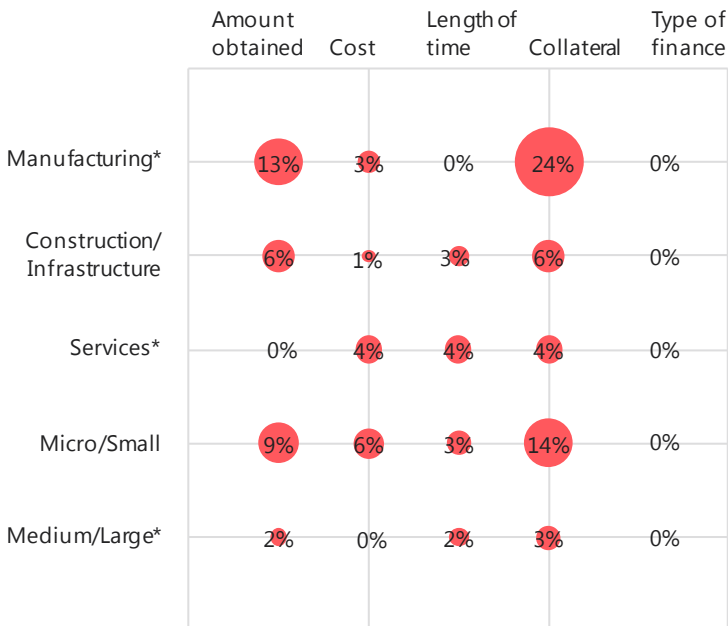
Firms that used external finance are on balance satisfied with the amount, cost, maturity, collateral and type of finance received.

Firms in Luxembourg are most likely to be dissatisfied with the collateral required (8%), followed by the amount obtained (5%).



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?

DISSATISFACTION BY SECTOR AND SIZE



Dissatisfaction with collateral is largely driven by manufacturing firms.

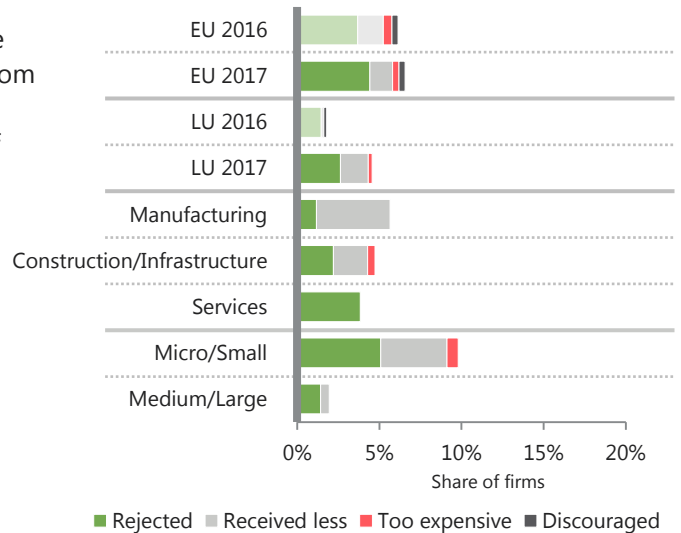
The external finance problems appear to be concentrated in small/micro enterprises.

Base: All firms who used external finance in the last financial year (excluding don't know/refused responses)
*Caution very small base size less than 30
Q. How satisfied or dissatisfied are you with?

SATISFACTION WITH FINANCE

SHARE OF FINANCE CONSTRAINED FIRMS

Only a small minority (5%) of firms in Luxembourg are finance constrained, but this represents an increase from 2% one year ago. One in ten micro/small firms are finance constrained, compared to just two per cent of medium/large firms.

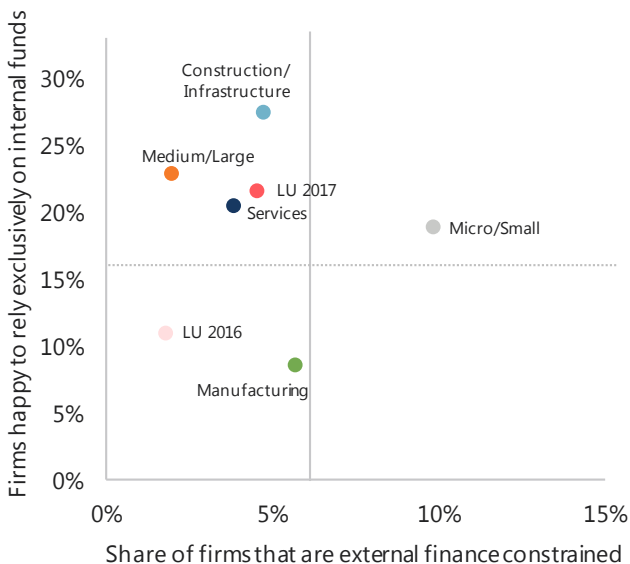


Base: All firms

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)

*Financing constraints for 2016 among non-investing firms estimated; **Caution very small base size less than 30 non-investing firms

FINANCING CROSS



Base: All firms

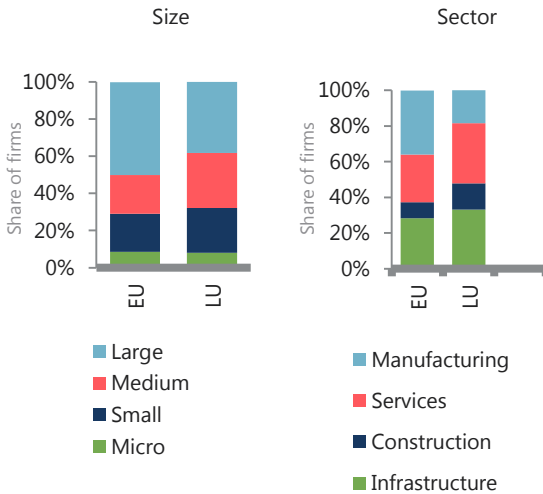
Data derived from the financial constraint indicator and firms indicating main reason for not applying for external finance was 'happy to use internal finance/didn't need finance'
The x- and y-axes lines cross on the EU average for 2016

Firms in Luxembourg are less likely to be finance constrained, and more likely to be happy to rely on internal funds compared to the EU average.

Firms in the manufacturing sector are least happy to rely on internal funds. Micro/small companies are more finance constrained, on balance.

PROFILE OF FIRMS

CONTRIBUTION TO VALUE ADDED



In terms of the weighted size distribution, larger firms account for the greatest share of value-added (38%) followed by medium size firms (29%). The manufacturing sector makes up a lower share of value-added compared to the EU-wide sample.

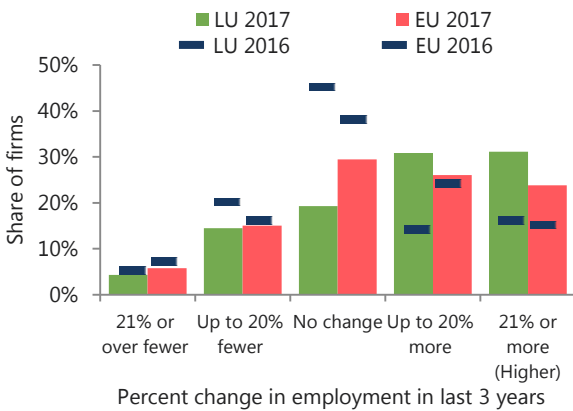
Employment dynamics over the past three years are favourable in Luxembourg, with more firms expanding than contracting.

Firms in Luxembourg have marginally lower levels of productivity compared to the EU benchmarks. Infrastructure sector has a relatively high share of firms in the higher productivity classes.

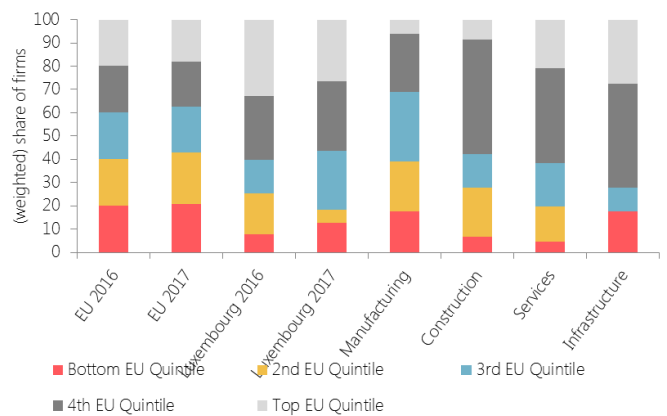
Base: All firms

The charts reflect 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+.

EMPLOYMENT DYNAMICS IN LAST THREE YEARS



DISTRIBUTION OF FIRMS BY PRODUCTIVITY CLASS

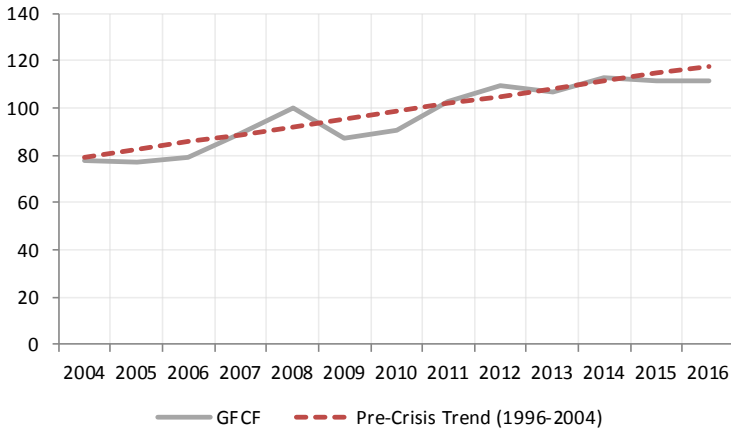


Base: All firms (excluding don't know, refused and missing responses)
Q. Thinking about the number of people employed by your company, by how much has it changed in the last 3 years?

Share of firms by productivity class (Total Factor Productivity). Productivity classes are defined on the basis of the entire EU sample.

MACROECONOMIC INVESTMENT CONTEXT

Investment Dynamics over time



Aggregate investment in Luxembourg quickly recovered after the 2008 contraction and as of 2016 it is around 10% above 2008 levels.

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

Investment Dynamics by Asset Class

From 2012 until 2015, the largest investments were observed in machinery and equipment, followed by other buildings and structures. In 2016 the pattern reshuffled in favor of other buildings and structures, closely followed by IPP expenditures and investment in dwellings. For the first time since 2010 GFCF in machinery and equipment declined in 2016.



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

EIB 2017 – COUNTRY TECHNICAL DETAILS

SAMPLING TOLERANCES APPLICABLE TO PERCENTAGES AT OR NEAR THESE LEVELS

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.

	EU	Luxembourg	Manufacturing	Services	Construction/ Infrastructure	Micro/Small	Medium/ Large	EU vs Luxembourg	Manufacturing vs Construction/ Infrastructure	Micro/Small vs Medium/Large
	(12338)	(177)	(39)	(49)	(86)	(112)	(65)	(12338 vs 177)	(39 vs 86)	(112 vs 65)
10% or 90%	1.1%	5.8%	12.0%	9.7%	8.8%	5.1%	8.2%	5.9%	14.9%	9.6%
30% or 70%	1.6%	8.8%	18.4%	14.8%	13.5%	7.7%	12.5%	9.0%	22.7%	14.7%
50%	1.8%	9.6%	20.0%	16.2%	14.7%	8.4%	13.6%	9.8%	24.8%	16.0%

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).
Micro/Small firms	Firms with between 5 and 49 employees.
Medium/Large firms	Firms with at least 50 employees.

EIB 2017 – COUNTRY TECHNICAL DETAILS

BASE SIZES

Base definition and page reference	EU 2016/ 2017	LU 2016/2017	Manufacturing	Construction/ Infrastructure	Services	Micro/Small	Medium/Large
All firms, p. 2, 3, 6, 7, 8, 11, 14	12483/12338	150/177	39	86	49	112	65
All firms (excluding don't know/refused responses), p. 3	12159/12020	146/174	37	85	49	111	63
All firms (excluding don't know/refused responses), p. 5	12071/12073	145/173	37	85	48	110	63
All firms who have invested in the last financial year (excluding don't know/refused responses), p. 4	10060/10321	135/152	31	77	41	97	55
All firms who invested in the last financial year, p. 5	10881/10889	137/167	35	85	44	104	63
All firms (excluding 'Company didn't exist three years ago' responses), p. 6	12453/12306	150/174	39	85	47	109	65
All firms (data not shown for those who said not an obstacle at all/don't know/refused), p. 9	12483/12338	150/177	39	86	49	112	65
All firms who have invested in the last financial year (excluding don't know/refused responses), p. 10	9093/9131	90/132	27	68	35	87	45
All firms (excluding don't know, refused and missing responses), p. 14	12162/11513	146/170	39	83	45	105	65



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Overview

© European Investment Bank, 11/2017 print: QH-05-17-137-EN-C ISBN 978-92-861-3469-2 doi:10.2867/141116
digital: QH-05-17-137-EN-N ISBN 978-92-861-3470-8 doi:10.2867/52852

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