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## Kent SME Internationalisation Study

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## **Executive Summary**

### ***Background***

The Kent SME Internationalisation Study 2016/2017 investigates the internationalisation status of SMEs located Kent, UK. The core aims of the study are the understanding of the existing levels of SME international activities; the identification of drivers for and barriers to SME cross-border activities; the assessment of the existing support mechanisms; the initiation of the Brexit impact discussion; and ultimately the provision of recommendations on the increase of internationalisation capacity and activity among Kent businesses. The rationale for the SME focus is due to the significant population of SMEs in the region and their contribution to economic growth, as SMEs create employment opportunities, contribute to achieving higher production volumes, boost exports and drive innovation.

### ***Kent Business Population and Sample Characteristics***

- The profile of Kent businesses shows similar business characteristics (distribution of firms by economic size (turnover), employment and industry classification) to the ones observed for the whole of the UK.
- Generalisation of this study's findings, especially with regard to Brexit, is possible.
- The study's sample, despite its small size (268 completed questionnaires), is representative of the population and shows no evidence of non-respondent bias.
- Firms in the sample show a normal credit score and low failure rates, and thus current likelihood of bankruptcy is small but subject to substantial changes in the external business environment due to Brexit.

### ***Kent SMEs and Internationalisation***

- Operating internationally has become an important business opportunity for SMEs that have a developed domestic portfolio of valuable and rare resources and wish to expand rapidly.
- Size, international experience through building networks and use of new technologies and innovation are key factors driving SMEs' internationalisation.
- Kent SMEs encounter opportunities through product differentiation and focus on quality.
- Kent SMEs lack the ability to develop external networks. Being part of external networks would allow for the utilisation of other firms' international experience. Future policy should aim to address this by focusing on the creation of external networks and linking SMEs with suitable international partners.
- Kent SMEs do not rely on government initiatives to support their activities and lack of engagement with national and local support mechanisms is evident. Kent SMEs view national and local government as a facilitator for their activities through the reduction of obstacles (legislation and bureaucracy) and less as a contributor through direct counselling and source of advice on, for instance, funding.
- Kent SMEs tend to show an inward looking approach with current focus on domestic rather than international markets but represent a potential for increasing internationalisation trend.
- Exports are still a small proportion of the economic activity and only is specific to some sectors such as manufacturing, professional science and information technology.
- EU markets dominate with over 80% of exporting and 70% of importing firms suggesting that these are the most important markets. Emerging markets such as India and China play a much more important role for importers.
- For Kent SMEs the decision to internationalise is a strategic one when they aim to increase growth or profits and not a reaction to the move of competitors or for survival. This is further verified by the relatively positive performance of export activity.

- The importing activity is much less important for Kent SMEs and a substantial proportion of companies that import are exporters as well.
- The corporate characteristics of Kent SMEs influencing exports and imports:
  - Customer focus enhances the export intensity.
  - Technological intensity and customer focus lead to higher export performance.
  - Industry classification determines import intensity and import performance.

#### ***Barriers to internationalisation***

- SMEs are wary of unfavourable foreign rules and regulations, high tariff barriers and inadequate property rights protection when considering internationalisation.
- SMEs are also influenced by high costs of customs administration and restrictive technical standards. Internal barriers relate to informational issues where SMEs lack access to important information for internationalisation, functional that correspond to resource constraints faced by SMEs and related to marketing which have to do with product characteristics.
- Kent SMEs are driven towards internationalisation by product characteristics and not the development of an international network.
- The lack of access to funding and the lack of awareness of relevant funding schemes and also low in-house experience are key barriers for Kent SMEs.

#### ***Facilitators to internationalisation***

- Kent SMEs consider advice and support for internationalisation important but they require access to specialised information such as access to customers and marketing.
- Access to this type of specialised information might have a positive effect to the more efficient distribution of internal resources thus tackling the most important barrier to internationalisation.

#### ***Support Mechanisms***

- A substantial number of support mechanisms exist, often without any significant coordination. Federation of Small Businesses, Institute of Directors and Kent Invicta Chamber of Commerce are the most recognisable ones by Kent SMEs, and also UK Trade and Investment (Department for International trade) and Gov.Uk emerge also as significant support mechanisms specifically for exporters.
- Despite the relatively high awareness there is little use. The diversity of mechanisms creates confusion for SMEs that do not wish to spend substantial time in searching for the most appropriate support.
- In terms of effectiveness the general support mechanisms tend to score high in the wider population but for exporters the more specialised mechanisms, such as UK Export Finance, Export Britain and Federation of Small Businesses are considered very effective.

#### ***Brexit Implications***

- Currently 1 in 4 companies do not have a full understanding of Brexit impact.
- Industries (primarily services) face the uncertainty of a post Brexit regulatory environment that will no longer be governed by EU regulations. There is no certainty around what the new UK regulations will look like.
- Liberalisation will have positive effects in industries such as accommodation, construction, human health, professional science.
- Administrative support, art and recreation, education, information and communications and manufacturing anticipate a negative impact from Brexit, either due to the loss of access to markets or uncertainty with regards to the regulatory environment.
- In the case of exporters, the proportion of firms that expect a negative impact is close to 60%. This is not unexpected given the uncertainty of the post Brexit trade relationship with other EU markets and the importance of these markets for SMEs located in Kent.

- Positive impact also diminishes due to a potentially weaker pound sterling and its effect on the competitiveness of these organisations to service through imports the UK market or produce final goods with the use of imported raw materials and intermediate goods in the UK market.
- Not all industries will be affected by the same factors. Human resources, low or semi-skilled, such as accommodation, agriculture and transport or highly skilled such as art and recreation, education, information and communications, professional science and trade have indicated that free movement of labour is an important factor in their consideration
- Access to markets is an important factor across industries with manufacturing showing the highest overall proportion of firms, slightly over 60%.
- Brexit success or failure will be based on the negotiated trade terms that will give companies access to markets.

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## Introduction

### Background

This report states the research work commissioned by the Kent County Council (KCC) to investigate the internationalisation status of SMEs located in the county of Kent, UK. Similar in its aims to its 2010 predecessor – the Kent Business Internationalisation study (2010), this report focuses on understanding the existing levels of SME international activities; the drivers of and barriers to SME cross-border activities; offers evidence on and effectiveness of existing support mechanisms and importantly contributes to the discussion of Brexit impact on SMEs' internationalisation strategies.

### Defining 'SMEs' and 'Internationalisation'

According to sections 382 and 465 of the Companies Act 2006 SMEs are non-subsiary, independent organisations. A small company is one that has a turnover of not more than £6.5 million, a balance sheet total of not more than £3.26 million and not more than 50 employees. A medium-sized company has a turnover of not more than £25.9 million, a balance sheet total of not more than £12.9 million and not more than 250 employees. SMEs significantly contribute to economic growth as they create employment opportunities, contribute to achieving higher production volumes, boost exports of the country and introduce innovation. To be precise SMEs account for 98 per cent of all enterprises and two-thirds of the employment across the Organisation for Economic Cooperation and Development countries (Fliess, Busquets 2006).

This report applies a working definition of internationalisation beyond referring to the typically used indicators of international business activity, i.e. exporting, importing and inward (foreign direct) investment. Instead, given the SME focus, the attention is on a specific range of SME international activities – i) export/import activities (including both direct and indirect); ii) collaborative partnerships set up for the purpose of developing products and services as well as exchanging ideas and best practice; iii) networks of business people outside the UK.

## The scope and objectives of the study

The goal of this study is to contribute to a better understanding of the current internationalisation levels of Kent SMEs by identifying key drivers and appreciating existing barriers in order to develop and operate under an institutional support viewed by businesses as a credible enabler of their internationalisation potentials. The scope of the Kent Internationalisation Study (2016) was set out by the Kent County Council (KCC) and in agreement with Kent Business School (KBS), KCC's research partner, the primary focus and key research aims (RAs) have been defined as follows:

RA 1: To determine current levels of internationalisation among Kent businesses and compare them with those identified in the 2010 Kent International Business Study (KCC, 2010)

RA 2: To assess the effectiveness of existing business support policies, mechanisms & services and identify gaps & opportunities.

RA 3: To evaluate the potential impact of the EU referendum result on the internationalisation decisions of Kent businesses.

RA 4: To make recommendations about how to increase internationalisation capacity and activity among Kent businesses.

In order to address the above four aims we adopted a quantitative approach, through the use of a survey instrument distributed to SMEs located in Kent. The quantitative approach differentiates this study from its predecessor, in 2010 that followed a qualitative approach with the use of interviews. A quantitative approach was considered more appropriate this time due to the need to create some generalizable findings and solicit views from a wider group of SMEs in order to evaluate the recommendations of the 2010 study. The information provided in the next section highlights the key parameters of our survey.

## The survey: sample characteristics, methodology and confidence levels

### Kent Business Population and Characteristics

Our starting point was to understand Kent's overall business population and the changes that have taken place since the 2010 study. Our benchmark data comes from the Office of National Statistics (ONS) and more specifically the Interdepartmental Business Register (IDBR). The three tables below present Kent's business population by size (in terms of employment - Table 1 and turnover -

Table 2) and by economic activity (Table 3). In parallel, we present the same data for the overall UK business population to establish whether Kent’s profile differs significantly from the rest of the UK.

*Table 1 Business distribution by employment size*

	Count of Enterprises		Proportion of population	
	United Kingdom	Kent	United Kingdom	Kent
<b>Employment size band: 0-4</b>	1,985,220	45,775	77.71%	77.67%
<b>Employment size band: 5-9</b>	292,260	6,965	11.44%	11.82%
<b>Employment size band: 10-19</b>	148,815	3,375	5.83%	5.73%
<b>Employment size band: 20-49</b>	78,635	1,735	3.08%	2.94%
<b>Employment size band: 50-99</b>	25,485	575	1.00%	0.98%
<b>Employment size band: 100-249</b>	14,405	315	0.56%	0.53%
<b>Employment size band: 250+</b>	9,690	195	0.38%	0.33%
<b>Employment size band: Total</b>	2,554,510	58,935	100.00%	100.00%

Source: ONS – IDBR 2016

Table 2 Business distribution by turnover (Thousands)

	Count of Enterprises		Proportion of population	
	United Kingdom	Kent	United Kingdom	Kent
Turnover size band: £0-49	433,115	9,225	16.95%	15.65%
Turnover size band: £50-99	604,100	13,625	23.65%	23.12%
Turnover size band: £100-249	795,665	18,865	31.15%	32.01%
Turnover size band: £250-499	309,745	7,610	12.13%	12.91%
Turnover size band: £500-999	181,145	4,335	7.09%	7.35%
Turnover size band: £1000-1999	103,920	2,535	4.07%	4.30%
Turnover size band: £2000-4999	69,925	1,605	2.74%	2.72%
Turnover size band: £5000-9999	26,620	570	1.04%	0.97%
Turnover size band: £10000-49999	22,825	445	0.89%	0.76%
Turnover size band: £50000+	7,450	125	0.29%	0.21%
Turnover size band: Total	2,554,510	58,940	100.00%	100.00%

Source: ONS – IDBR 2016

Table 3 Business distribution by economic activity

	United Kingdom	Kent	United Kingdom	Kent
SIC07: 01-03 : Agriculture, forestry & fishing	147,600	2,295	5.78%	3.89%
SIC07: 05-39 : Production	146,320	3,280	5.73%	5.57%
SIC07: 41-43 : Construction	301,855	9,120	11.82%	15.47%
SIC07: 45 : Motor trades	73,460	1,785	2.88%	3.03%
SIC07: 46 : Wholesale	103,985	2,575	4.07%	4.37%

<b>SIC07: 47 : Retail</b>	192,395	4,135	7.53%	7.02%
<b>SIC07: 49-53 : Transport &amp; Storage (inc. postal)</b>	92,860	2,165	3.64%	3.67%
<b>SIC07: 55-56 : Accommodation &amp; food services</b>	148,020	3,335	5.79%	5.66%
<b>SIC07: 58-63 : Information &amp; communication</b>	206,960	4,170	8.10%	7.08%
<b>SIC07: 64-66 : Finance &amp; insurance</b>	52,435	1,225	2.05%	2.08%
<b>SIC07: 68 : Property</b>	90,990	1,790	3.56%	3.04%
<b>SIC07: 69-75 : Professional, scientific &amp; technical</b>	458,600	10,420	17.95%	17.68%
<b>SIC07: 77-82 : Business administration &amp; support services</b>	208,465	5,070	8.16%	8.60%
<b>SIC07: 84 : Public administration &amp; defence</b>	6,985	255	0.27%	0.43%
<b>SIC07: 85 : Education</b>	41,850	1,075	1.64%	1.82%
<b>SIC07: 86-88 : Health</b>	113,475	2,590	4.44%	4.39%
<b>SIC07: 90-99 : Arts, entertainment, recreation &amp; other</b>	168,255	3,650	6.59%	6.19%
<b>SIC07: Total</b>	2,554,510	58,935	100.00%	100.00%

Source: ONS – IDBR 2016

It is evident by the three tables above that Kent's economic activity profile does not substantially differ from the overall profile of United Kingdom. Kent is a region where the vast majority of the firms belong to the micro category (less than 10 employees). Construction together with professional, scientific and technical services account for more than a third of the companies.



### Methodology: Database description and search

For the purposes of this study we have relied on data provided by FAME. FAME is a database compiled by Bureau Van Dijk and covers over 9 million companies in UK and Ireland. It includes companies that are not required to file accounts or have yet to file accounts and thus the population coverage is much wider than the data provided by the Office for National Statistics who exclude companies below the tax threshold. We have based our search on the basis of the postcode of either the registered office address or the primary trading address. Our search resulted in 111,737 enterprises in the region. We have then identified those organisations with an e-mail address and this resulted in 17,357 enterprises (15.53% of the population). These companies were contacted over October and November (the actual period of data collection was between the 10<sup>th</sup> of October and the 30<sup>th</sup> of November) in order to explore their views on internationalisation.

### Distribution list and questionnaire distribution

The distribution of questionnaires took place in two phases. The first phase was between the 10<sup>th</sup> and the 24<sup>th</sup> of October. Table 4 below shows the distribution of the first wave of questionnaires.

*Table 4 Distribution of first wave of questionnaires (10th of October 2016)*

Category	Size	Proportion
Emails sent	17,357	100.00%
Emails failed	0	0.00%
Emails bounced	1,758	10.13%
Emails duplicate	680	3.92%
Surveys started	357	2.06%
Surveys finished	178	1.03%

The second phase took place between the 25<sup>th</sup> of October and the 30<sup>th</sup> of November. A reminder e-mail was sent to participants that have not responded or finished their survey. This reminder excluded those enterprises that decided to opt-out of any further communication.

Table 5 below shows the distribution of the reminder campaign.

*Table 5 Distribution of second wave of questionnaires (25th of October 2016)*

Category	Size	Proportion
Emails sent	9,939	57.26%
Emails failed	0	0.00%
Emails bounced	1,250	7.20%
Emails duplicate	0	0.00%
Surveys started	134	0.77%
Surveys finished	90	0.52%

Over the two rounds we had a total of 491 responses (3.29% response rate) and 268 completed questionnaires (1.80% completion rate). Although this sample is rather small in comparison to the wider population, as it will be shown further below, it is representative and large enough to allow for statistical inference with regards to the behaviour of Kent's business population.

It is worth noting that the questionnaire was also distributed through an e-mail news bulleting to the Kent International Business and the Institute of Directors distribution lists but unfortunately the response rate was very poor (5 responses in total) and therefore we decided not to include those in our analysis.

## Sample and representation

### *Non-respondent bias*

An important testing in all surveys, especially those with relatively small sample sizes and low response rates, is the non-respondent bias. The non-respondent bias means that the participants that opted to respond to questionnaires might have different characteristics and thus might provide different responses to the ones that decided not to participate. In our case, for example, companies with limited resources that do not have enough time might have decided not to respond to the survey. In order to test for non-respondent bias, we tested the characteristics of the early respondents (first 10%) with those of late respondents (last 10%). The assumption is that the late respondents will have similar

characteristics to those not responding at all. We tested participants’ differences with regards to size (turnover, total assets and employment) as well as their propensity to export and import. In all five cases, shown in Table 6 below, the characteristics of the early to late respondents did not indicate any statistically significant differences. We can therefore argue that the sample included in this study does not have any non-respondent bias.

*Table 6 Non-respondent bias tests*

Variable	F-Stat	Probability
Turnover	0.28	0.76
Total Assets	2.22	0.11
Employees	0.81	0.47
Export	1.21	0.30
Import	0.56	0.57

### Key characteristics

We also wanted to check our sample with regards to representation of the SMEs population. More specifically we wanted to provide the summary statistics for a number of financial variables as well as some variables constructed through responses to survey questions as well as provide some information on the industry classification of respondents. We created three key characteristics of companies that wish to engage in exporting activity. Building on the answers in question one, of the questionnaire, we have identified companies that have a focus on technology, customer focus and partnership focus. We would like to explore further their links with export contribution to the annual turnover and also export performance.

### Creation of composite indices

The elements that contribute to the creation of the three composite indices are the following:

For Technological focus we have used the answers that organisations have given to the following statements:

1. Employs the necessary qualified staff
2. Has modern technological equipment
3. Makes full use of information technologies
4. Invests in the development of innovative products
5. Supports our employees to participate in training regularly

For Customer Focus we have used responses to the following statements:

1. Works closely with its customers to better understand their needs
2. Provides a high level of customer service
3. Provides a high level of expertise and experience

Finally for Partnership Focus the following statements were used:

1. Constantly researches the market for new partnerships in the domestic market
2. Constantly researches the market for new partnerships abroad

In Table 7 we present the Cronbach’s alpha for the three composite variables. In all cases, alpha is over 0.65 and therefore it is acceptable to put together the three factors.

*Table 7 Cronbach’s Alpha for composite measures*

	alpha
Technological Focus	0.7039
Customer Focus	0.7889
Partnership Focus	0.6569

Table 8 and Table 9 provide a summary of the characteristics of our sample as well as the industrial distribution of companies. Given that the mean can be skewed by the inclusion of a few SMEs that are close to the limit provided by the definition we have provided information on both the mean and the median of the key characteristics. It is interesting to note that the median company (company at the 50<sup>th</sup> percentile) is marginally over 50 employees which shows that the vast majority of the

companies in our sample belong to the micro and small categories. The likelihood of failure shows the probability of companies in our sample to fail and the credit score shows the probability of the company to declare bankruptcy. The credit score is within the normal band which indicates a rare likelihood of bankruptcy but it could still happen subject to substantial changes of the external environment, i.e. Brexit. The distribution of firms within our sample resembles to a great extent the distribution of the wider population in Kent as presented in Table 3.

*Table 8 Sample summary statistics*

Variable	Mean	Median
Turnover	£ 5,046,775	£ 811,240
Total Assets	£ 1,719,378	£ 117,724
Employees	69.25	51.00
Profit/Loss	£ 315,715	£ 22,697
Long Term Debt	£ 1,127,812	£ 159,351
Likelihood of Failure	4.75%	4.50%
Credit Score	53.32	45.00
Technology focused	3.99	4
Customer Focused	4.65	5
Partnership Focused	2.83	3

*Table 9 Sample distribution by industry*

Industry	Percentage
Accommodation	1.89%
Admin Support	12.88%
Agriculture	1.14%
Art, recreation	3.03%
Construction	10.98%
Education	3.03%
Human Health	3.03%
Info and Communications	11.74%
Manufacturing	11.36%

Other service	1.52%
Prof Science	14.39%
Real Estate	2.27%
Trade	9.85%
Transport	3.03%
Unclassified	9.85%
<b>Grand Total</b>	<b>100.00%</b>

### Confidence in deliverables

1. RA 1: To determine current internationalisation levels and identify changes since the 2010 Kent International Business Study (KCC, 2010) this study utilised the KCC and their partners' (e.g. UKTI, EEN, KICC) resources to obtain details of known exporters in Kent who provided primary data in the form of responses to standardised questionnaires. In addition, the use of the FAME database as a secondary data enhanced the sample size.
2. RA 2: To assess the effectiveness of existing international trade support policies & mechanisms and identify key barriers to Kent SMEs' internationalisation activities this study developed a questionnaire which required the participants to comment on the pre- and post-Brexit internationalisation climate.
3. RA 3: Given the current post-EU referendum developments, the Brexit decision and the general uncertainty in the macro-environment, this study used relevant material from the academic research domain particularly concerning trade and the impact on regional development, collaborations and commercial partnerships, foreign direct investment (FDI) opportunities, and Impact on trade in times of political, economic and institutional uncertainty. In addition this study utilised the expertise of the University of Kent's School of Politics and International Relations to provide a robust balanced view.
4. RA 4: To provide a series of recommendations and recommend potential actions to better support the internationalisation of Kent SMEs in the future, this study considered the roles of key

stakeholders by gaining information on these in the questionnaires and assess their (non)changing roles within the power/interest framework given the Brexit. Furthermore, the Executive Summary of this study is to be used to compare the situation in Kent with six other regions involved in the SIE project in order to utilise their international research expertise and to communicate data and findings to international audiences.

## Kent SMEs and Internationalisation: Appetite lost or gained?

### General picture: motivations, markets and entry modes

The current phenomenon of globalisation has altered the SME growth model as it allows SMEs to expand into international markets quicker and more efficiently and it assists with the advancement of their business activities to a highly competitive level (Federation of Small Businesses, 2016). Operating internationally has become an important business opportunity for SMEs that have developed domestically a portfolio of valuable and rare resources. SMEs aim to grow through internationalisation, especially in highly competitive or saturated markets (Lu, Beamish 2001). The internationalisation strategy though depends on the availability and competitive quality of a firm's resources and capabilities (Barney 1991). It has been suggested that key factors that influence SMEs internationalisation are size, international experience, use of new technologies and innovation. Importantly, SMEs need to make a strategic decision whether they improve and expand their product markets through innovation or they focus on internationalisation and focus on expanding into new geographical markets. It is perfectly possible that strategic focus on innovation and export activities can be complimentary as the presence in foreign markets can lead to learning and thus enhance innovation performance Golovko and Valentini (2011). External factors also affect the international strategy of SMEs. Firms experience pressures or pull factors in their domestic markets, which act as triggers for the internationalisation decision (Makhija 2003). Such triggers may be changes in the business environment such as for instance an institutional reform or change in the nature of international trade agreements as it is currently in the case of Brexit. Additionally, the network-based pull factors (Zahra, Hayton et al. 2004) may also drive firms to foreign markets. This is as a result of firms' efforts to build on existing relationship with suppliers and other partners, as these connections provide them with an advantage of having access to formal and informal sources of information and contacts. The study conducted in 2010, stated that exporting activity tended to be triggered primarily due to Kent's businesses desire to find new customers, seeking information and advice and as a result



of historic path dependent behaviour. Motivations for other international activities were not identified. With respect to barriers, unsuitability of products/services to foreign markets; insufficient time available for business to consider internationalisation; concerns regarding the access to clients; language barriers and cultural differences in general; as well as the presence of local competitors scored significantly. Nevertheless Kent businesses did not score disproportionately differently from the ones in different UK regions.

### Internal assessment - current

Our first few questions addressed the way companies evaluate their internal environment and their strategic decision making. This would allow us to evaluate the existence of factors that can be used for internationalisation. In other words we wanted to explore whether Kent SMEs start with an inherited disadvantage or not in their internationalisation efforts through the existence of factors that foster internationalisation. This information is presented in Figure 1. We have asked companies to evaluate a number of statements<sup>1</sup> that characterise their focus with regards to products and services but also their links with and embeddedness in the external environment. The top subjective characteristics on how companies view themselves are related to the quality of products and services offered, the close working relationship with customers and the employment of qualified staff. This suggests that companies that responded, follow predominantly a strategy of product differentiation as they focus on quality and high perceived value of their offerings and work closely with customers to ensure the appropriate provision of products and services.

The least frequent characteristics targeted firms associated themselves with are related to the development of partnerships, both abroad but also in UK, the family type corporate structure, their

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<sup>1</sup> The figures show the mean answer for our sample on a 5 points Likert scale (5-strongly agree to 1 strongly disagree)

focus on few customers (i.e. narrow target groups) and the obstacles these companies face when engaging in transactions with the public sector. It appears that the companies responding do not consider the bureaucracy of engaging with the public sector to be an issue for their operations, they do not engage in a focused business strategy and are quite inward looking or conservative when it comes to an active search for partnerships, however this does not appear to be due to the tight management control of a family owned business. The above characteristics provide a mixed picture with regards to the factors fostering internationalisation. On the one hand companies do use new technologies and can be considered innovative but on the other they do not proactively build networks and therefore miss significant opportunities abroad.

### Internal assessment - future

The next question focused on the investigation of factors that influence the future direction and development of the company (Figure 2). The results mirror and reinforce our findings above showing that the development of Kent businesses is linked strongly with their ability to pursue and innovative focus, build a strong brand name, invest in new technologies and innovation. It is also interesting to note the high focus of these companies on searching for opportunities that help the development of local markets in contrast to the development of opportunities for opening up new markets abroad. Another important finding here relates to the approach these companies have towards human capital and its development as both factors such as training for human resources and the search for capable executive staff are ranked very low. This is in direct contrast to the innovation efforts of these companies.

### External environment conditions

When companies were asked specifically on the factors from the external environment that influence their business focus and activities (Figure 3), in either a positive or negative way, the key factors identified were the legislative environment and the utilisation of communication technologies. The least important factors related to the management of energy (cost of energy, waste water etc.) and the improvement of counselling/support services to SMEs by the public sector. The key statements

around government/public sector involvement in this question score relatively low showing an overall disengagement of the companies responding to the support offered by the public sector both in terms of counselling as well as finance and infrastructure.

## Internationalisation and performance

The key focus of this report is to explore the internationalisation patterns of SMEs located in Kent and therefore the next set of findings relate to the way respondents internationalise, either through export or import activities.

### Current exporters

Just over a third of the companies responding to our questionnaire reported some engagement in export oriented activity. Whilst this is relatively high and does not compare with the data provided by the Internationalisation study conducted in 2010, there is no recent benchmark study that offers levels of internationalisation through exports at the county level (i.e. Kent) for the UK. The number captured here demonstrates that there is definitely a positive trend in exporting as an operation mode for many companies located in Kent to internationalise and grow.

When assessing the overall internationalisation levels through exports (Figure 5), a large group of sampled companies consider exporting only a small part of their overall activities with almost a third of the respondents noting that the contribution of exports to their turnover does not exceed 10%. However, 36% of companies in the same sample maintain that export activities contribute to 50% or more of their turnover, with 10% of Kent firms stating 90% and higher dependence on exports. These firms tend to come from manufacturing, professional science, and information and technology sectors (Figure 6).

### Key markets

The findings with regards to the key markets, presented in Figure 7, are not unexpected, but are unquestionably worth a comment, especially in the context of the decision of the UK to leave the EU and the Single Market. Over 80% of the companies considered EU markets their key ones for

internationalisation with United States and United Arab Emirates following. Emerging markets, such as China and India, are still relatively low on the list. This finding demonstrates the significant importance, of EU markets, for Kent located companies.

### Reasons for internationalisation

When companies were asked to evaluate the reasons that led to the internationalisation decision in the first place, the most important factor was the existence of opportunities abroad followed by an increase in the growth of the organisation's earnings. Figure 8 shows the key factors contributing to the initial internationalisation decision. It appears that the decision to internationalise is a strategic one for SMEs in order to explore their assets abroad and generate additional earnings. Only a few number of companies considered internationalisation a reactive move that could help the company survive or follow its competitors.

### Key reasons for continuation

When companies were specifically asked about the key reasons that drive their decision to maintain their exporting activity after their initial decision to internationalise, these were identified as an expansion of the client base and the exploration of new markets, as well as, the involvement with businesses outside the UK. Figure 9 presents the key driving factors supporting the maintenance of internationalisation activities. The decision to internationalise and export appears to be a strategic decision, as most companies disagreed with the statement indicating that this has happened due to luck and it is not always related to the saturation of the domestic market.

### Evaluation of export performance

As it can be seen if Figure 10, the overall self-evaluation of the companies' export performance is quite positive with over 68% of the respondents feeling somewhat or extremely satisfied by their export performance. This finding further reinforces our previous arguments with regards to the nature of internationalisation. Despite the challenges SMEs face from the external environment and the lack of resources, when they decide to internationalise, this is a strategic decision, and thus impacts in a

positive way in their overall performance. Figure 11 reveals some interesting patterns across a number of industries. Companies in construction, trade, agriculture, transport, manufacturing and information and communications evaluate their performance higher in contrast to the rest of the industries.

### Importers

As can be seen in Figure 12, a smaller proportion of the companies included in the sample indicated that they are internationalising through importing activity. Only one in four companies are currently engaged in some form of importing of goods and services. It is interesting to note that almost 40% of these companies have also indicated an engagement with export activity as well. This means that the total number of companies located in Kent that they only import is relatively low and is approximately 14%.

### Contribution to firm's economic activity

Contrary to exporting that is usually a parallel activity to the domestic activity for the majority of companies, when it comes to importing, a substantial number of companies suggested that contributes up to 30% of their economic activity. As it can be seen in Figure 13, more specifically, over 60% of the companies responded that exporting is up to 30% of their economic activity whilst over 13% of the companies considered importing their main economic activity with a contribution of over 90%. The industry dimension here offers an interesting insight. Data in Figure 14 shows that accommodation, education, administrative support and trade have a number of companies where imports generate a substantial amount of their economic activity, in some cases over 90%.

### Key markets for importers

A similar pattern to exporting emerges when it comes to the key markets for importers. Figure 15 clearly shows that over 70% of companies indicated that other EU markets are important and just over 42% indicated the United States. The main difference is, when it comes to importers, emerging markets such as China and India are relatively important with over 35% and 8% of the companies considering these two as important markets.

### Assessment of import performance

A significant number of companies, over 65%, consider their import performance somewhat satisfactory or extremely satisfactory indicating that again once companies decide to engage with importing activity they also perform relatively well. The findings presented in Figure 16 clearly indicate the success of importers. This is of course not the same across industries, as it can be seen in Figure 17. Administrative support and manufacturing tend to outperform all other industries.

### Analysis of characteristics

Some additional statistical analysis was performed to the export intensity (proportion of exports), export performance, import intensity (proportion of imports) and import performance to demonstrate whether the industrial classification, the technological intensity, the customer focus and the partnership focus impact on the above mentioned variables. The results, presented in Table 10 show a number of interesting findings. With regards to export intensity the most important factor playing a positive and statistical significant role is the customer focus of the organisation. For those companies that listen to customers, innovate in their offering as well as provide high quality products exports are a substantial part of their activities. In addition to this companies that have both customer focus as well as technological focus tend to outperform the other in terms of export performance. These two factors, therefore can enhance the firm's success in international markets.

With regards to imports the findings are rather simple. The key factor distinguishing both import intensity and import performance is the industrial classification of the firm. Specific industries, for example manufacturing, have an advantage that allows them to differentiate both in terms of intensity as well as in terms of superior performance.

Figure 1 Key corporate characteristics

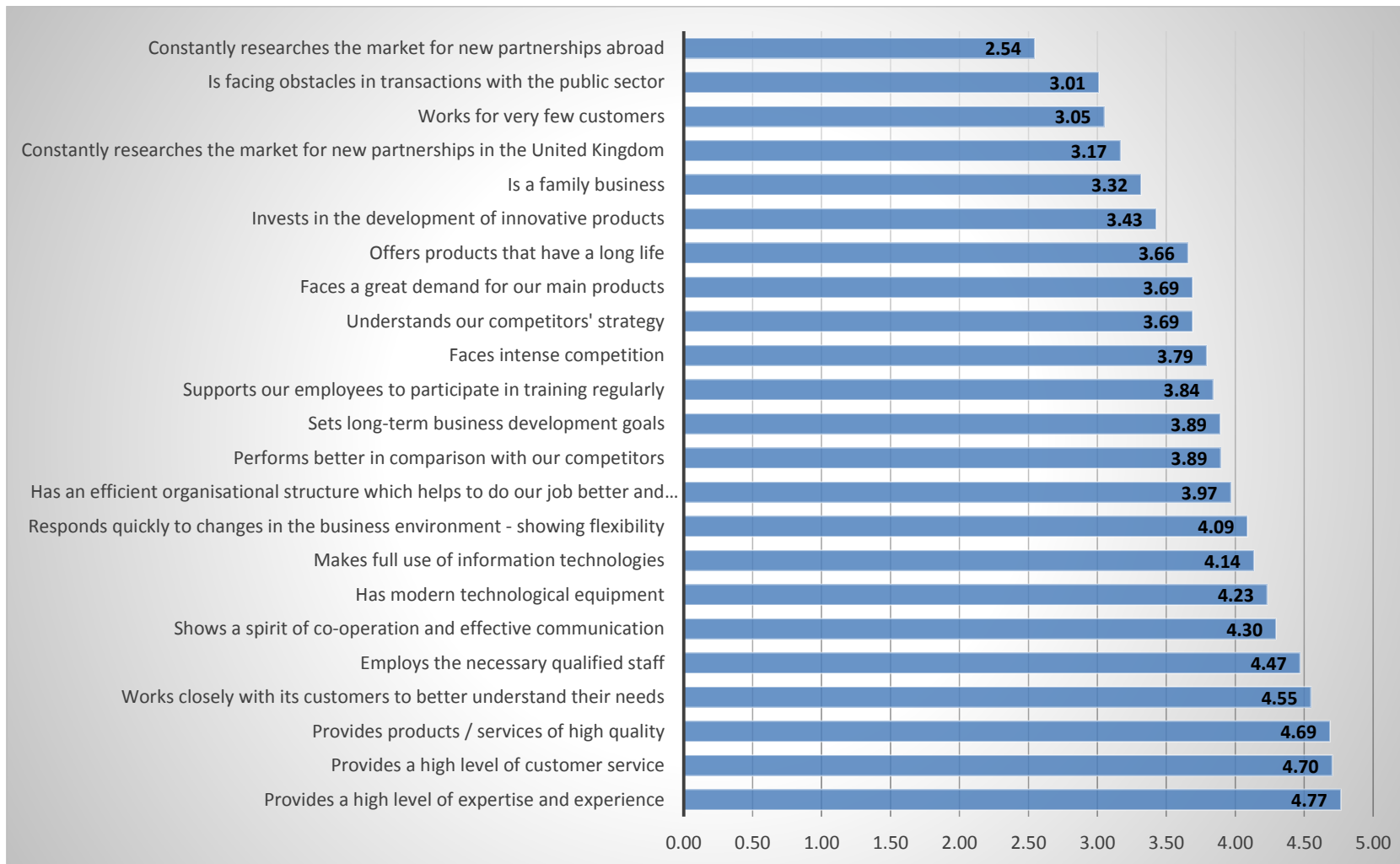


Figure 2 Factors influencing the company's development

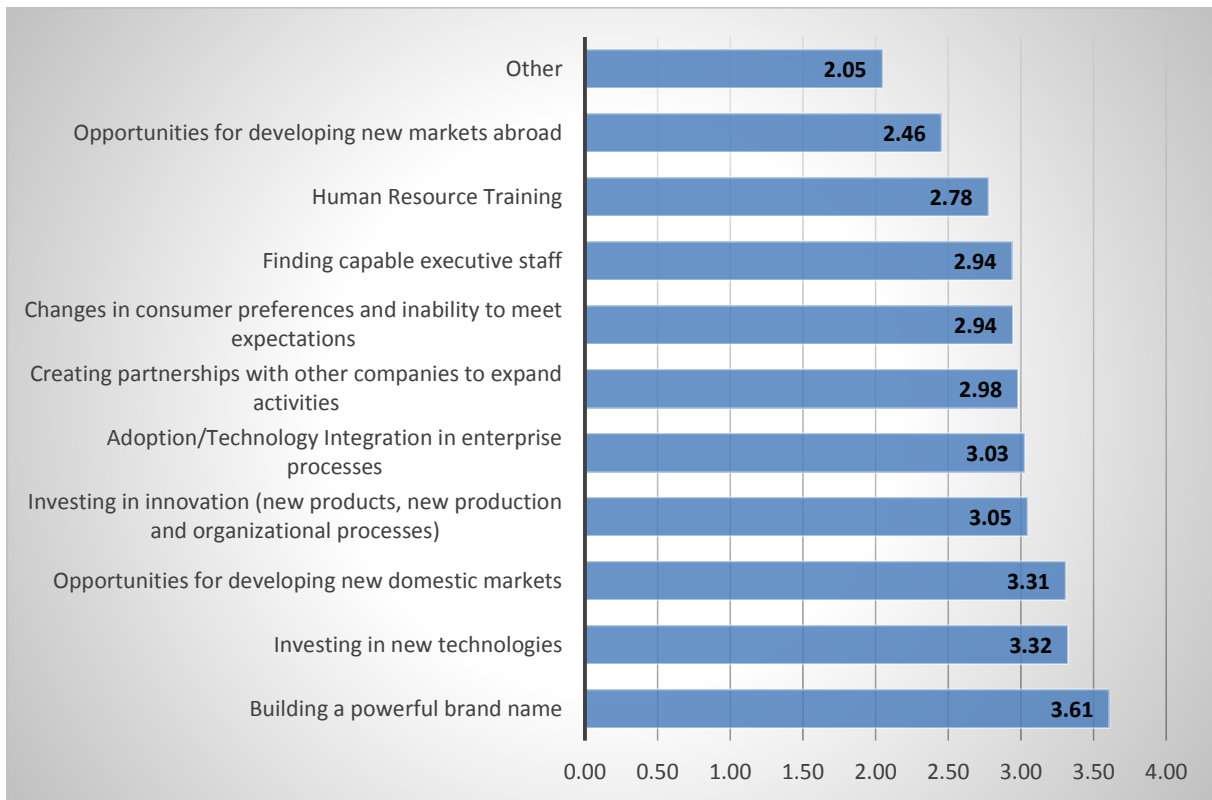


Figure 3 Issues affecting the external environment

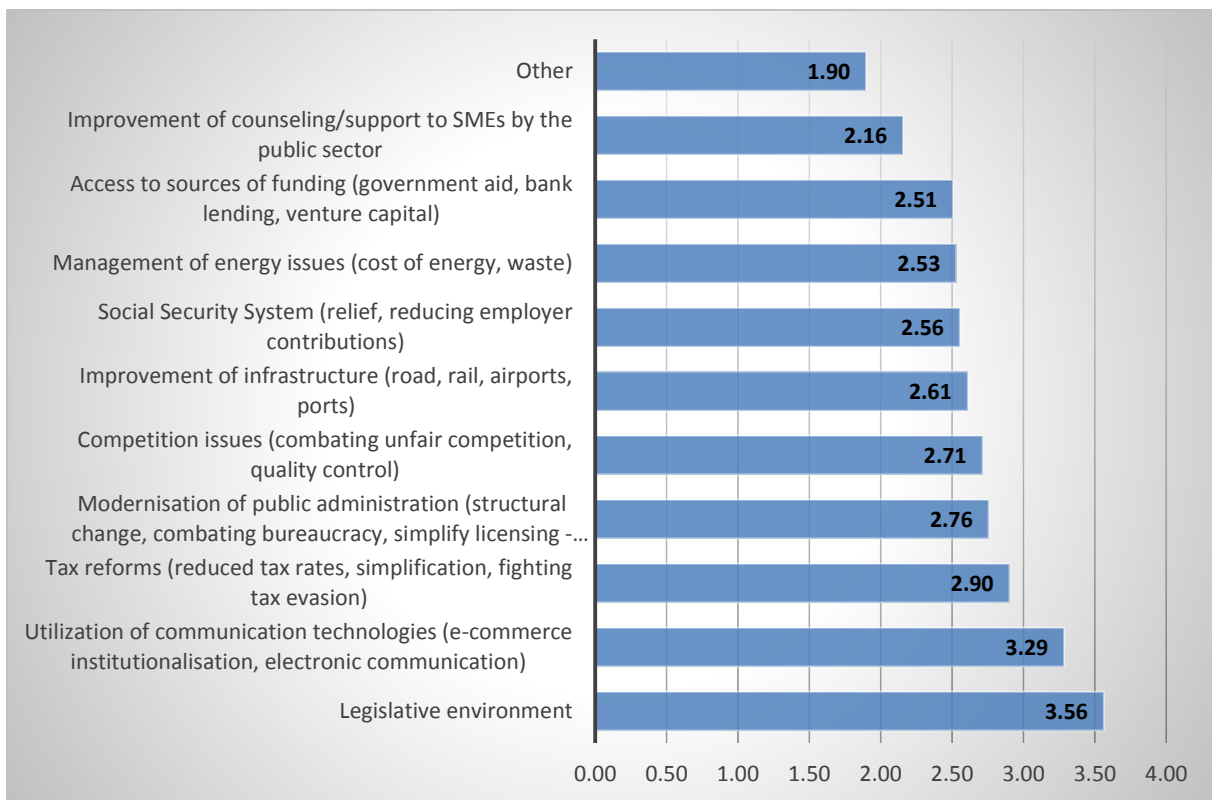




Figure 4 Proportion of exporters

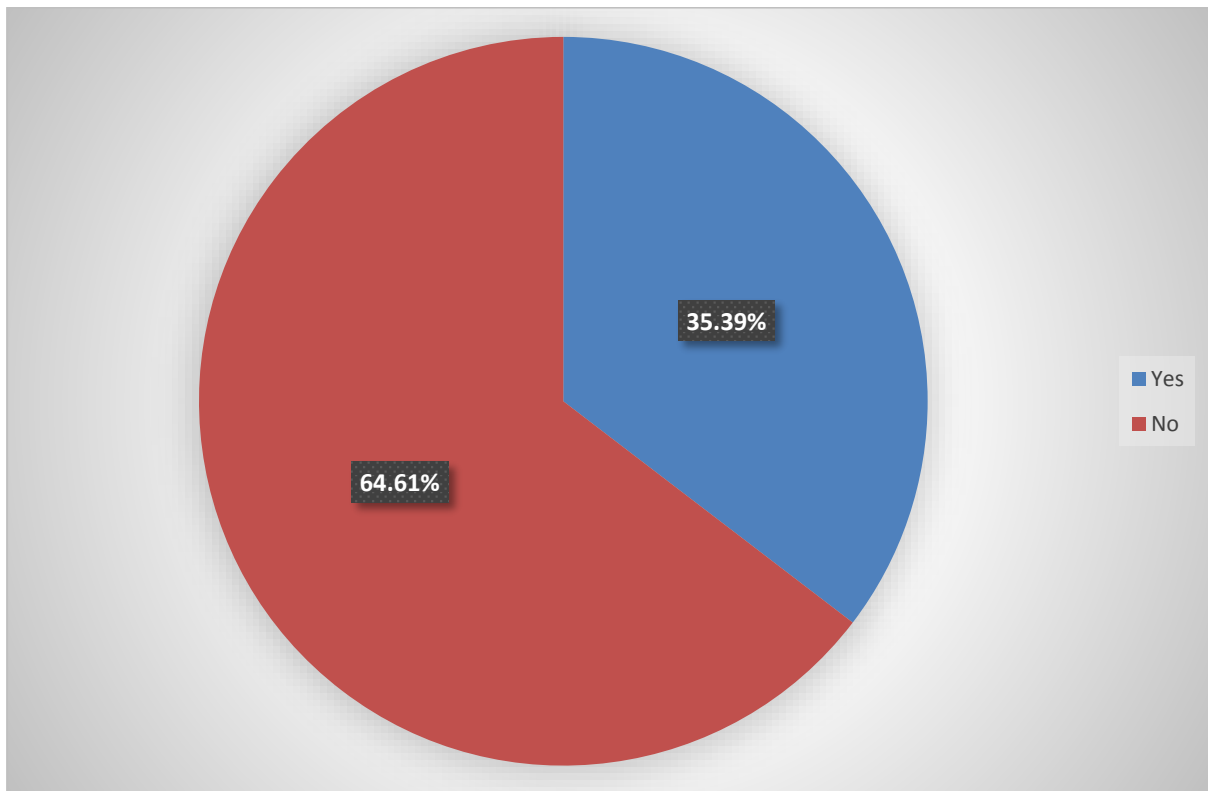


Figure 5 Contribution of exports in annual economic activity

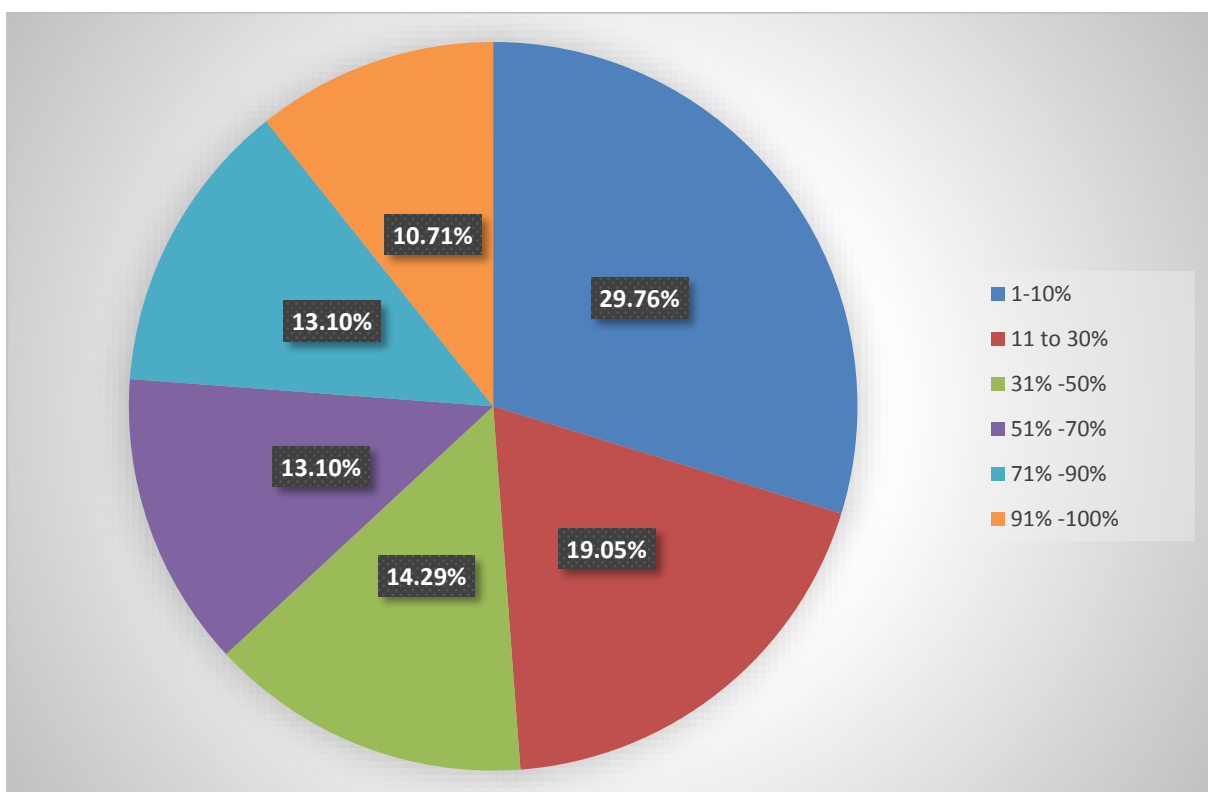


Figure 6 Contribution of exports in annual economic activity by industry

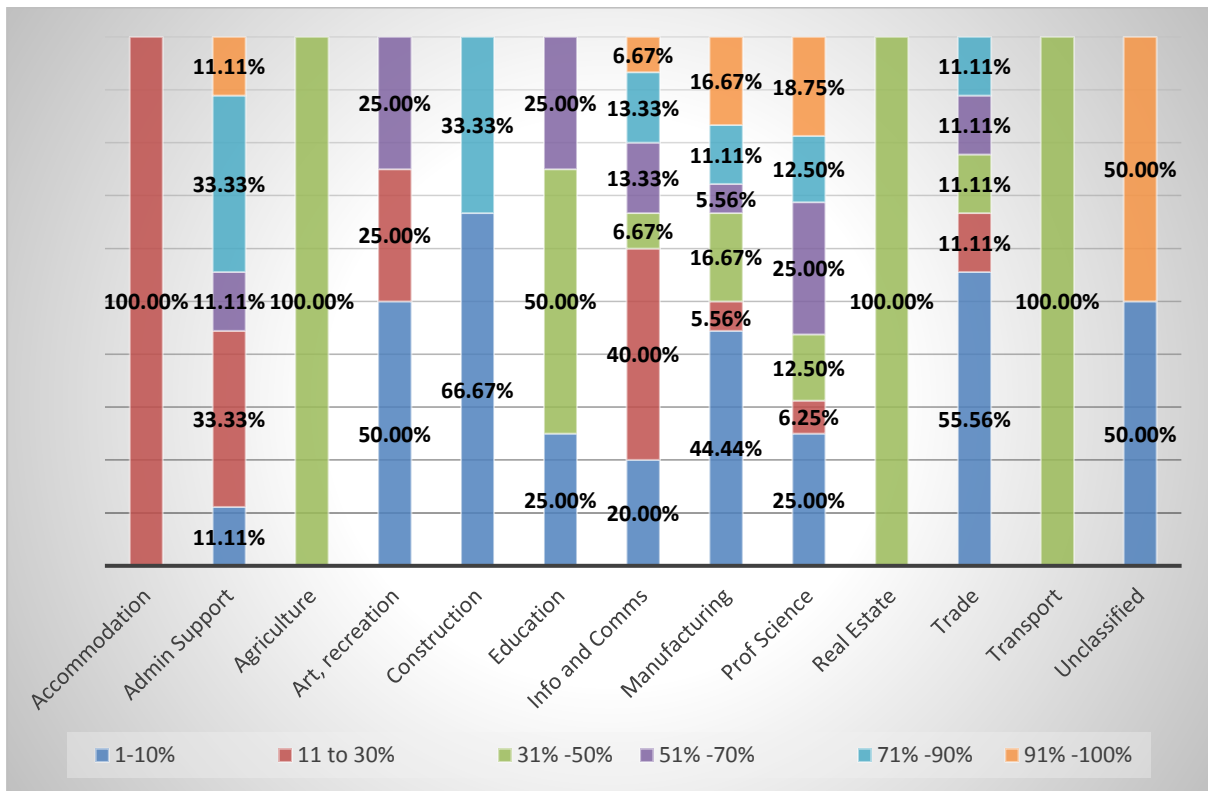


Figure 7 Key export markets

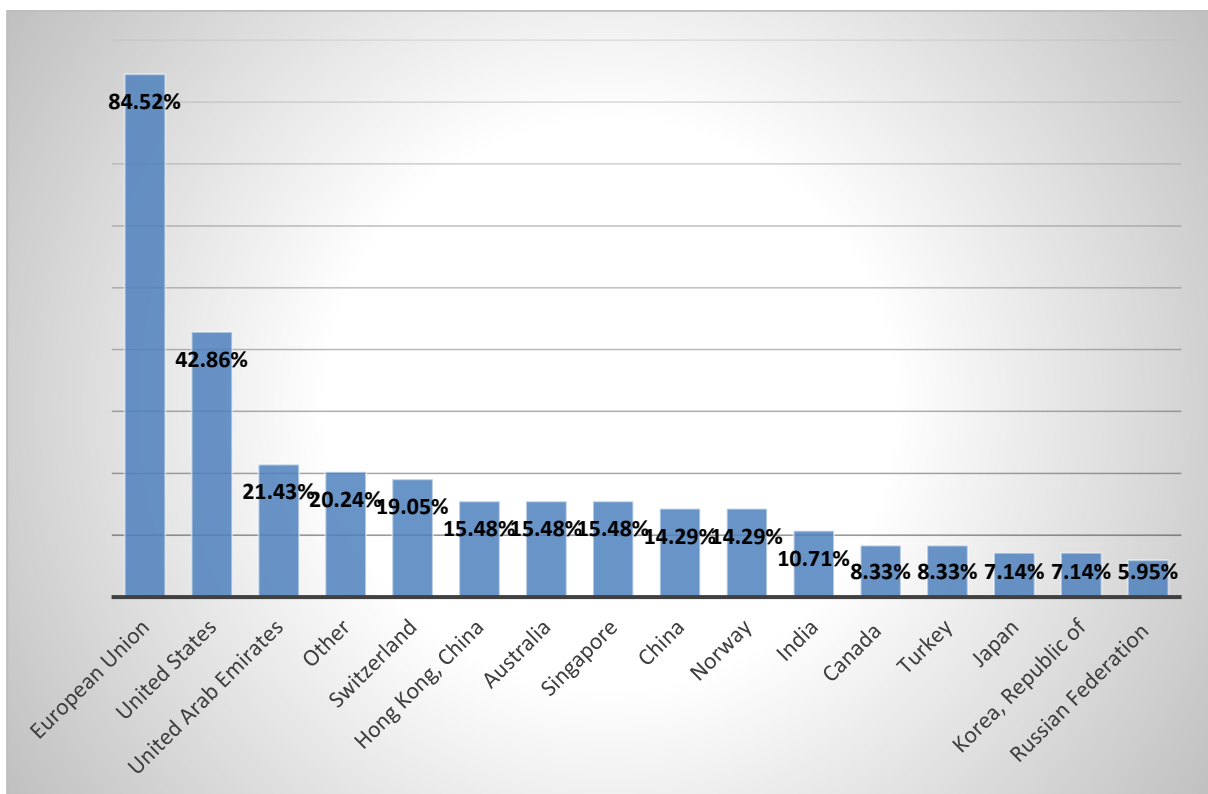


Figure 8 Rationale for exporting (initial decision to engage in exporting activity)

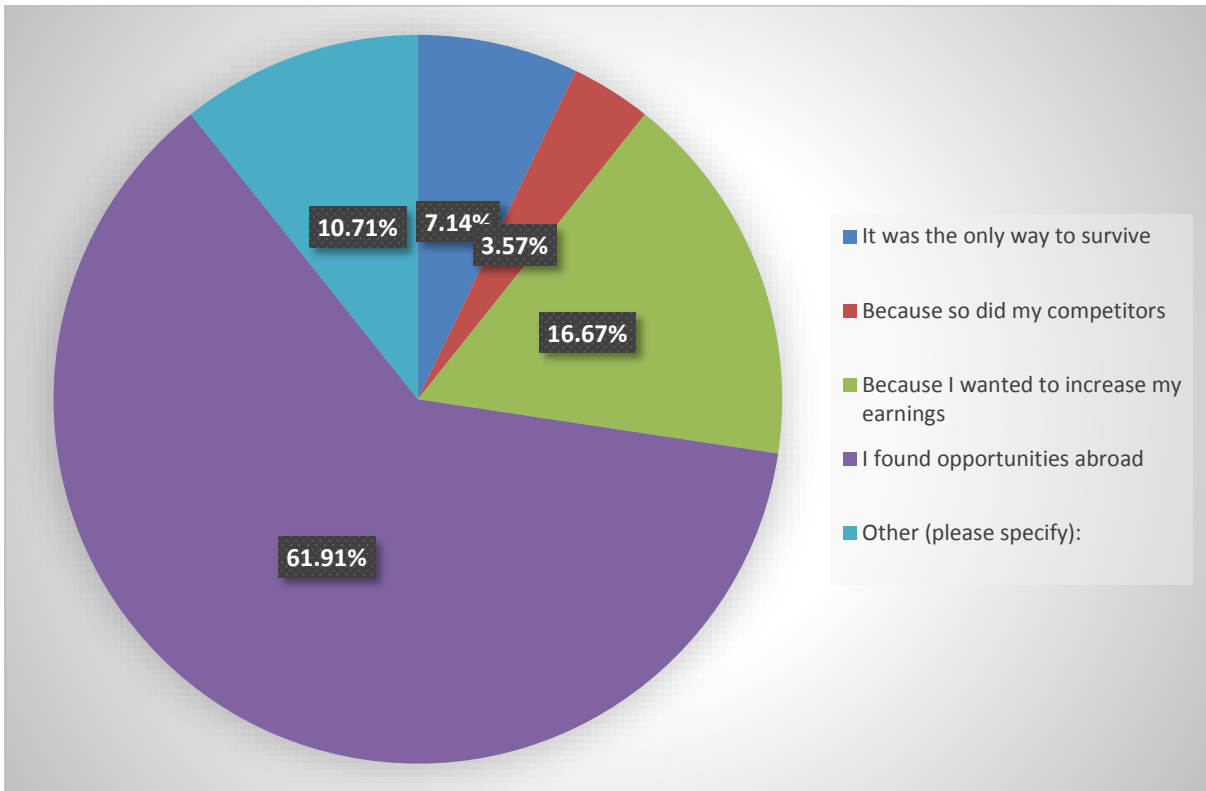


Figure 9 Reasons supporting continuous exporting activity

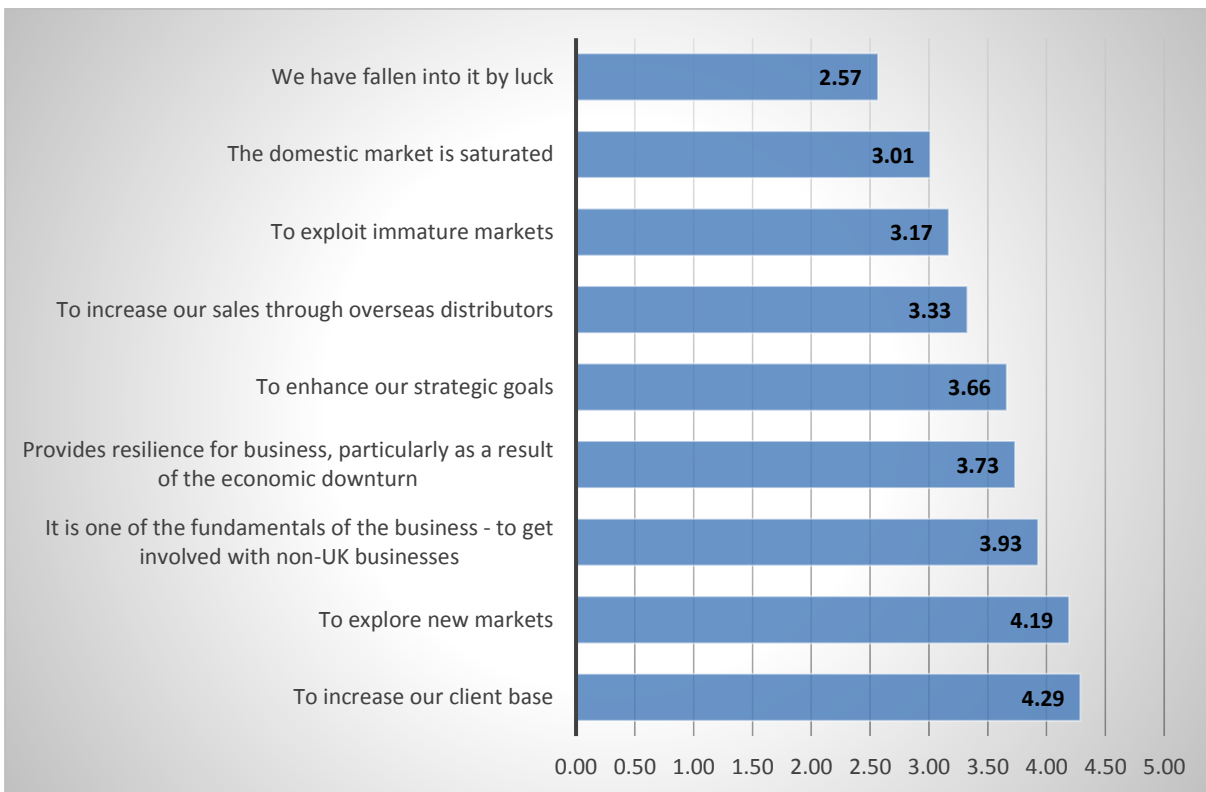


Figure 10 Subjective performance evaluation of exporting activity

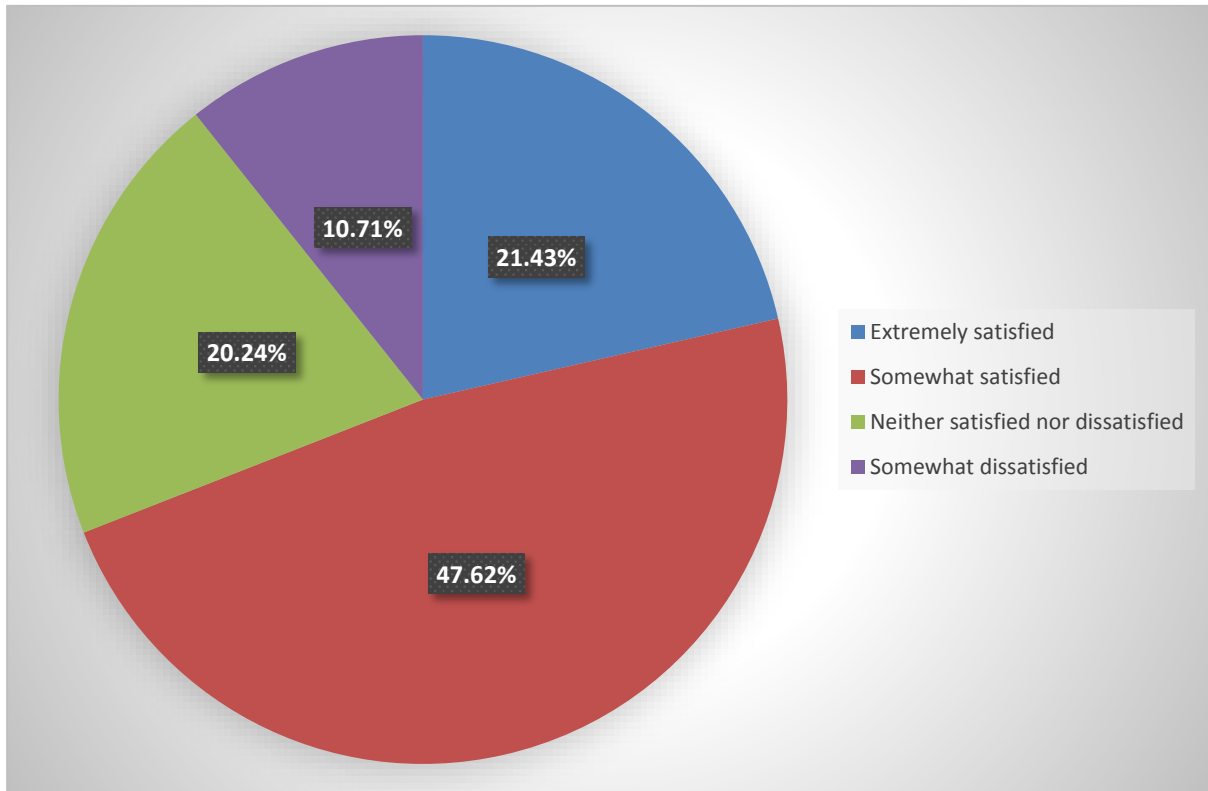


Figure 11 Subjective performance evaluation of exports by industry

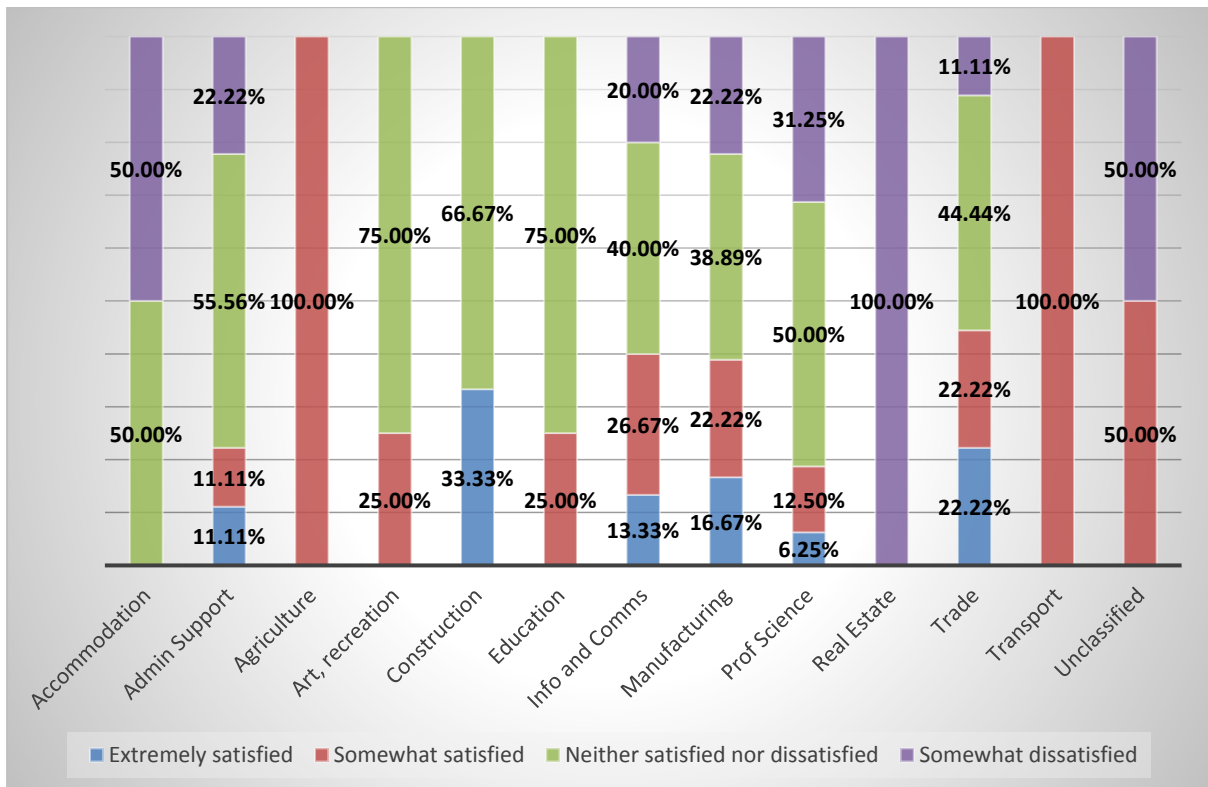


Figure 12 Proportion of importers

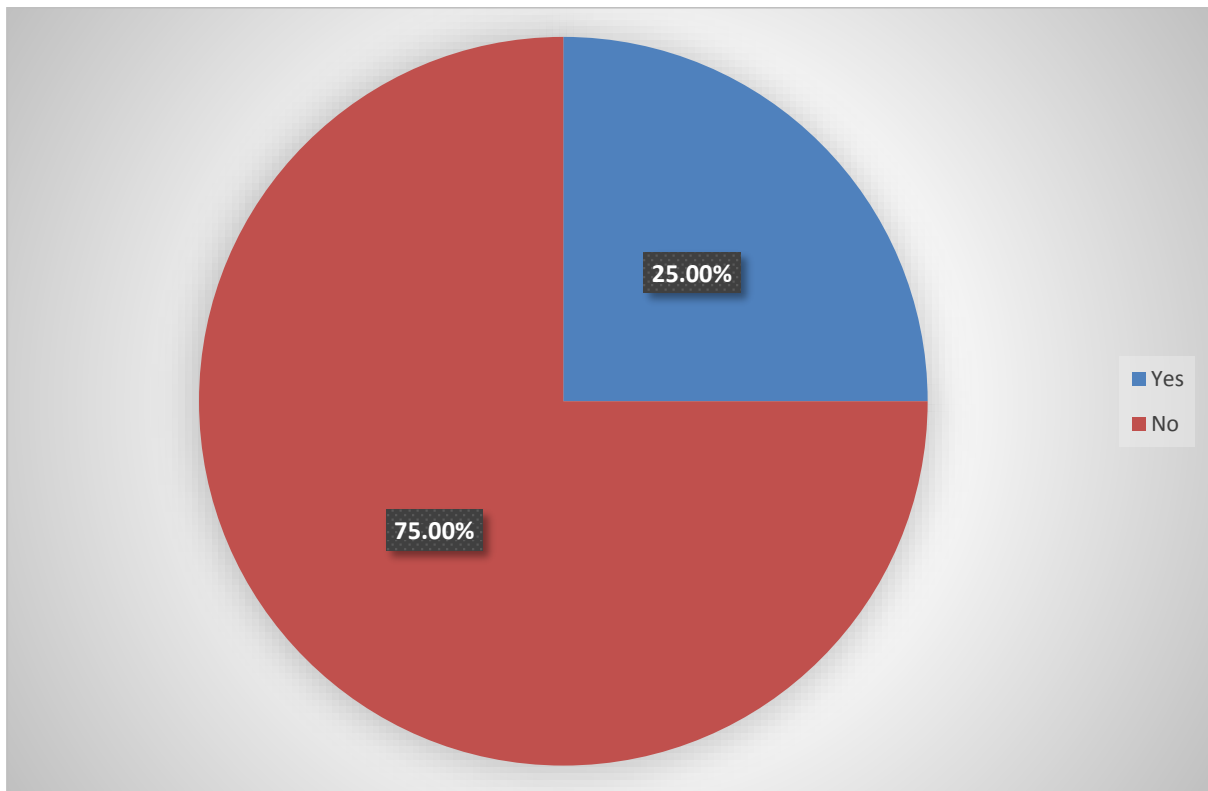


Figure 13 Contribution of imports in annual economic activity

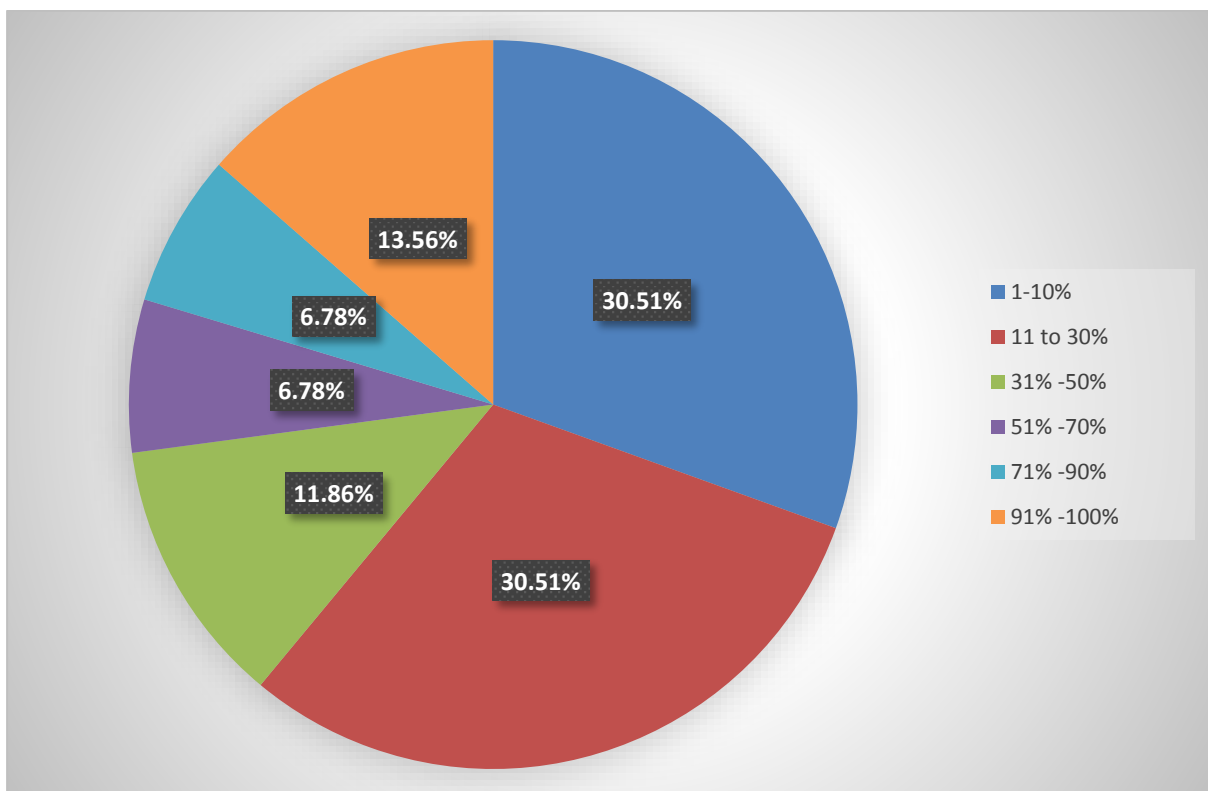


Figure 14 Contribution of imports in annual economic activity by industry

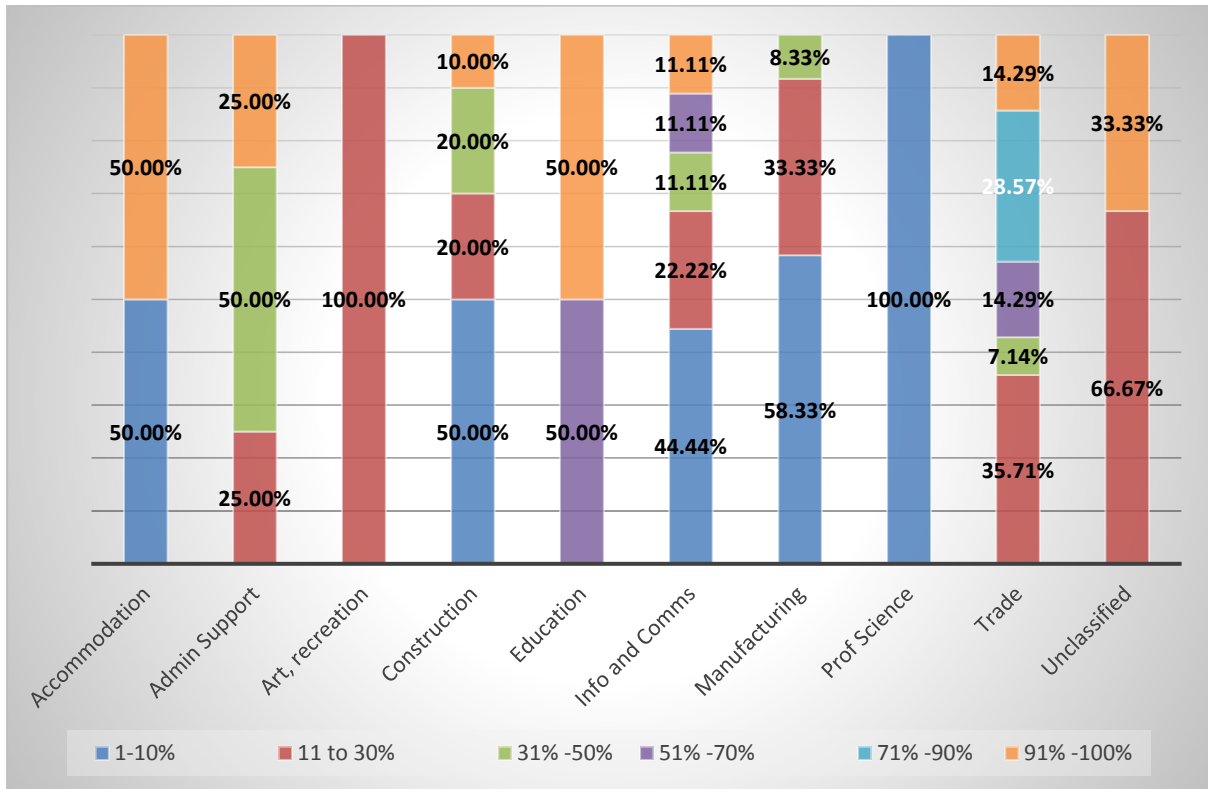


Figure 15 Key importing markets

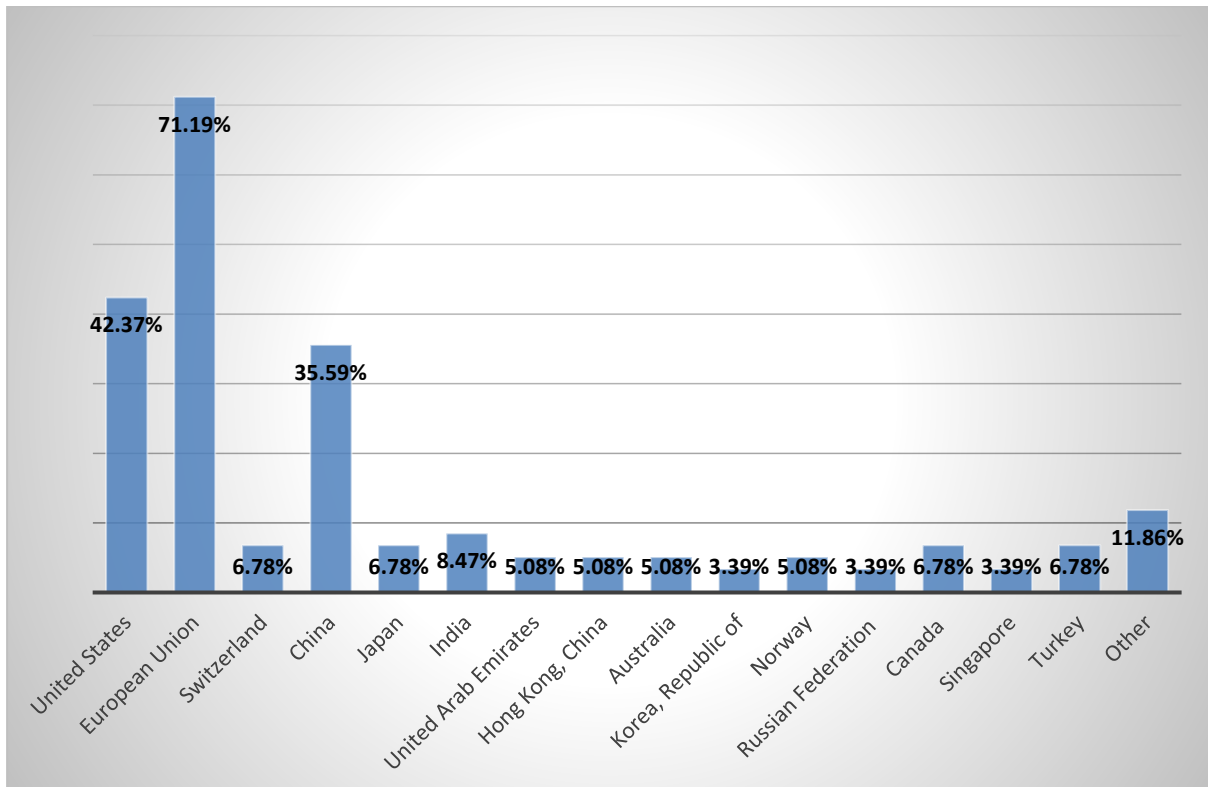


Figure 16 Subjective performance evaluation of importing activity

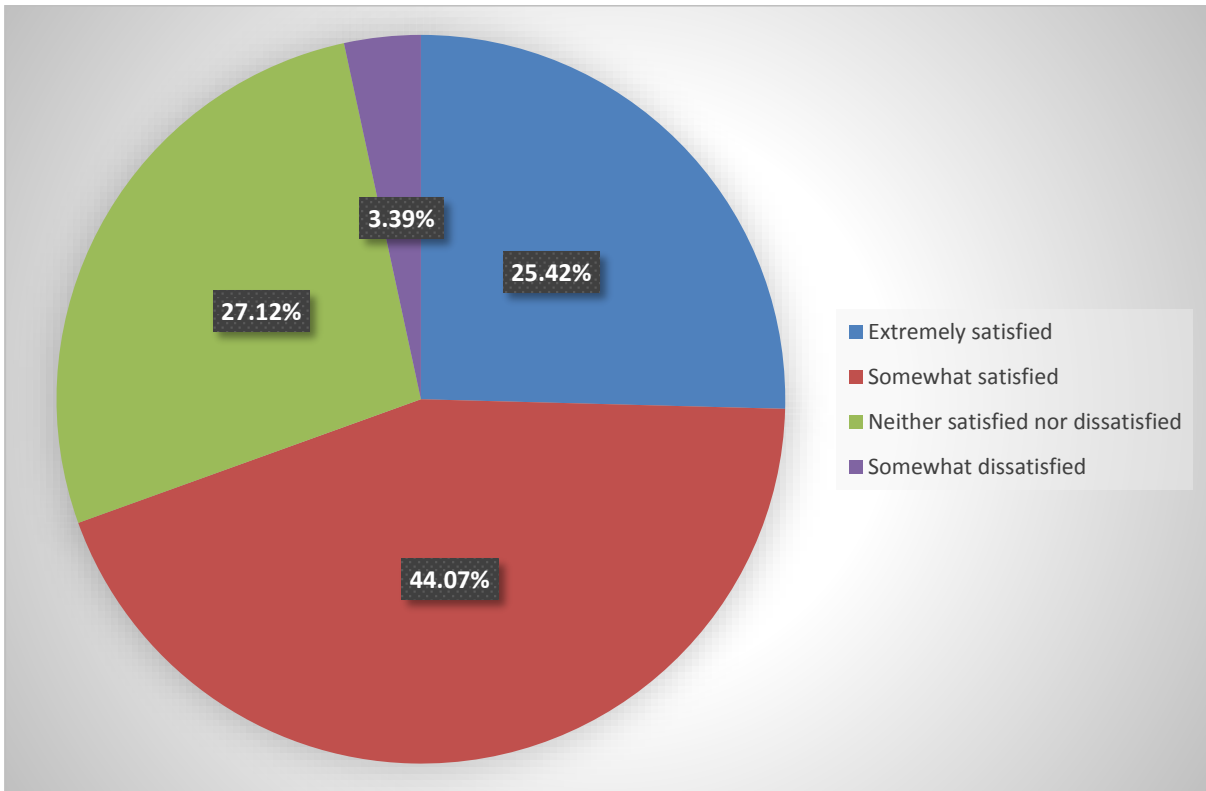


Figure 17 Subjective performance evaluation of importing activity by industry

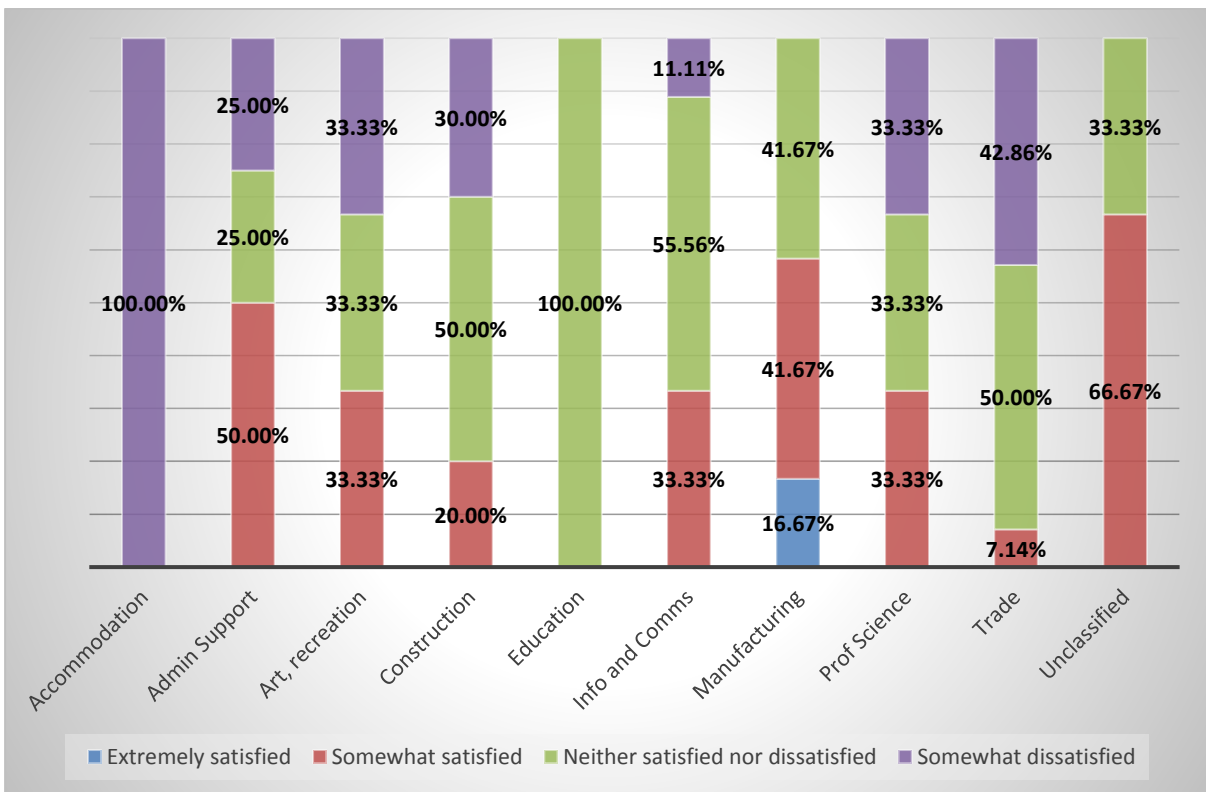


Table 10 Proportion of exports and export performance by corporate characteristics

Export Percentage	F-stat	Probability
Industry	0.560	0.864
Technological Intensity	0.940	0.520
Customer Focus	<b>1.970</b>	<b>0.070</b>
Partnership Focus	0.530	0.827
Export Performance	F-stat	Probability
Industry	0.680	0.766
Technological Intensity	<b>2.180</b>	<b>0.017</b>
Customer Focus	<b>2.190</b>	<b>0.045</b>
Partnership Focus	0.690	0.699
Import Percentage	F-stat	Probability
Industry	<b>3.120</b>	<b>0.004</b>
Technological Intensity	1.600	0.121
Customer Focus	0.540	0.747
Partnership Focus	0.350	0.943
Import Performance	F-stat	Probability
Industry	<b>2.550</b>	<b>0.016</b>
Technological Intensity	0.850	0.602
Customer Focus	0.670	0.649
Partnership Focus	1.510	0.175



## Barriers to internationalisation

SMEs face numerous resource constraints. Surviving and being sustainable in international markets often proves challenging as SMEs are particularly vulnerable to trade barriers (Fliess, Busquets 2006). According to an OECD study (Fliess, Busquets 2006) SMEs are wary of unfavourable foreign rules and regulations, high tariff barriers and inadequate property rights protection. Also SMEs are influenced by high costs of customs administration and restrictive technical standards. Internal barriers relate to informational issues where SMEs lack access to important information for internationalisation, functional that correspond to resource constraints faced by SMEs and related to marketing which have to do with product characteristics. On the other hand external barriers are classified as procedural which have do with information on operations in foreign markets, governmental which are related to the relevant assistance and incentives offered by governments, task related which captures the differences in customer requirements and general environmental ones (Leonidou, 2004; Narayanan, (2015). In addition, political turbulence increases uncertainty and thus hinders internationalisation efforts whilst political knowledge leads to experiential knowledge and thus fosters internationalisation efforts. Currently, in the pre-Brexit era uncertainty is influenced by the political turbulence firms face and the political knowledge the firm can accumulate.

A key focus of this section is to examine the impact of different obstacles companies face in their international activity. We have asked companies to evaluate a number of barriers, identified either through the relevant literature or through the previous study conducted in 2010.

### Perceived barriers for Kent SMEs

The most important barriers identified relate to finding the right partners and distributors, finding access to local markets and reliable information, the existence of unfavourable exchange rates and currency fluctuations and lack of internal resources (Figure 18). It appears that internationalising is a demanding activity for companies and puts strains on their internal resources. Access to distribution channels and reliable information would facilitate and further foster the internationalisation activity.

Our findings, here, complement the findings in the previous section. Kent SMEs are driven towards internationalisation by product characteristics and not the development of an international network. The lack of international network is also identified as the key barrier to internationalisation. Policy makers, therefore, should place particular emphasis on the support of creation of these international networks that will facilitate access to a wider range of international markets. It is interesting to note that cultural factors, time differences, translation costs and visa restrictions are not considered particularly important but this has to do with the fact that most companies in our sample consider EU markets as their most important ones and these barriers can be considered relatively low when expanding in the EU.

### Access to Funding

Given the importance firms give to the availability of internal resources and more specifically access to financial resources we asked companies to comment on whether they have accessed either EU or national funding over the last 4 years.

The responses indicate that only a small proportion of companies have tapped into funding resources with the vast majority, close to 90%, answering that they have not accessed either an EU or national funding programme (Figure 19). The SME funding debate has been for some time now fuelled by the funding providers stating the lack of SME engagement with existing funding schemes and on the other hand by SMEs pointing out the difficulty of access to funding, including bureaucratic and knowledge barriers.

According to findings by the European Commission (2011) there are two apparent needs of SMEs for making their businesses 'funding ready'; mentoring in sources of funding and developing skills for successfully leading a dialogue with funding providers. Becoming 'funding ready' encompasses a whole set of considerations, business strategy assessment with a clearly defined business mission and objectives indicating the presence of a sustainable business model, understanding of various sources of financing with a particular focus on the advantages and disadvantages of equity finance, and

corporate structure implications, inexperience to develop relationship with the various financial intermediaries (e.g. venture capitalists), to name a few. Indeed, SME managers typically believe that their business systems and relevant documentation are not ready, that their business models are perhaps not mature and tested enough. These findings of the European Commission are also reflected in the responses of Kent SMEs as presented in Figure 20.

### Access to support

The responses by businesses on reasons preventing them to access funding support are in line with European Commission (2011) observations of SME behaviours and reactions to funding as the lack of awareness regarding relevant funding programmes available was the most important reason for low levels of engagement. This was followed by the lack of in-house expertise and lack of understanding of procedures that needed to be carried out. These findings indicate that it is thus important not only to raise awareness for the existence of funding sources but also simplify the procedures through which companies can apply for these schemes.

Also, there is a need for forward looking business models which steer managers away from fear of losing (strategic decision-making and operational) control over their businesses and enable them appreciate and manage the threat of information asymmetries, both stemming from the presence of an investor/funder in the business.

### Perceived effect of existing support measures

The key defining characteristics of SMEs are resource constraints, these make them vulnerable to uncertainty and thus create a need for support from the national government and other institutions to offer a 'cushioning' effect during uncertain times. We aimed to explore the factors that companies consider important for supporting their internationalisation efforts.

## Facilitators

We asked companies to identify factors that would positively support their internationalisation expansion. These were separated into factors that would facilitate the engagement with international activity (Figure 21) but also factors that would support companies that are currently internationalised to expand further (Figure 22).

The availability of internal resources is identified as the key factor that would allow companies to internationalise. This is followed by access to specialised advice on the identification of potential markets and customers, access to specialised resources with regards to marketing abroad and co-operation with reliable distributors. Two important findings emerge here. The first one is that companies still consider advice and support important but they require access to specialised information such as access to customers and marketing. Both these types of information require a tailored approach to individual organisations and cannot be substituted effectively from the general type of advice and support currently offered. The second one is that access to this type of specialised information might have a positive effect to the more efficient distribution of internal resources thus tackling the most important factor.

## Facilitators - future

With regards to the factors that would have a positive effect on the existing internationalisation efforts it is interesting to note that none of the factors identified, either from the literature or the 2010 study, score highly. The most important factors though can be summarised as a favourable tax system, strengthening their technological capabilities, availability of information on new markets to continue the internationalisation process and access to finance for participation to exhibitions and seminars.

## Support Mechanisms

When asked about specific national and regional bodies which offer internationalisation support (Figure 24) businesses noted their awareness of the Federation of Small Businesses (FSB) and Institute of Directors (IoD) but also the regionally run Kent Invicta Chamber of Commerce. Businesses also

demonstrated knowledge of the support mechanisms offered by UK Trade and Investment<sup>2</sup> but to a lesser extent. This national body, however, is significantly more recognisable by those firms in the same sample who rely on exporting (Figure 24). Interestingly, the location specific support bodies, e.g. The China British Business Council and The UK India Business Council, do not seem to be recognised as preferential source of support and advice for firms engaged in internationalisation activities in general or specifically exporting.

Since a certain level of awareness of existing support does not imply an equal level of the use of and engagement with such support, we asked businesses to elaborate to what extent they interact with existing bodies and thus actively engage with the support mechanisms (Figure 26). The results overwhelmingly demonstrate low levels of engagement across the board of existing bodies, with some level of engagement noted in the case of FSB and UKTI (Department for International Trade). Exporters also noted their engagement with UKTI, but interestingly not with any of the Export-focused sources of support, such as the Institute of Export or the UK Export Finance (**Error! Reference source not found.**).

We further investigated the arena of existing support by exploring the effectiveness of support gained from the used sources of support (Figure 27). A mixed picture emerges with regards to the effectiveness of support mechanisms<sup>3</sup>. Gov.uk, the Institute of Directors, Locate in Kent and the Federation of Small Businesses receive relatively high effectiveness ratings from the wider population. Other more specialised support mechanisms such as Kent International Business have a mixed picture with a third of the firms suggesting they have received very effective advice and a third considering it not effective at all. When it comes specifically to exporters (Figure 29 & Figure 30) more specialized mechanisms, such as UK Export Finance, Export Britain and Federation of Small Businesses are

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<sup>2</sup> Department for International Trade (as of July 2016)

<sup>3</sup> We have excluded from the analysis support mechanisms with less than 10 companies providing information on their effectiveness.

considered very effective. This demonstrates, once more the need for a more focused approach to supporting the internationalisation efforts of SMEs.

Figure 18 Barriers influencing the decision to internationalise

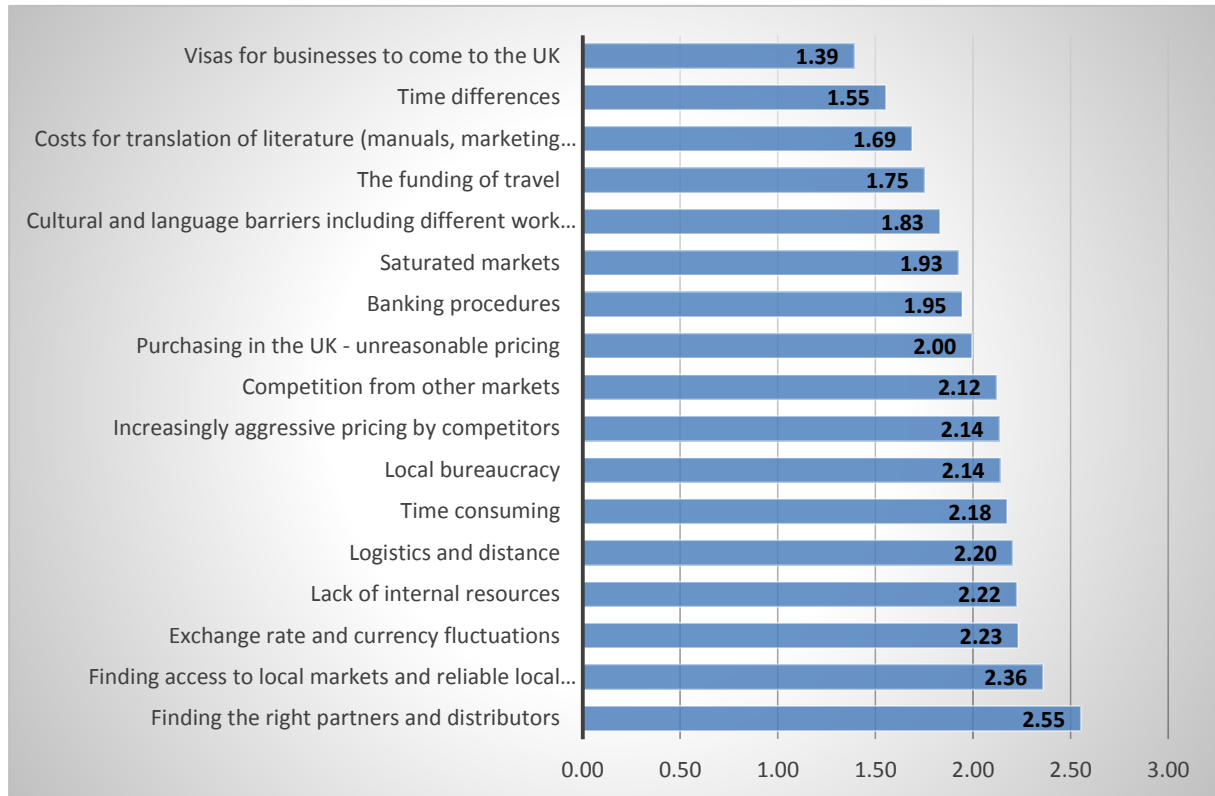


Figure 19 Proportion of companies that have applied for membership in a European or national funding programme in the last 4 years

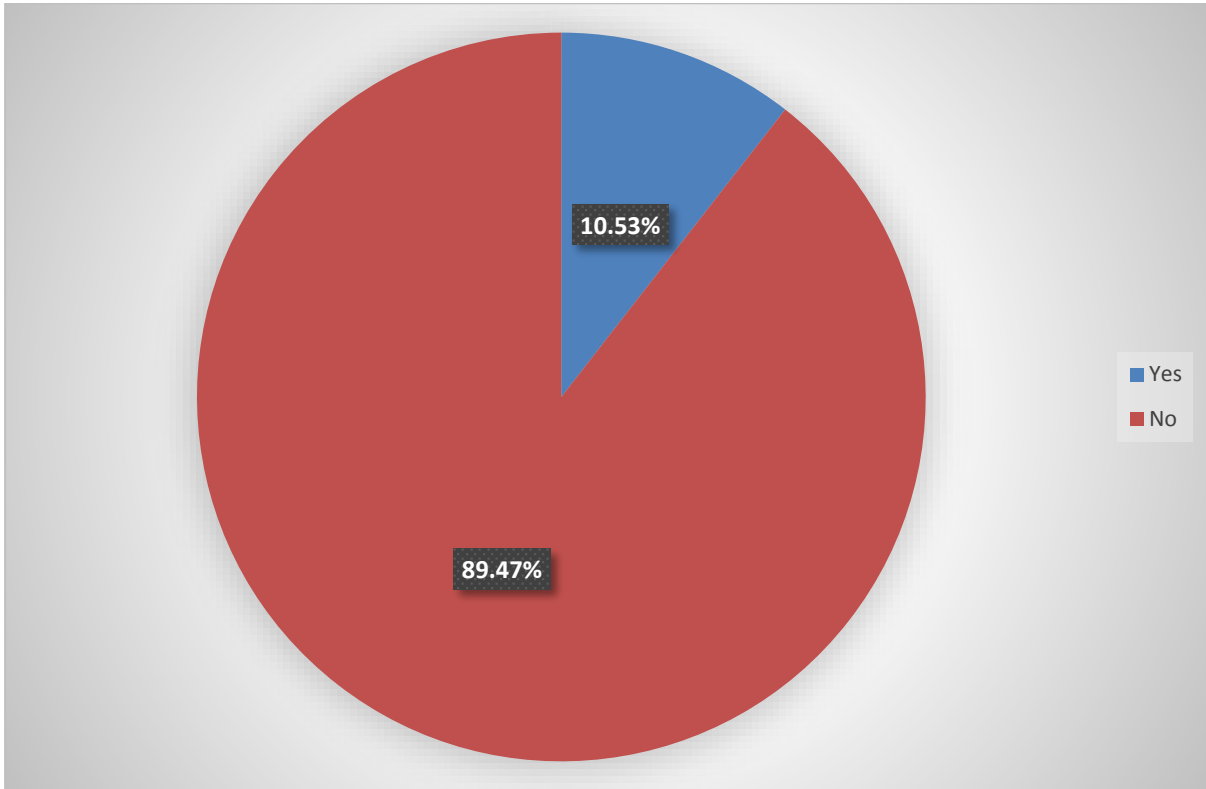


Figure 20 Factors preventing companies from joining a funding scheme

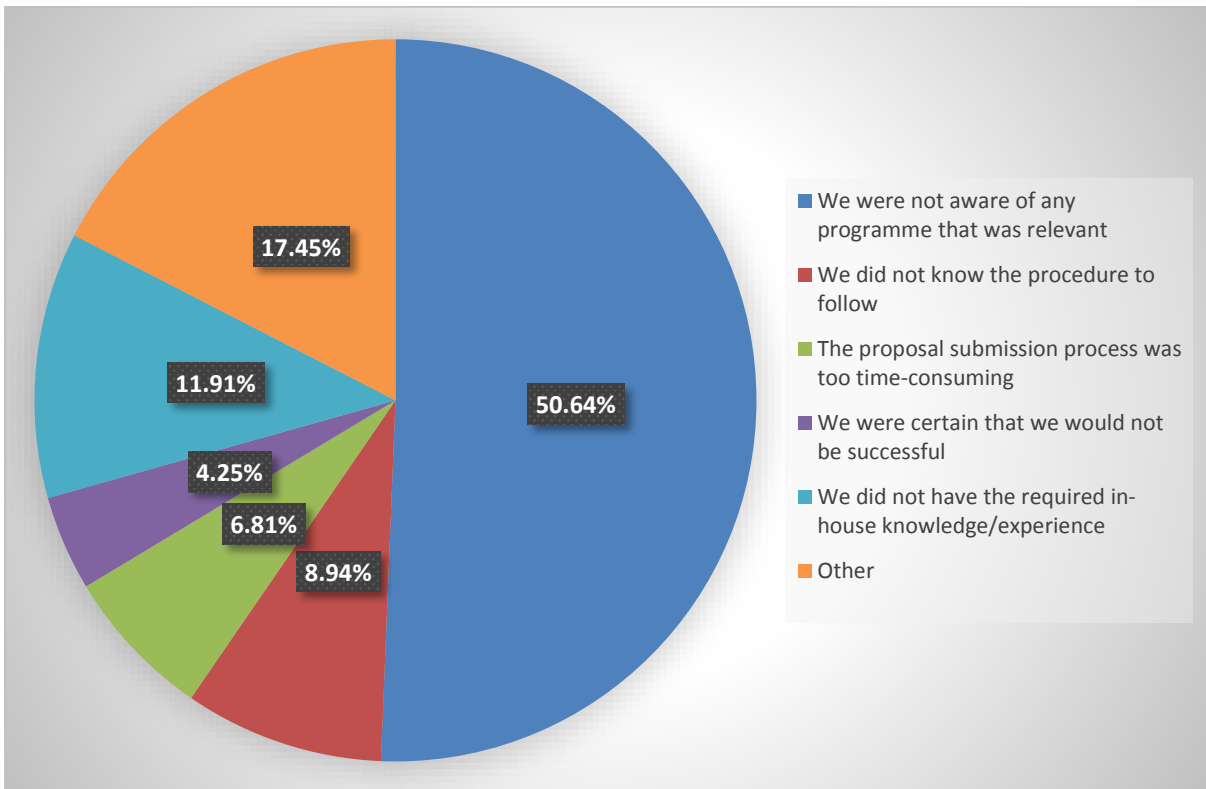


Figure 21 Factors facilitating the decision to internationalise/export

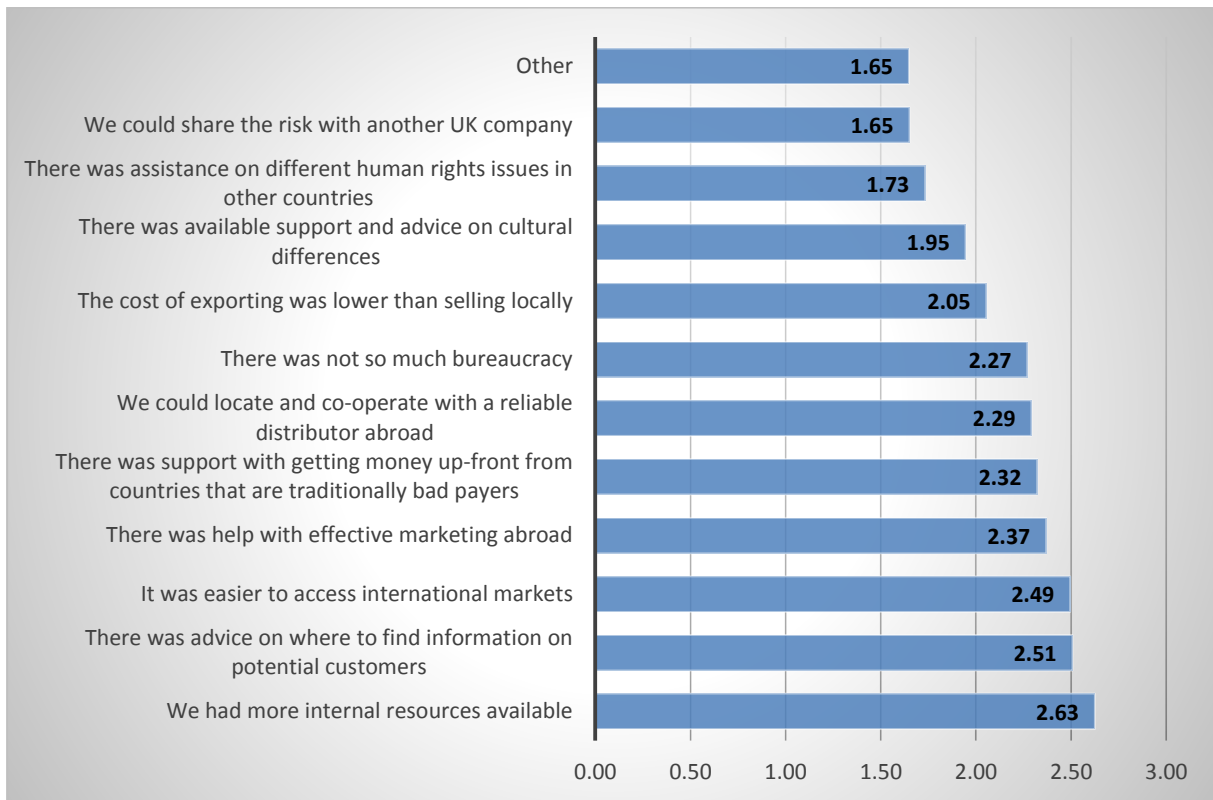


Figure 22 Factors contributing to the decision to internationalise/export

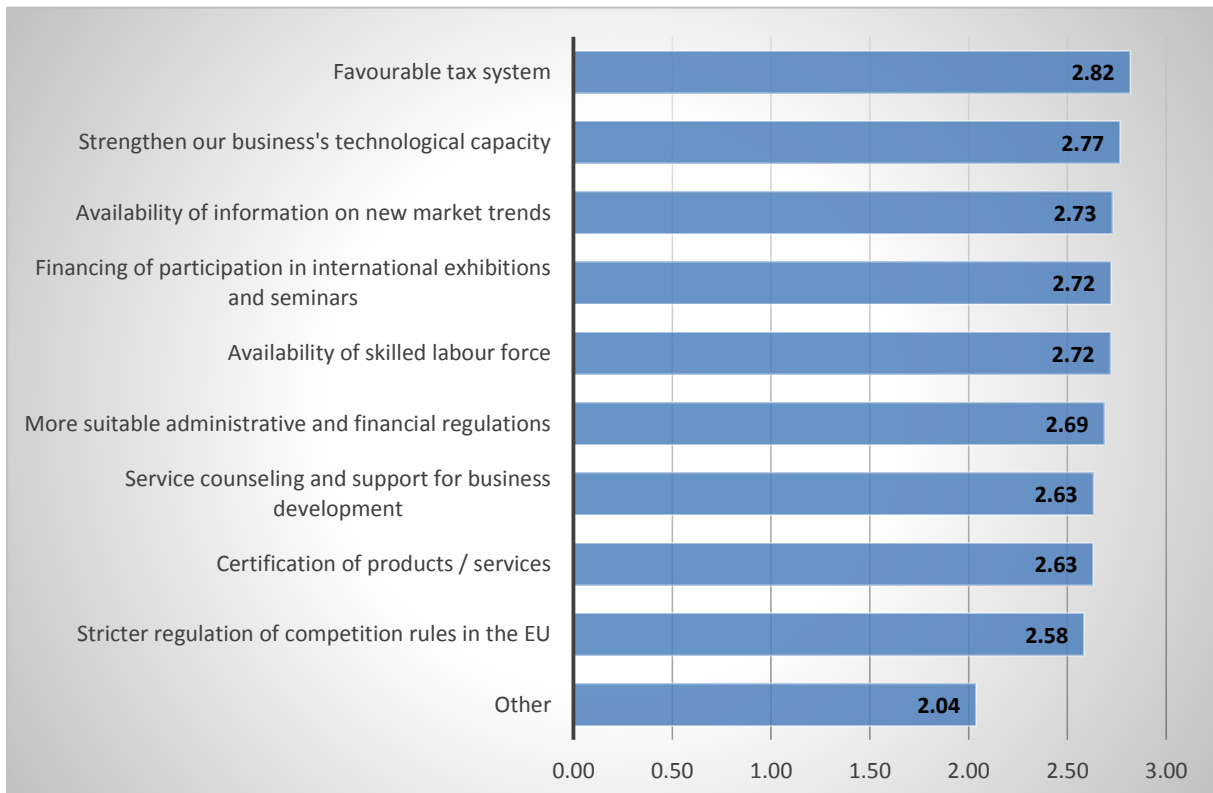




Figure 23 Awareness of existing support mechanisms (all companies)

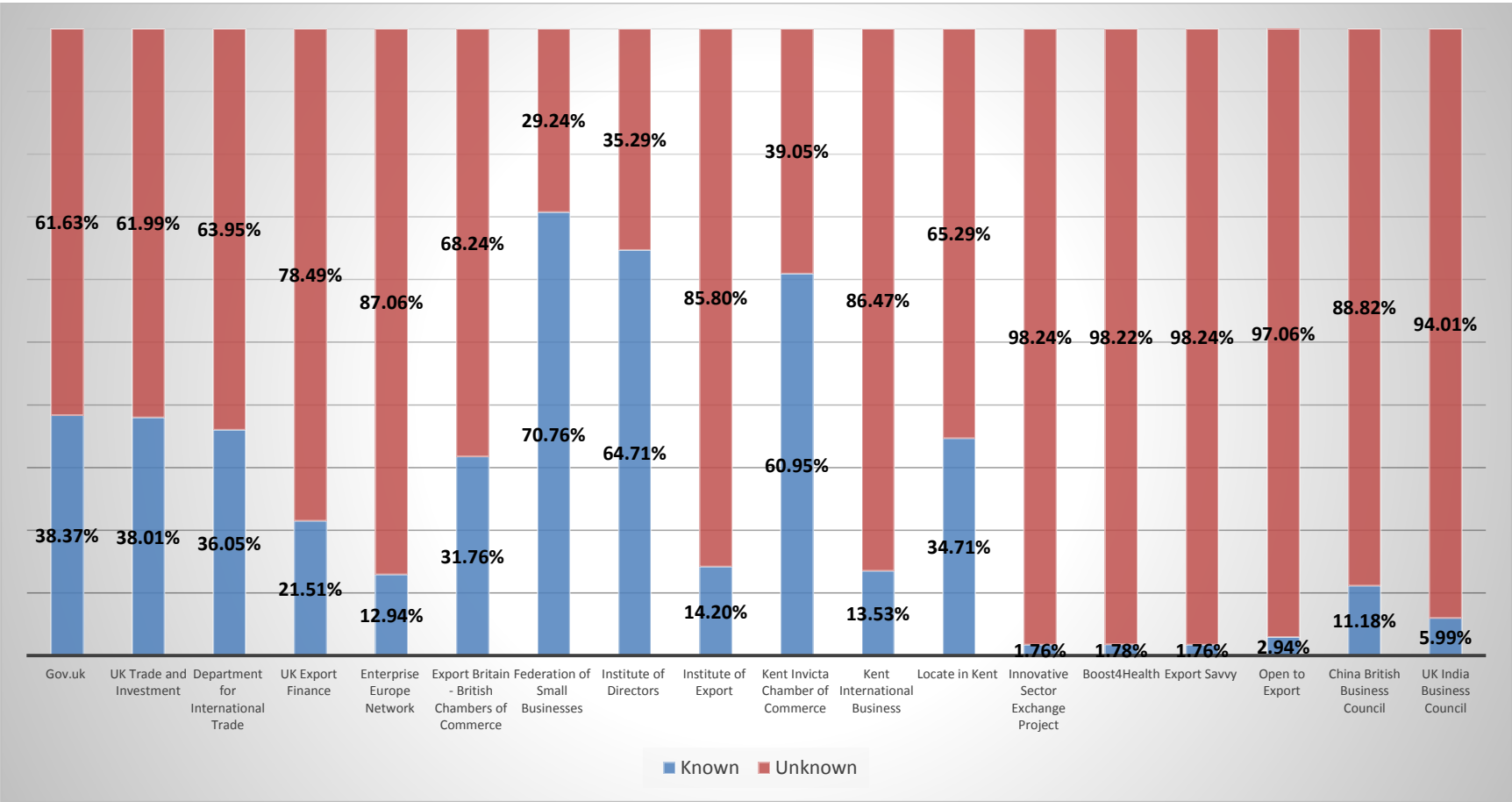


Figure 24 Awareness of existing support mechanisms (exporters)

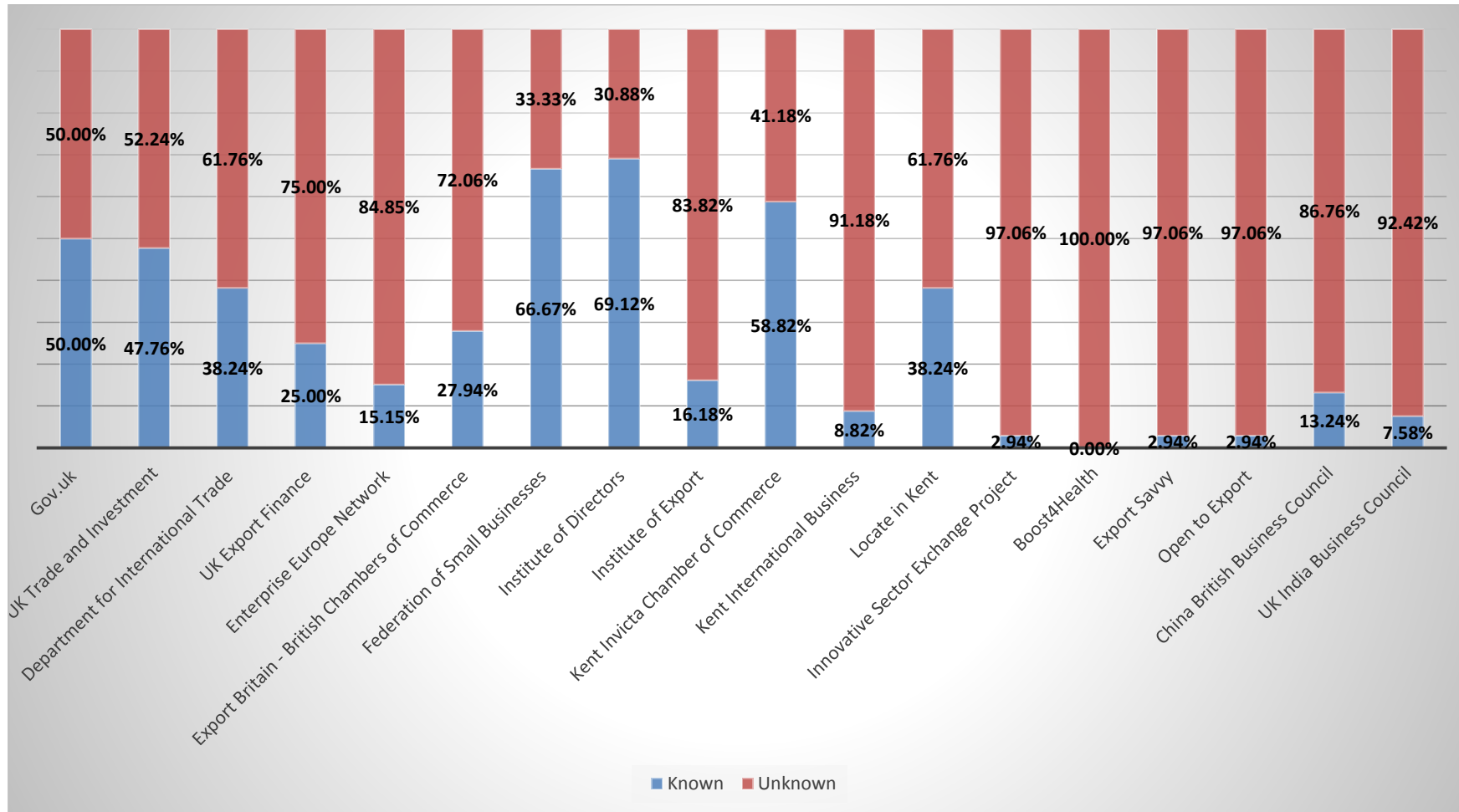


Figure 25 Use of existing support mechanisms (all companies)

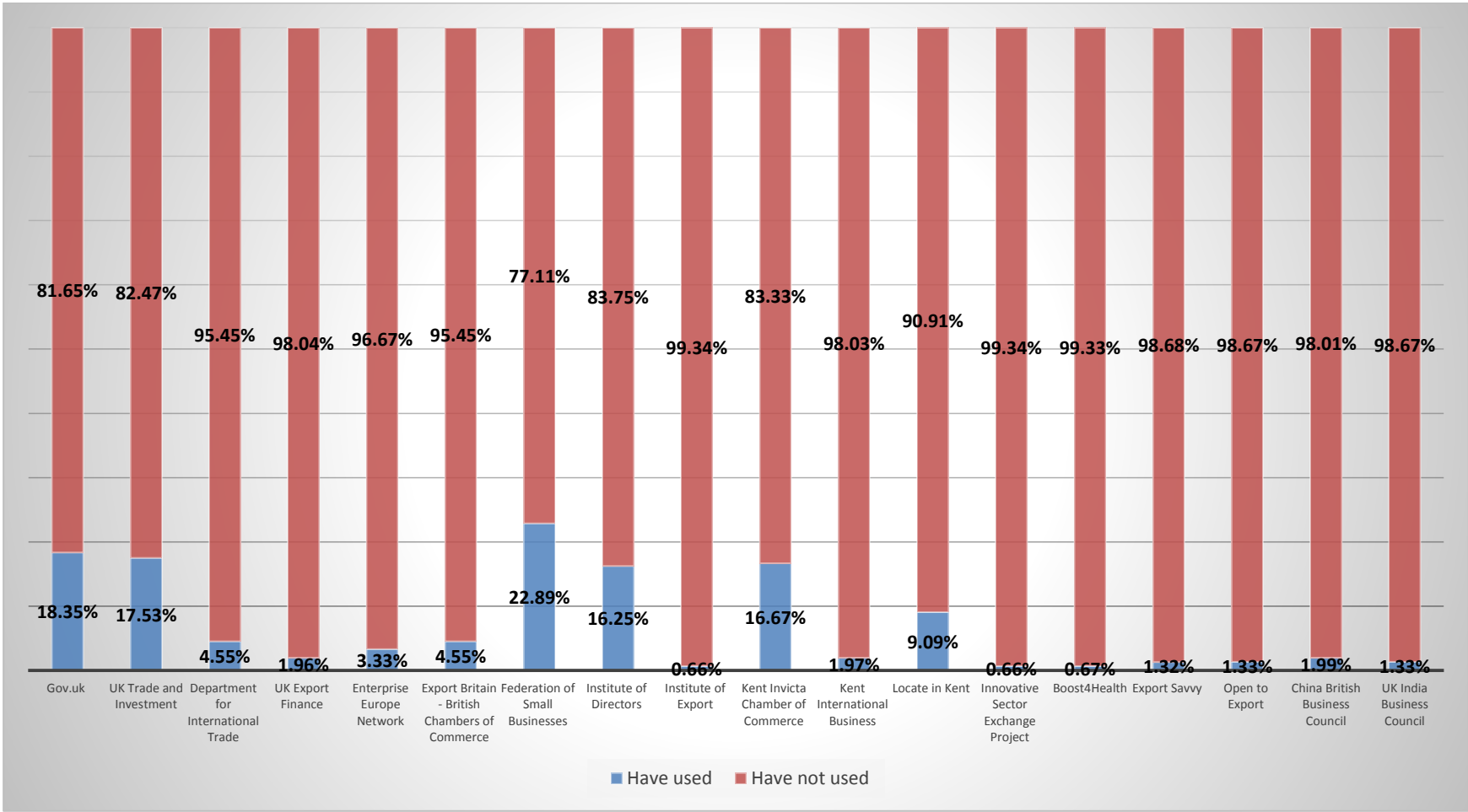


Figure 26 Use of existing support mechanisms (exporters)

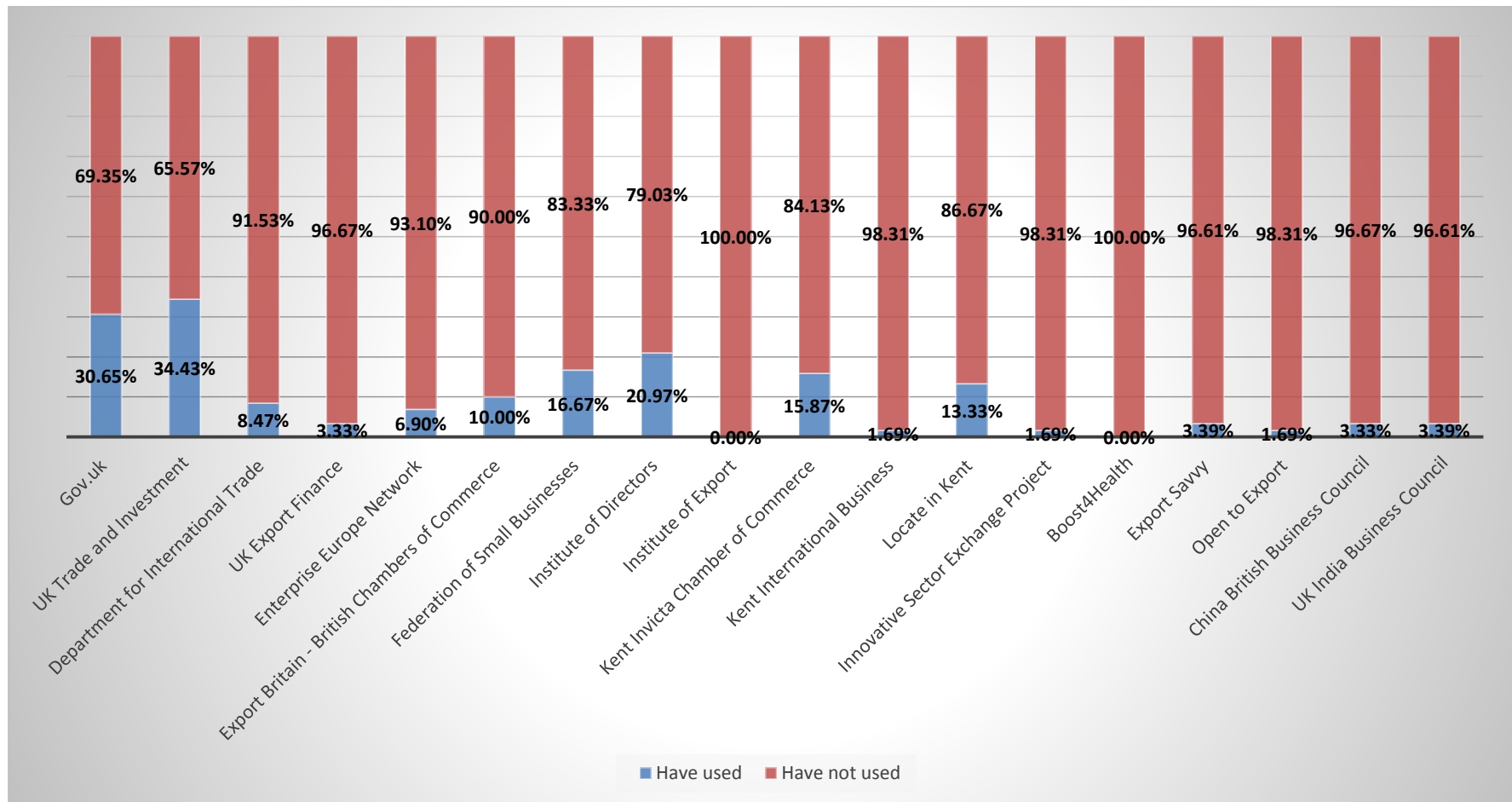


Figure 27 Evaluation of effectiveness of existing support mechanisms (only if used)

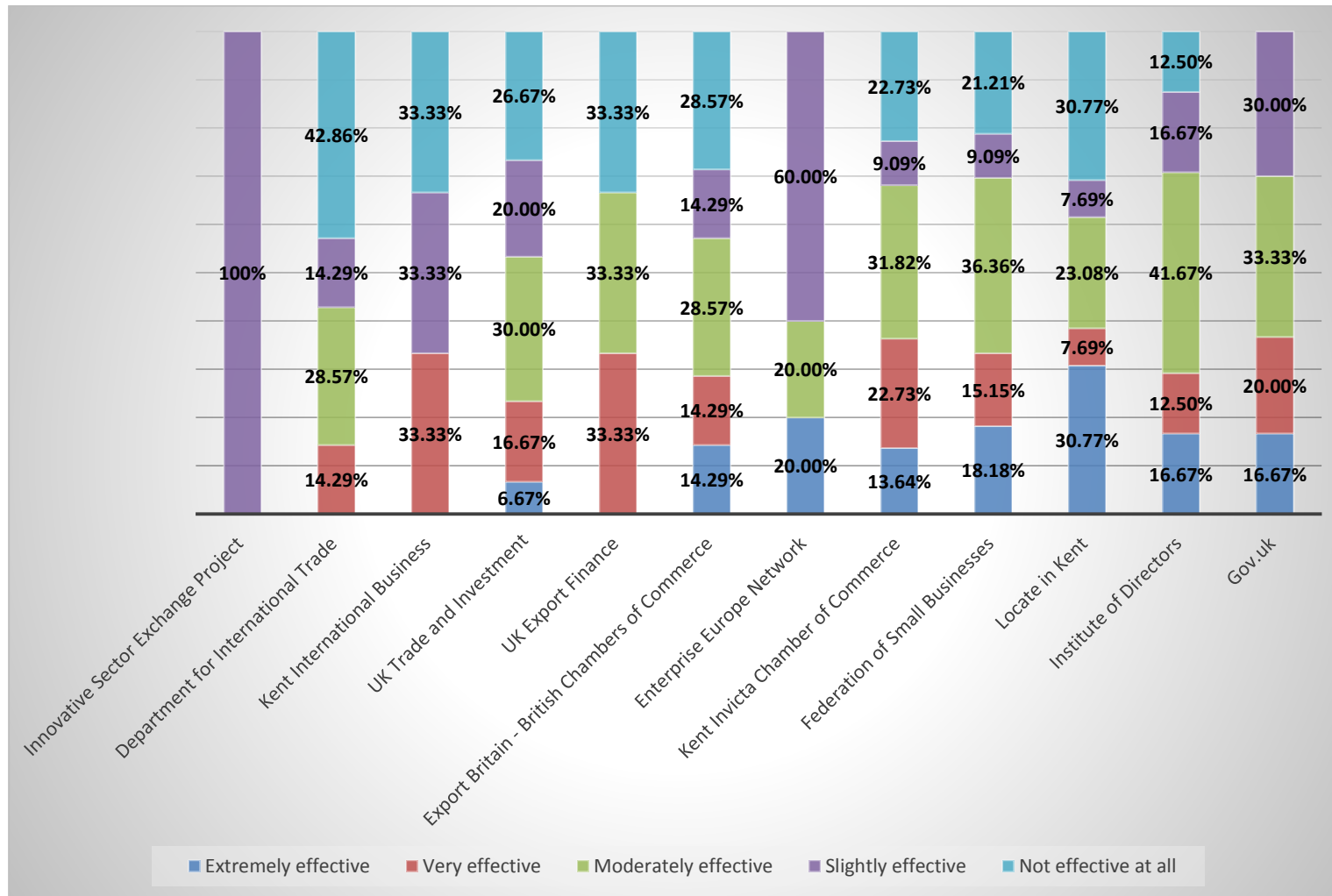


Figure 28 Average score of effectiveness evaluation (only if used)

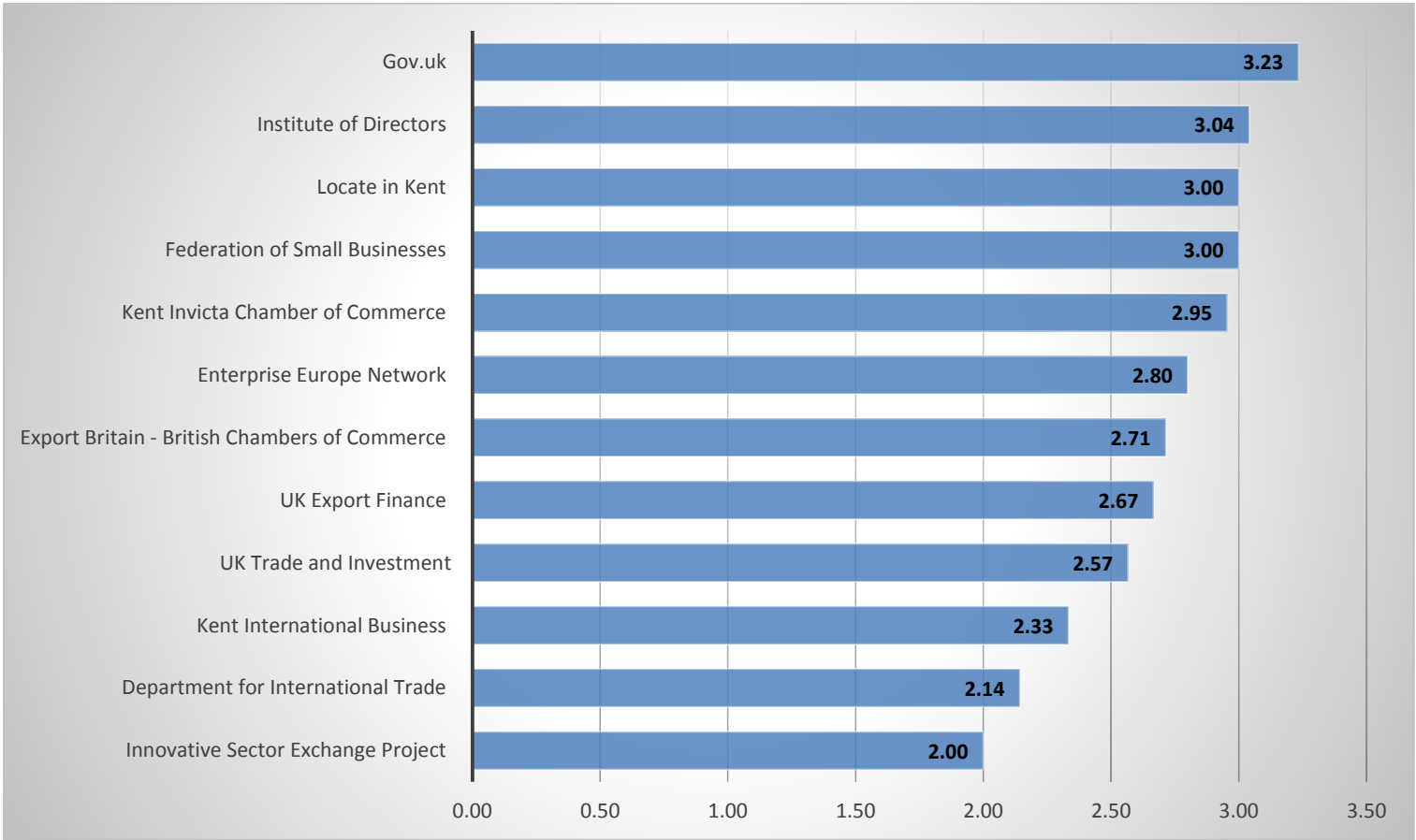


Figure 29 Evaluation of effectiveness of existing support mechanisms (only if used - exporters)

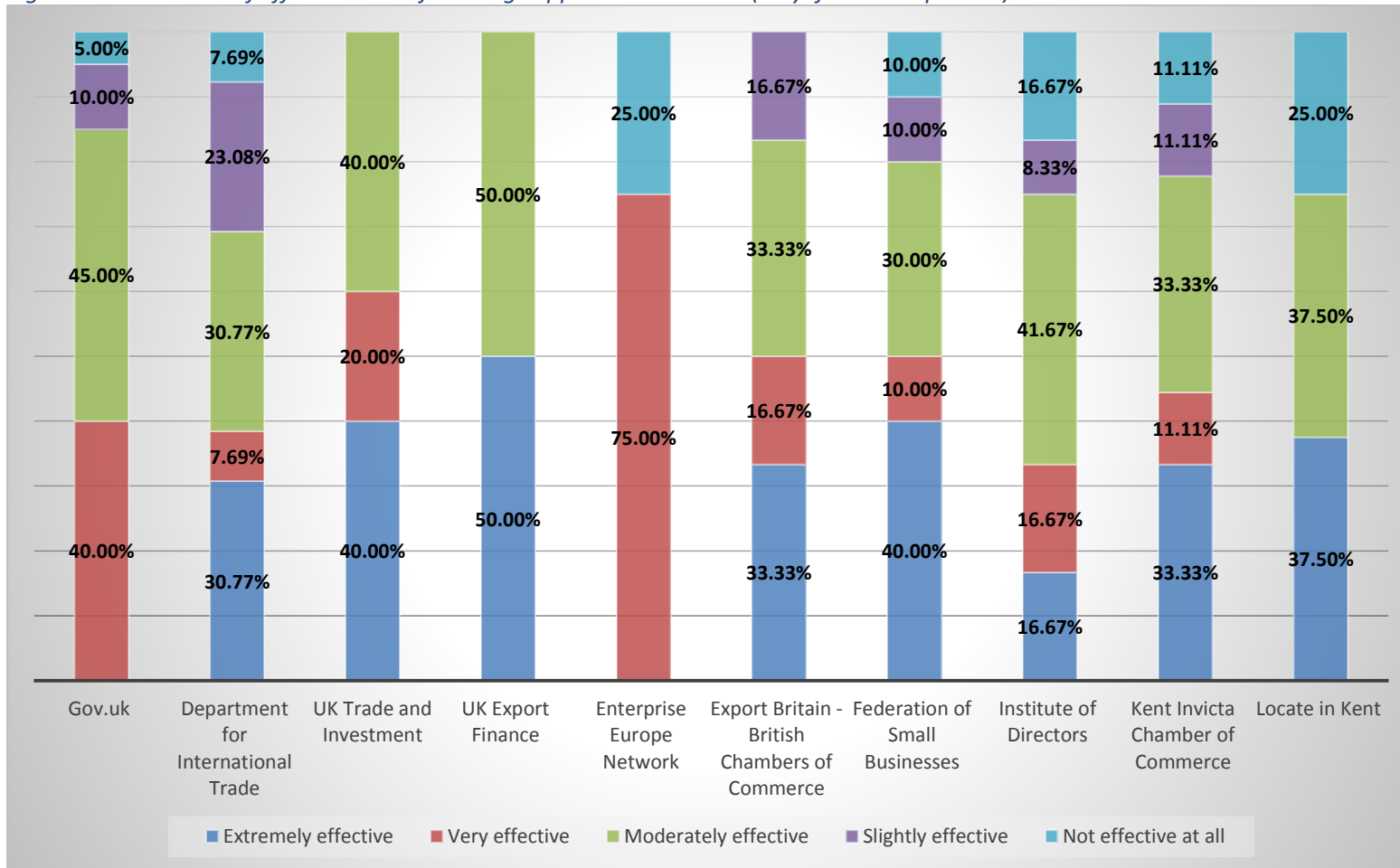
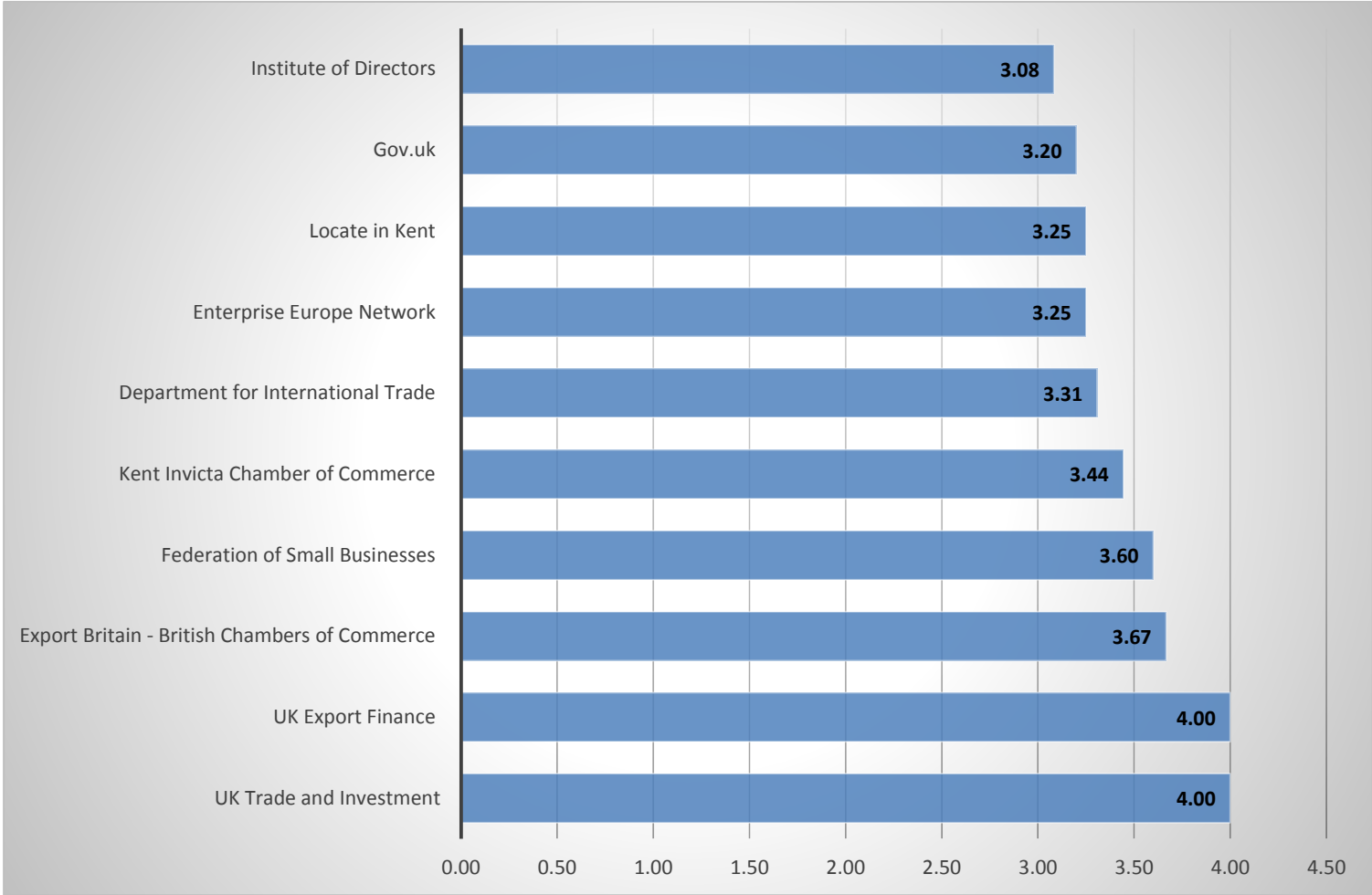


Figure 30 Average score of effectiveness evaluation (only if used - exporters)





## The Impact of Brexit

Currently, in order to design effective support mechanisms for SMEs it is crucial to investigate the impact of Brexit on SMEs' international strategies, as perceived by SMEs managers. Brexit brings environmental uncertainty and this can affect significantly the internationalisation of SMEs (Hilmersson, Sandberg et al. 2015). As Brexit is likely to affect all companies that operate in the UK and the EU, SMEs may also use their internationalisation strategy to deal with the impact of Brexit on their suppliers and partners. Finally, local or home-based social networks play a mediating role in the relationship between inward and outward internationalisation and performance of SMEs (Zhou, Weiping Wu et al. 2007). If SMEs consider expanding to international markets rapid utilisation of social networks might be an effective incentive as it can improve the efficiency and effectiveness of the SMEs both in local and a foreign market. However, some of the social networks available to SMEs located in London and the South East may be affected by Brexit. The unprecedented nature of Brexit makes it an extreme event. Extreme events expose organisations to substantial strategic uncertainty (Sullivan-Taylor, Branicki 2011). Resourcefulness, technical and organisational capabilities do not necessarily help SMEs build resilience to extreme events. Some support was found with regards to rapidity, i.e. the ability of SMEs to reach decisions fast due to their flat organisational structures and management styles but the phenomenon is relatively under investigated. It is crucial, thus, to investigate: a) the impact of Brexit on SMEs and their internationalisation strategy b) the factors that help SMEs navigate successfully through uncertainty, i.e. maintain their internationalisation strategy.

The way SMEs managers perceive risk and uncertainty in their decision making is related to both individual and context (situational) specific factors (Ojiako, Chipulu et al. 2014). Ultimately, SMEs react to environmental uncertainty through a strategic approach that distinguishes between a *defender*, *prospector* or *analyser* strategic disposition (Miles, Snow 1978). Due to resource constraints SMEs tend to have a focused strategy and tackle primarily niche markets. Following from this, faced with competitive uncertainty a *defender* is an organisation that focuses on protecting existing markets; faced with technology uncertainty, a *prospector* is an organisation that is highly innovative and seeks out new markets; faced with market uncertainty, an *analyser* is an organisation that both protects market share but also innovates (Parnell 2013). Based on Nonaka's (1994) view of knowledge as a key element of a firm's competitive advantage, Heavin and Adam (2012) argue that it is the development of knowledge capabilities that enables firms to deal with uncertainty. In periods of substantial uncertainty it is crucial for the organisation to align its knowledge management with the overall strategy in order to maximise the way knowledge informs their decision making.

Similarly, Freel (2005) suggests that SMEs respond to uncertainty through innovation. His study builds on Milliken's (1987) concept of environmental uncertainty to discuss the way SMEs react in different cases. According to Milliken (1987) the environment can be characterised by what is defined as effect uncertainty where organisations cannot predict the nature of the effect of a future state of the environment, response uncertainty where organisations cannot predict the consequences of their responses to change and state uncertainty which is related to perceived environmental uncertainty. Different types of uncertainty are likely to have a different type of impact on SMEs' internationalisation strategy. Finally, Reeves and Carlsson-Szlezak (2016) argue that managers in order to deal with the uncertainty created by Brexit they need to understand the different levels of uncertainty, such as political, financial, trade and real economy ones and then analyse whether these correspond to a favourable or unfavourable state of uncertainty for the organisation.

A number of scenarios can then be created to establish the overall effect of Brexit related uncertainty on the organisation. It has also been established in the literature that there are crucial differences to the barriers that SMEs face and consequently to the support required between SMEs that solely focus on exports and others that utilise multiple modes of market entry. The study by Crick and Barry (2007) has found that different support is required for those SMEs that primarily export and those that use other modes of internationalisation. It is crucial, therefore, for policy makers to tailor assistance instead of offering generic measures of support especially in periods of uncertainty. Overall, the extant literature suggests that there is a clear need to investigate the impact of the uncertainty created by Brexit on the internationalisation of SMEs in order to a) identify the factors that underpin firm resilience and b) put forward recommendations for managers and policy makers to improve the resilience of SMEs.

In this study we explore a number of Brexit related factors that have an impact on SMEs internationalisation. We have as a starting point an exploration of the SMEs understanding of the impact of Brexit on their activities, we then present an evaluation of the impact of Brexit from a positive or negative perspective, followed by the importance of factors such as the free movement of labour, access to markets control of immigration and others have on SMEs and conclude with an evaluation of the future impact of Brexit driven uncertainty on SMEs. In all cases we have explored differences between industries, exporters, importers and the wider population.

### Understanding the impact of Brexit

Our starting point is to explore whether SMEs understand the impact of Brexit on their operations. Figure 32 presents the overall picture for the wider population. It is evident that a significant number of SMEs have an appreciation of the impact of Brexit. Over 75% of respondents suggest that they have

at least a moderate understanding of the impact of Brexit. This is due to the extensive discussion before and after the referendum result and the necessity that most organisations have to plan ahead for different scenarios. Despite the positive picture portrayed by the data presented in Figure 31 it is worth noting that still 1 in 4 companies claim that they do not understand the impact of Brexit. This is still a significant number and therefore the task of informing companies on the Brexit developments and the plausible impact on organisations is necessary. The industry perspective, in Figure 32, shows a more mixed approach. Industries such as accommodation, agriculture, education, human health, manufacturing, professional science and transport have a much higher proportion of SMEs that do not fully appreciate the potential impact of Brexit on their organisations. In some cases this proportion is close or over 50%. The high proportion of companies in these sectors can be explained by the fact that these industries rely significantly on regulations created in the EU and therefore they face the uncertainty of substituting EU based regulations with national ones after Brexit. It is therefore important to generate some clarity as to what the new regulatory framework will be for these sectors in a post Brexit United Kingdom. The data, in Figure 33 and Figure 34, shows that overall neither exporters nor importers have a better understanding of the Brexit implications. In the case of exporters the main difference comes from those companies that understand the implications extremely and very well. These account for almost 45% of exporters which is slightly higher than the wider population. In the case of importers this percentage is smaller and only accounts for 36% but it is compensated by a high proportion of companies, over 36%, which have a moderate understanding of Brexit implications. It is evident, therefore, that companies that have already established international activities do not have a substantial advantage or disadvantage in understanding the impact of Brexit.

### The impact of Brexit

In this study we also explored the nature of the Brexit impact. We have asked organisations to evaluate, in positive or negative terms, the impact of Brexit. In Figure 35 we present the picture for the wider population. The balance is in favour of a negative impact overall as only 16% of SMEs believe that there will be a positive impact on their operations in contrast to 45% that expect a negative impact. Mixed is also the picture, as presented in Figure 36, when it comes to the industry dimension. Industries such as accommodation, construction, human health, professional science show overall a positive impact. This is due to the belief that these industries will benefit from the liberalisation of regulations expected in the post Brexit era. On the other hand, industries such as administrative support, art and recreation, education, information and communications and manufacturing clearly anticipate a negative impact from Brexit, either due to the loss of access to markets or uncertainty with regards to the regulatory environment. The negative impact of Brexit, as anticipated is higher in exporters and importers amongst SMEs. In Figure 37 and Figure 38 we present the impact of Brexit for

these two categories. For exporters, the proportion of companies that expect a negative impact is close to 60%. This is not unexpected given the uncertainty of the post Brexit trade relationship with other EU markets and the importance of these markets for SMEs located in Kent. For importers the proportion, of companies expecting a negative impact, is somewhat smaller and accounts for just over 50% but what is interesting is that importing companies expect in a much smaller proportion of the wider population or exporters an improvement in their positioning as the number of companies that expect a positive impact drops to just over 10%. This means that although the negative proportion is smaller the positive impact also diminishes due to potentially a weaker pound and its effect on the competitiveness of these organisations to service through imports the UK market or produce final goods with the use of imported raw materials and intermediate goods.

### Importance of Brexit related factors

As our next step we wanted to explore further the effect of potential factors on the positive or negative impact of Brexit. We asked organisations to evaluate the most important factor for them and the results for the wider population are presented in Figure 39. It is interesting to note that the two issues that received a significant attention in the pre-referendum debate, i.e. free movement of labour and national control of immigration, cancel each other out with 14% and 12% of SMEs responding that this has been the most important factor. In reality our data shows very clearly that the single most important factors for SMEs located in Kent is access to markets with 42% of SMEs. This should be interpreted with some cautiousness as the impact of Brexit could be negative for those companies that require access to EU markets but potentially positive for those companies that require access to other international markets, under the assumption that UK will be able to negotiate better trade terms with some key markets such as USA, Canada, China, India and other emerging markets. The industry dimension, presented in Figure 40, gives a few interesting additional dimensions. Industries that rely on human resources, low or semi-skilled, such as accommodation, agriculture and transport or highly skilled such as art and recreation, education, information and communications, professional science and trade have indicated that free movement of labour is an important factor in their consideration. The fear for these SMEs is that post Brexit they will lose access to either low skilled but competitively paid staff or to highly skilled, innovative staff. It is also evident that access to markets is an important factor across industries with manufacturing showing the highest overall proportion of firms, slightly over 60%. When looking, in Figure 41 and Figure 42, at the two internationalised groups of SMEs, both exporters and importers there is a clear identification of access to markets as the most important factor. With a proportion of 67% and 61% of exporters and importers suggesting that access to markets is the most important factor it is evident that in the post Brexit era this is what will determine the economic success or failure of the disengagement from the EU.

## Impact of Brexit related uncertainty

Our discussion above has clearly demonstrated that the most important factor related to Brexit is the created uncertainty with regards to the next two years of negotiations but also with regards to the post Brexit environment. Uncertainty is problematic for businesses as it makes scenario planning difficult and leads to risk averse behaviour. In addition to the above we wished to explore whether SMEs consider the impact of this Brexit related uncertainty an important one for their decisions. Only a small proportion (close to 20%) of the SMEs participated in our study, as it can be seen from Figure 43, consider that there will be no impact. The majority of SMEs (close to 60%) consider that the impact of Brexit will have implications for their businesses. It is therefore important to ensure that there is clarity both during the negotiation process as well as with regards to the post Brexit situation. Frequent analysis of the progress made in the negotiations and the way the post Brexit landscape will look like will facilitate planning and will allow SMEs to respond to changes in the environment. In Figure 44, the industry dimension demonstrates a few interesting patterns. Uncertainty will have a differential impact on a number of sectors with sectors that rely primarily on the UK's relationship with the EU and the rest of the world such as trade and agriculture to demonstrate the highest sensitivity. Contrary to this, sectors that rely primarily on the local economy such as real estate, human health and administrative support have the highest resilience to uncertainty's impact. Similarly to the previous sections exporters and importers, as seen in Figure 45 and Figure 46, will face the highest impact. Over 65% of exporters and 78% of importers have answered that Brexit related uncertainty will have an impact on their businesses.

Figure 31 Understanding of the Brexit effect on business

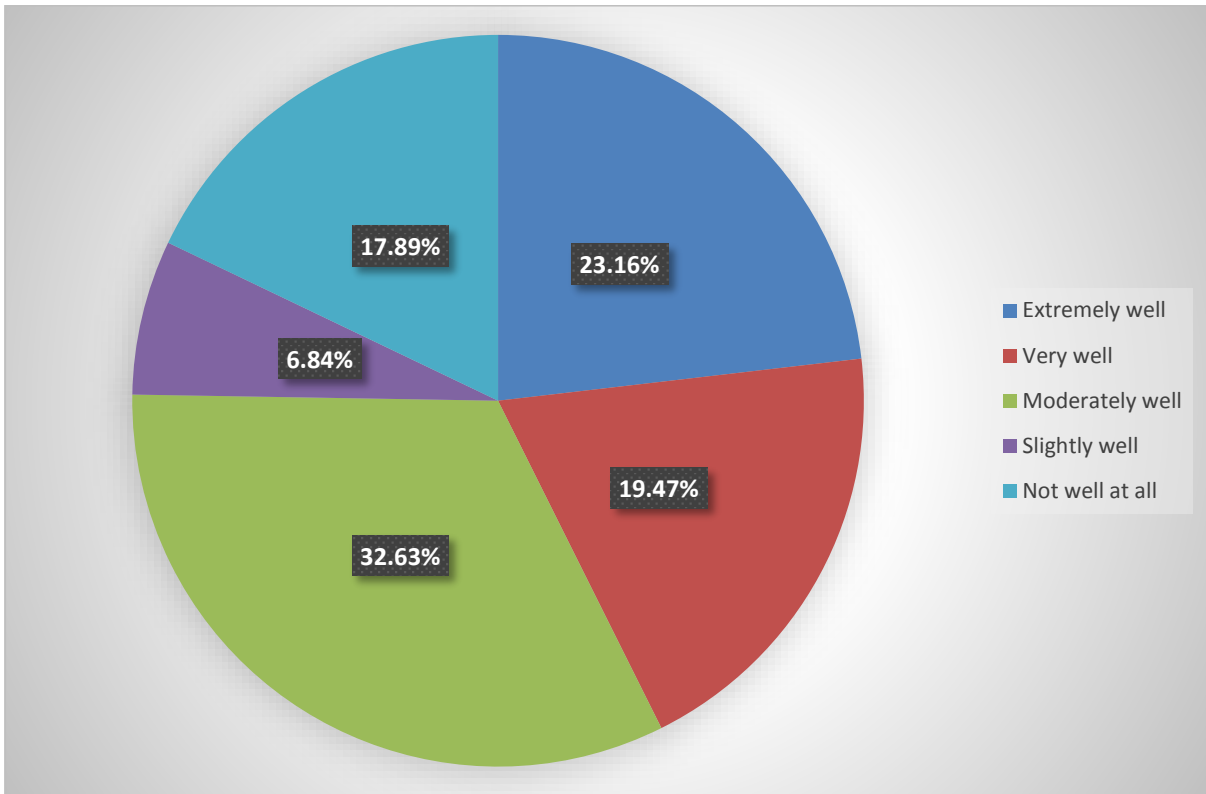


Figure 32 Understanding of the Brexit effect on business (by industry)

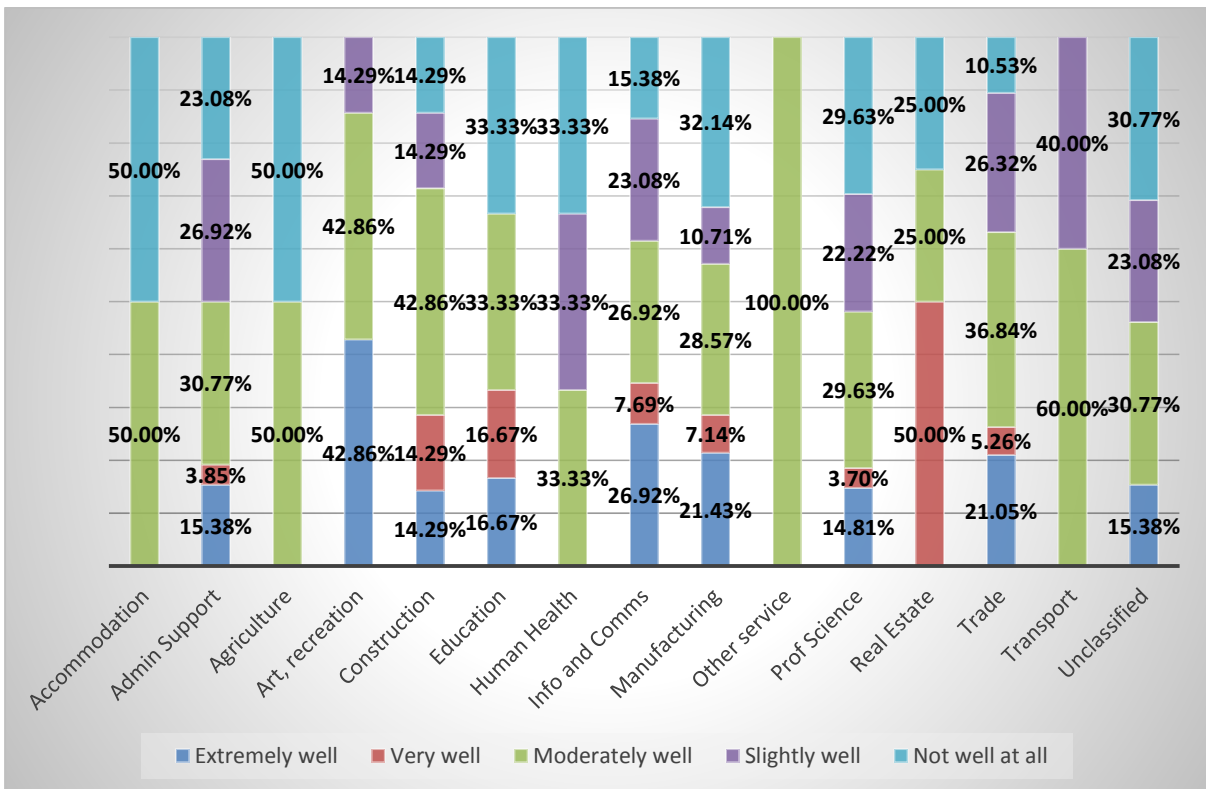


Figure 33 Understanding of the Brexit effect on business (exporters)

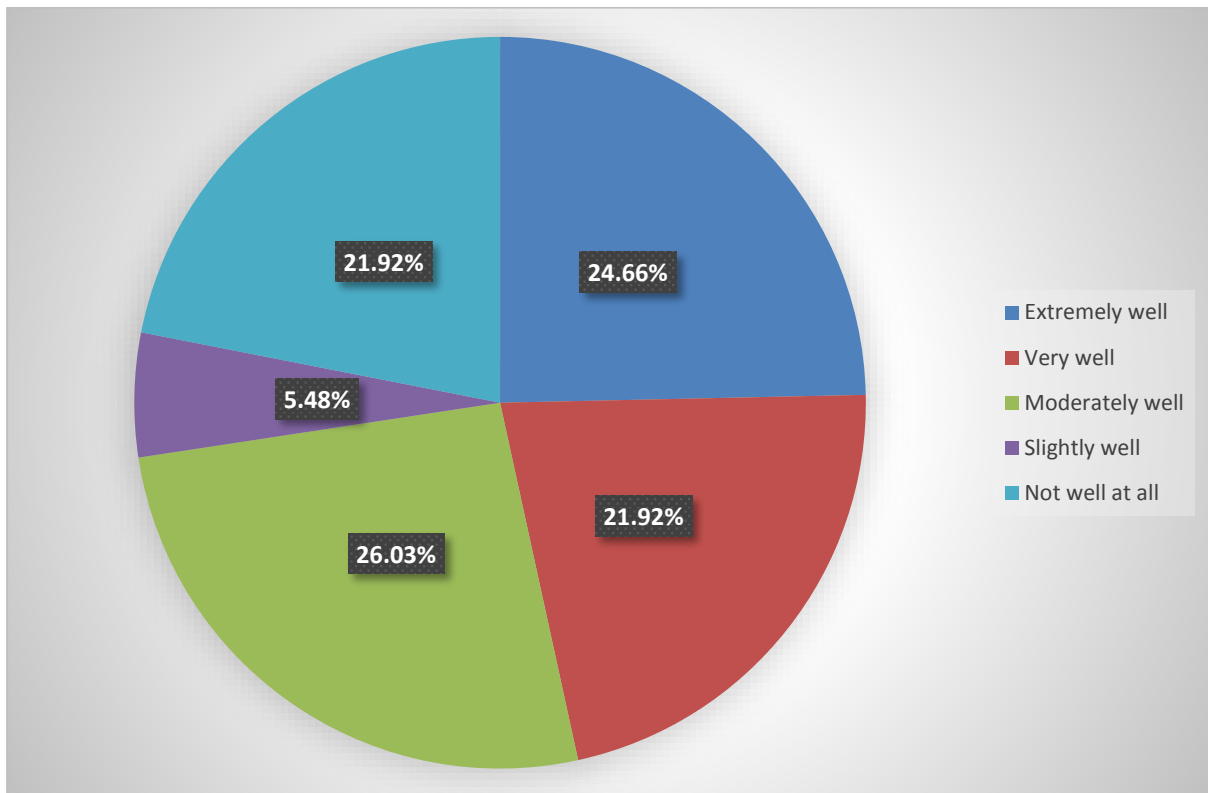


Figure 34 Understanding of the Brexit effect on business (importers)

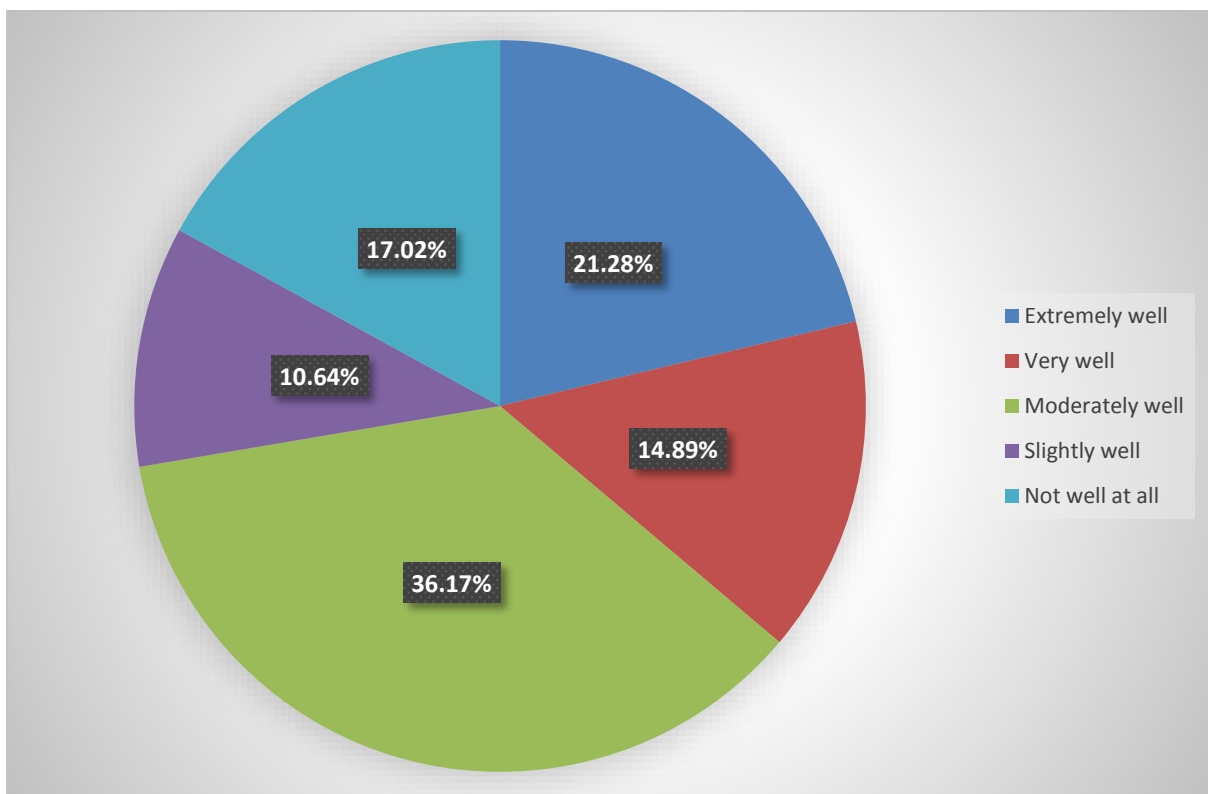


Figure 35 Impact of Brexit on businesses

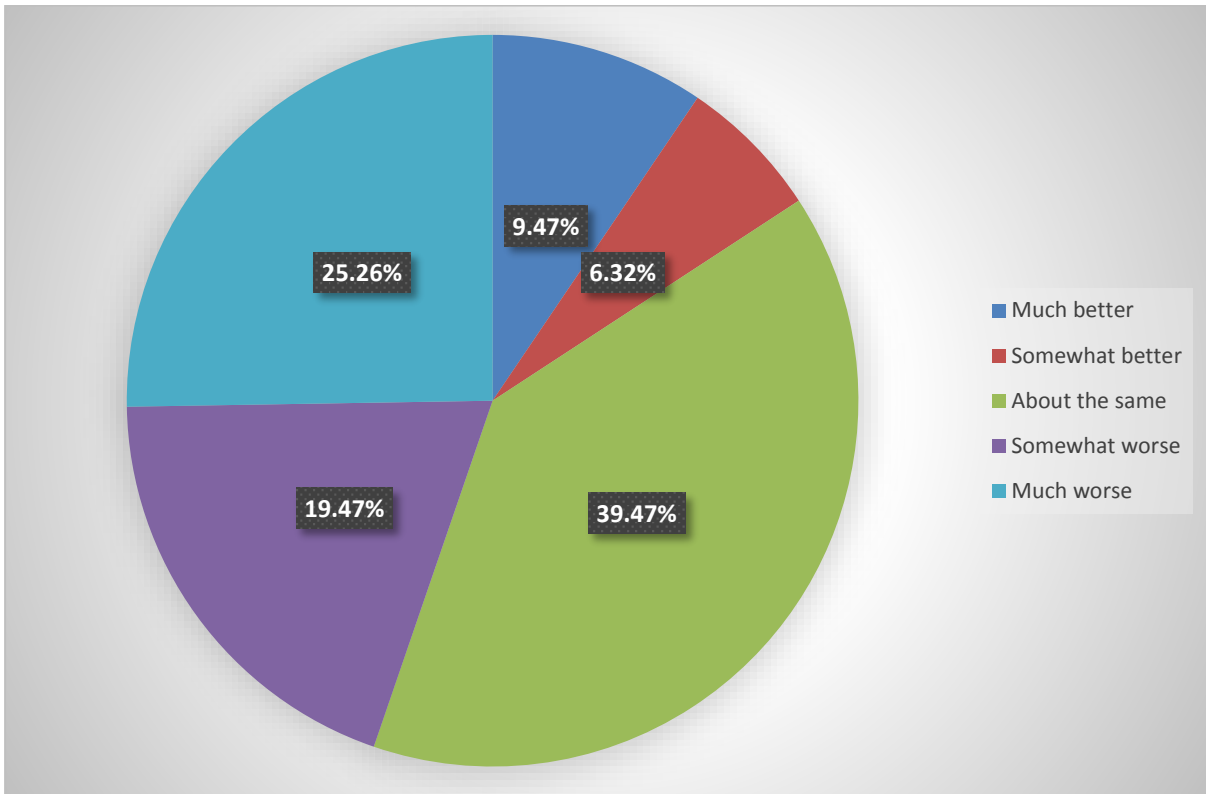


Figure 36 Impact of Brexit on businesses (industries)

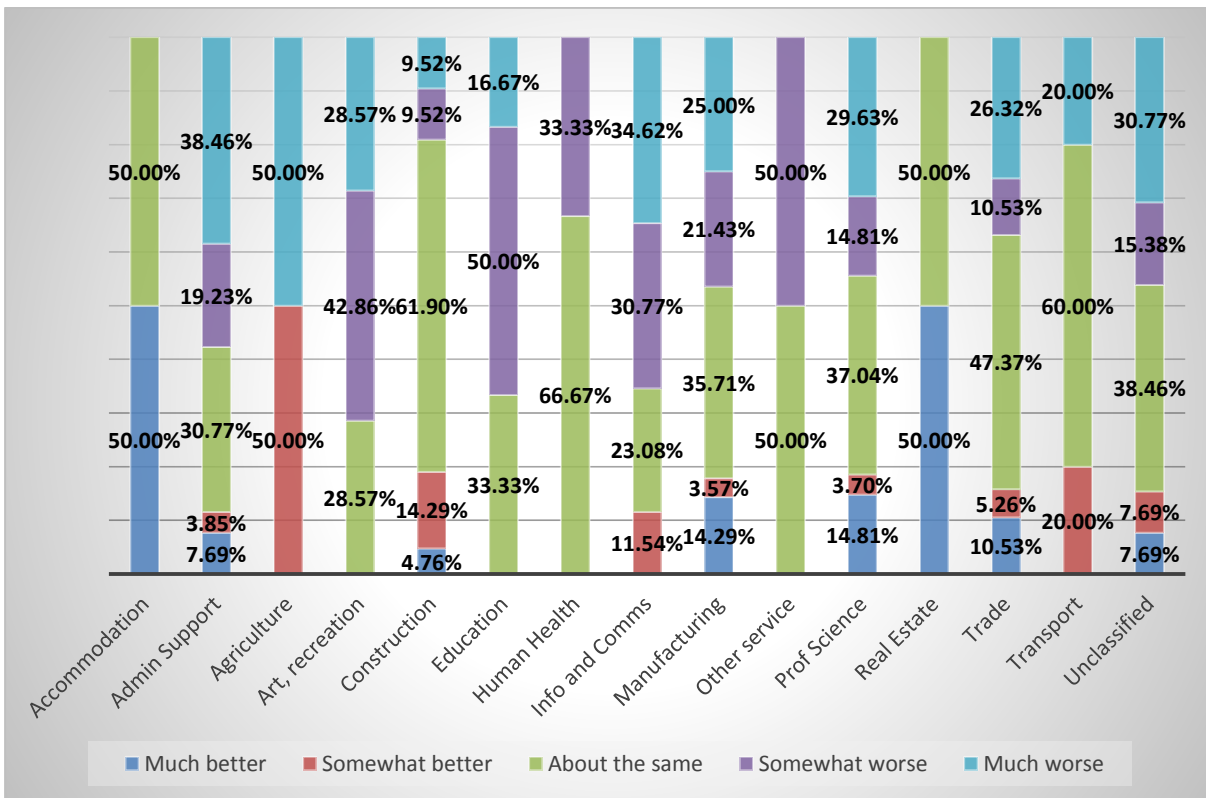




Figure 37 Impact of Brexit on businesses (exporters)

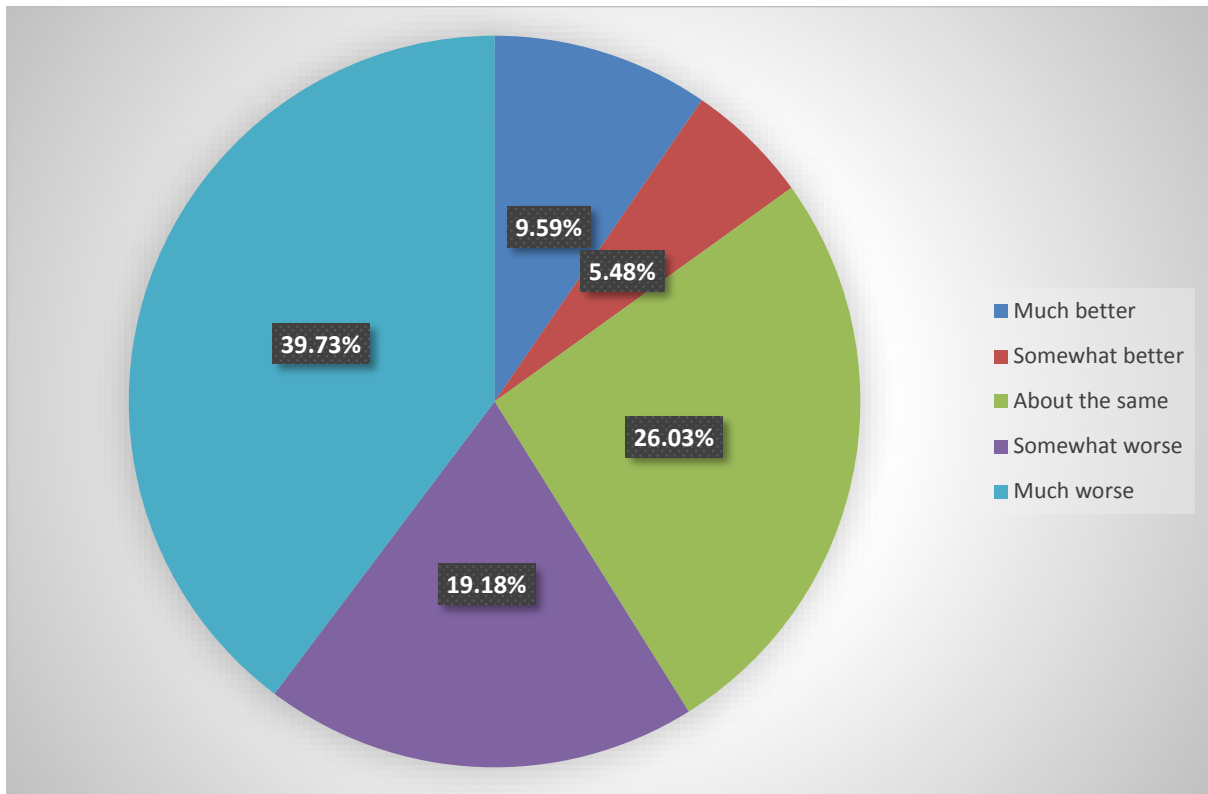


Figure 38 Impact of Brexit on businesses (importers)

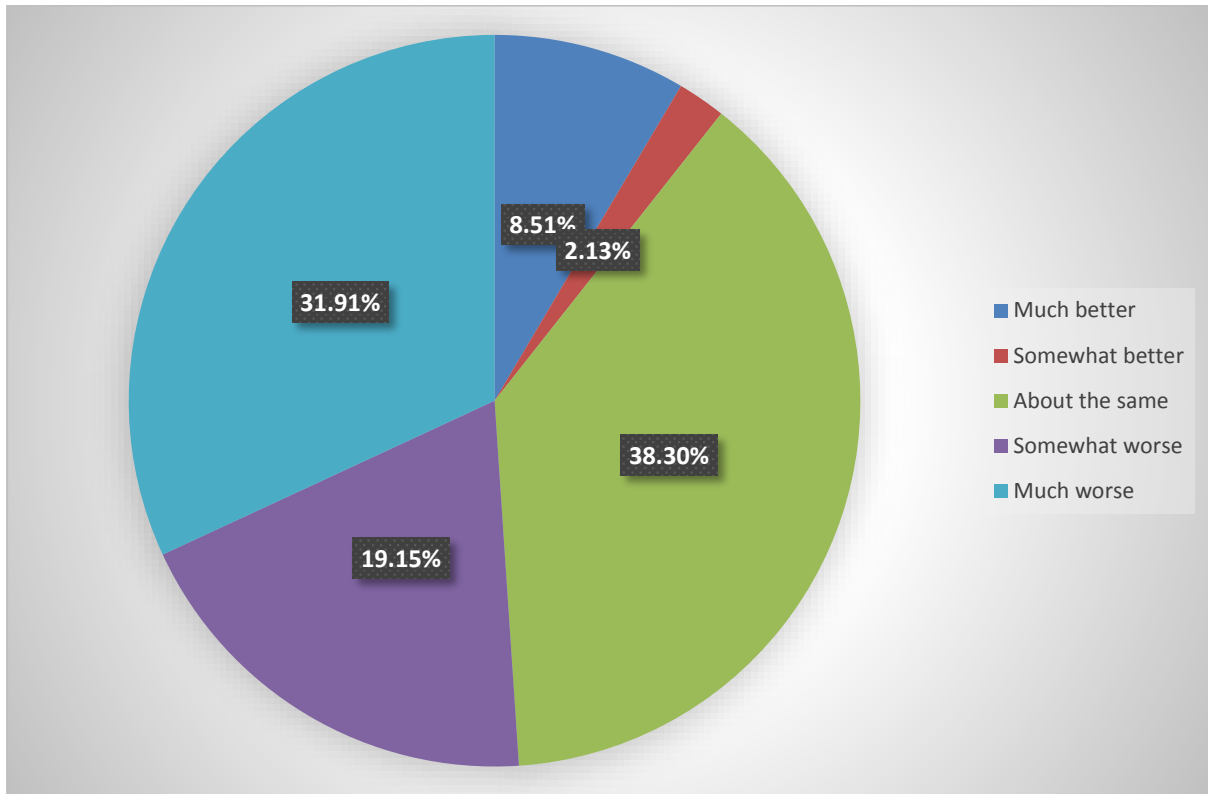


Figure 39 Importance of factors for businesses

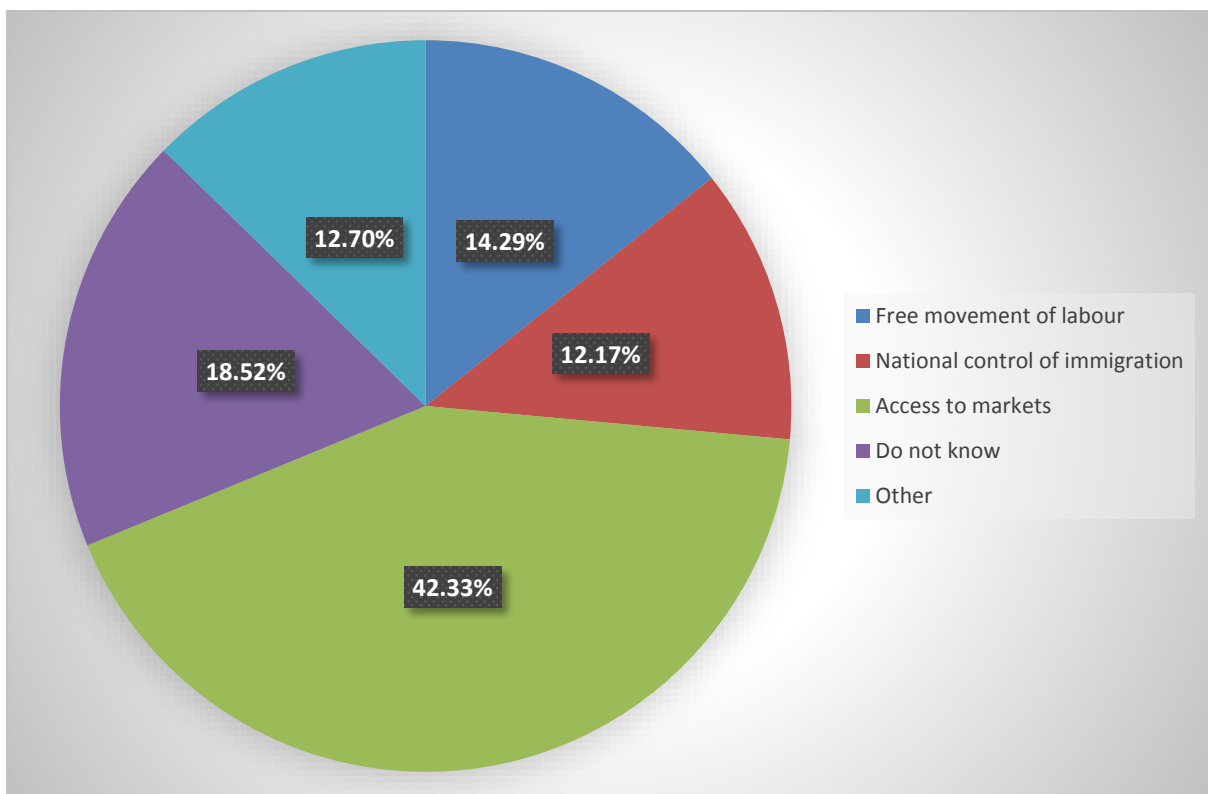


Figure 40 Importance of factors for businesses (Industries)

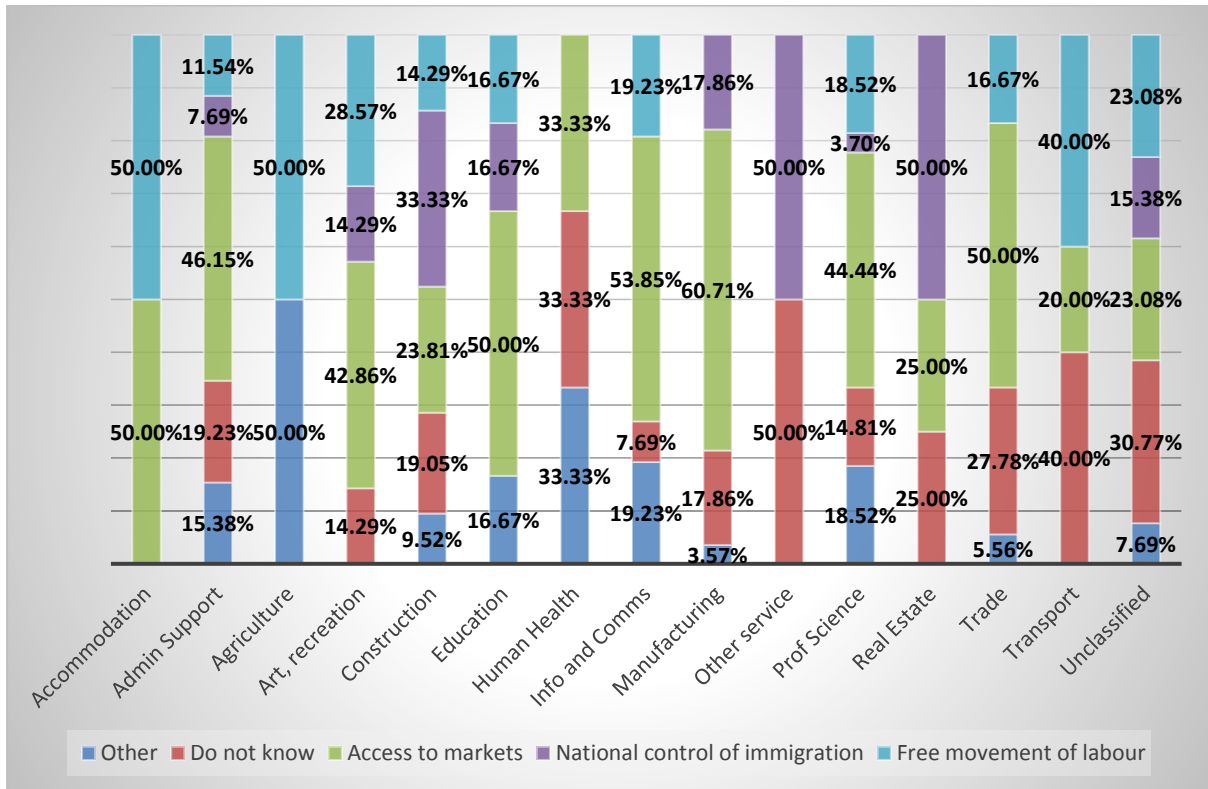


Figure 41 Importance of factors for businesses (exporters)

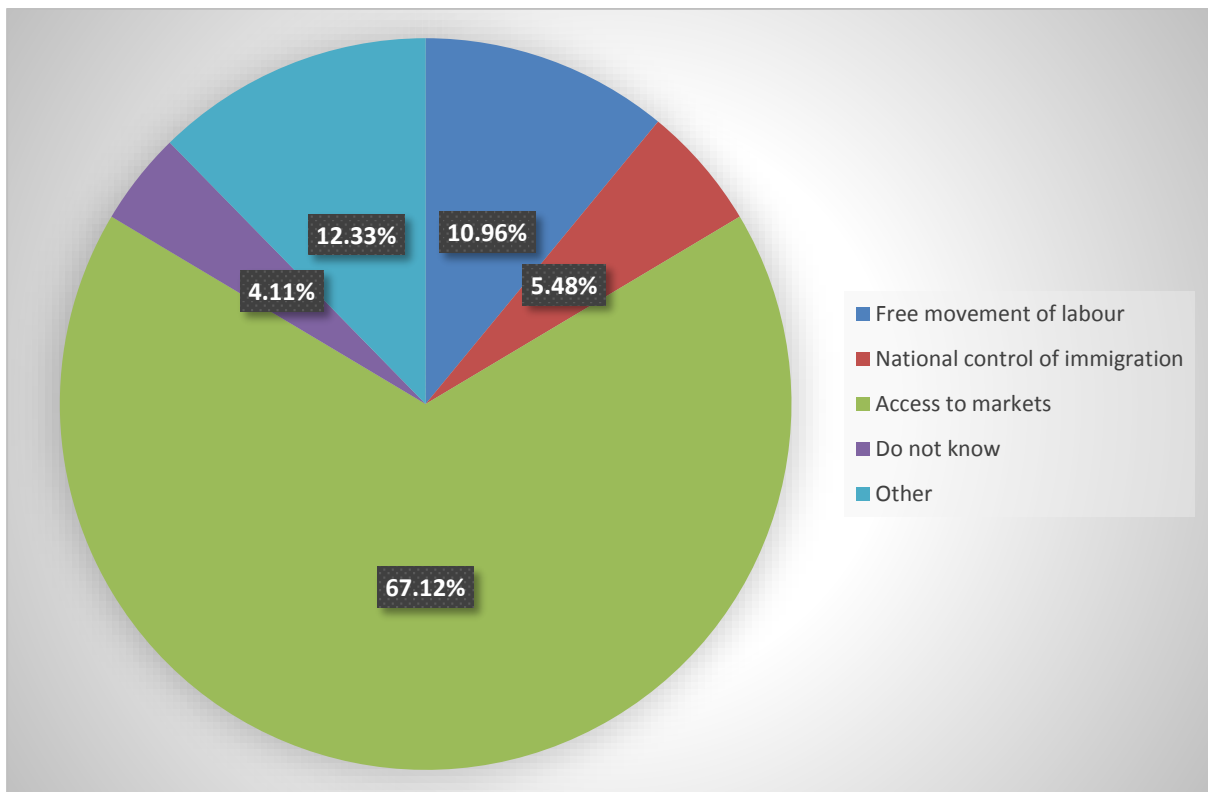


Figure 42 Importance of factors for businesses (importers)

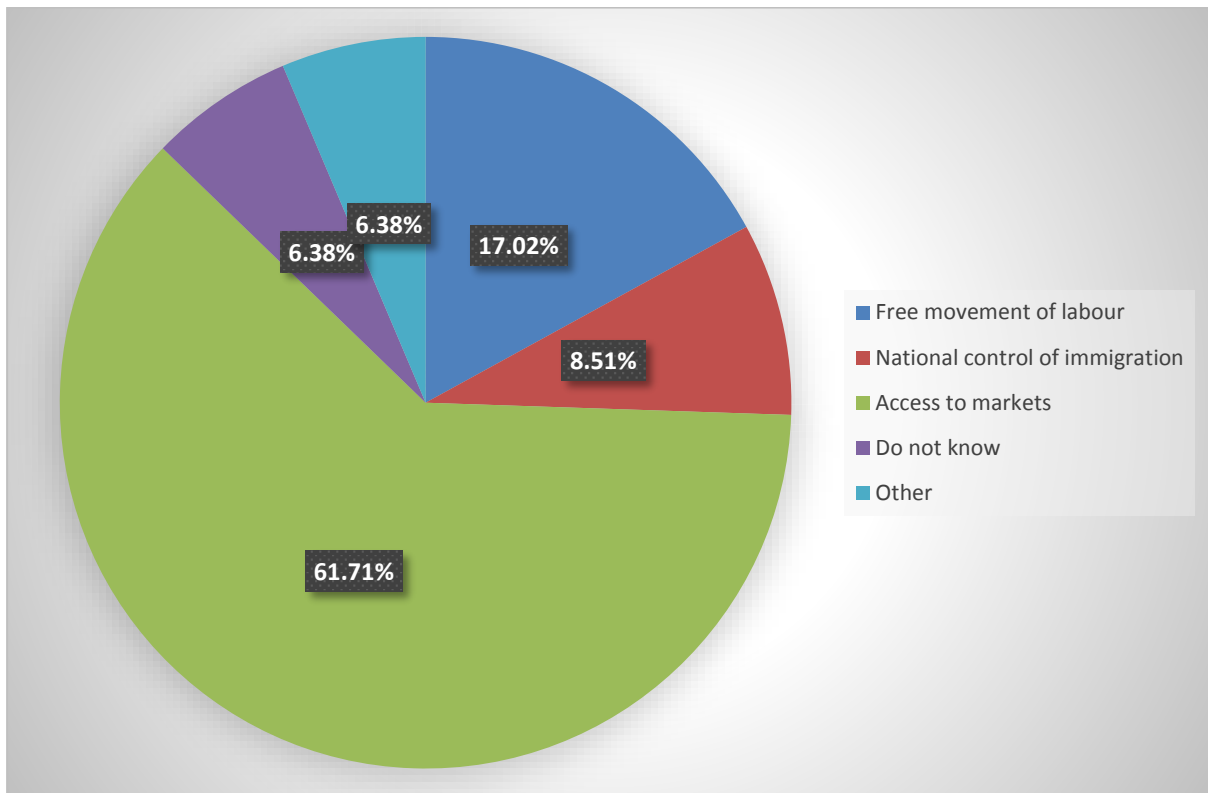


Figure 43 Impact of Brexit related uncertainty on businesses

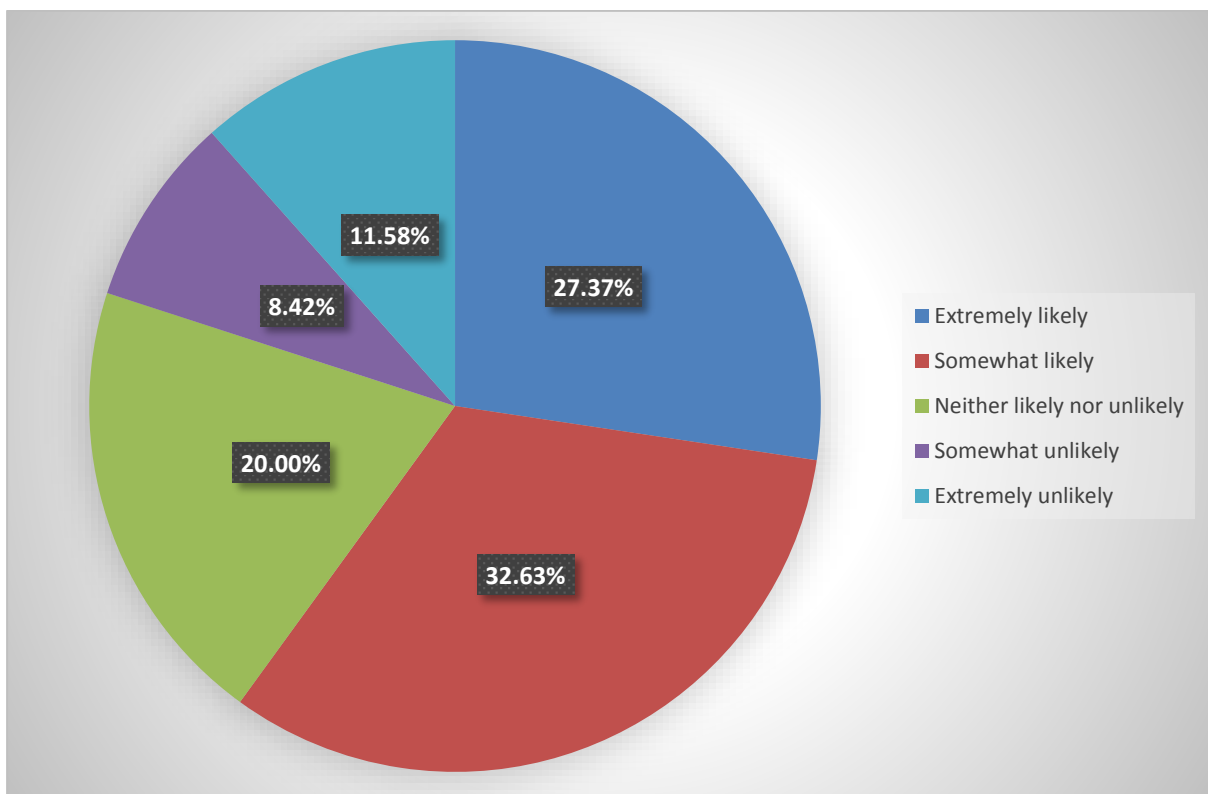


Figure 44 Impact of Brexit related uncertainty on businesses (industries)

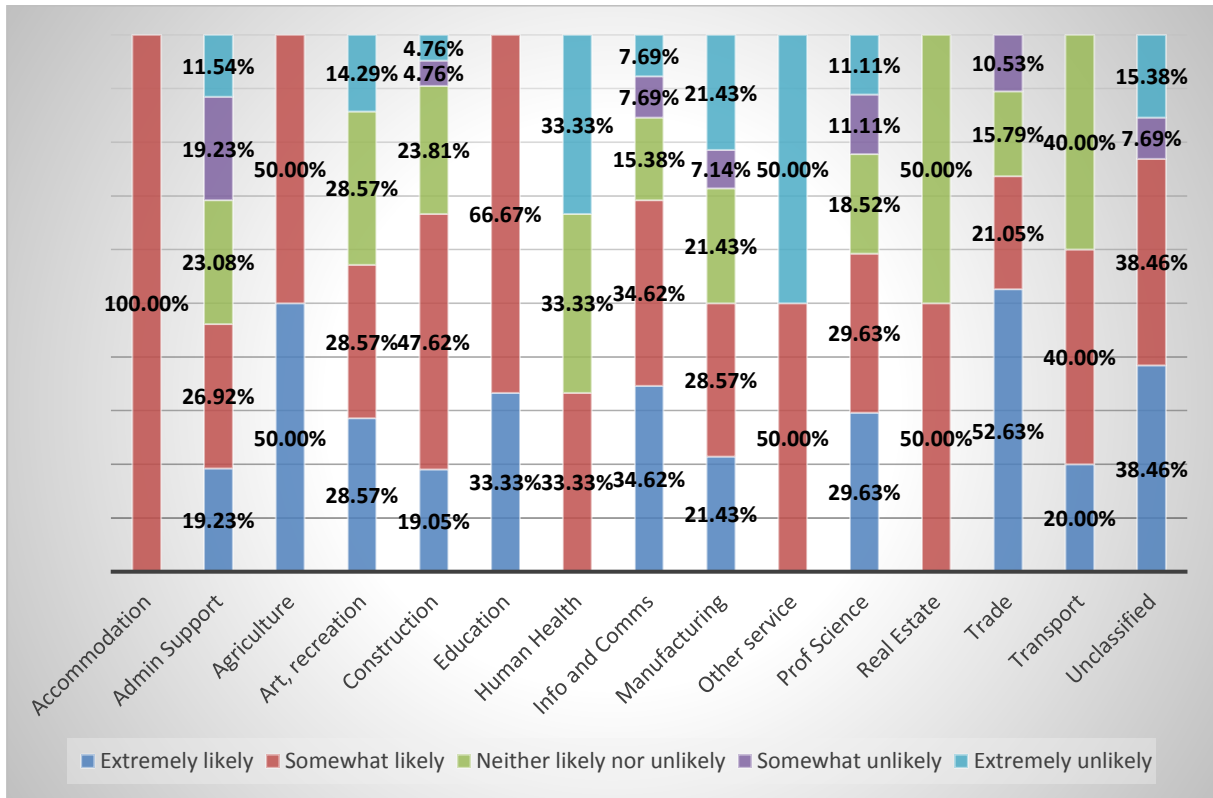


Figure 45 Impact of Brexit related uncertainty on businesses (exporters)

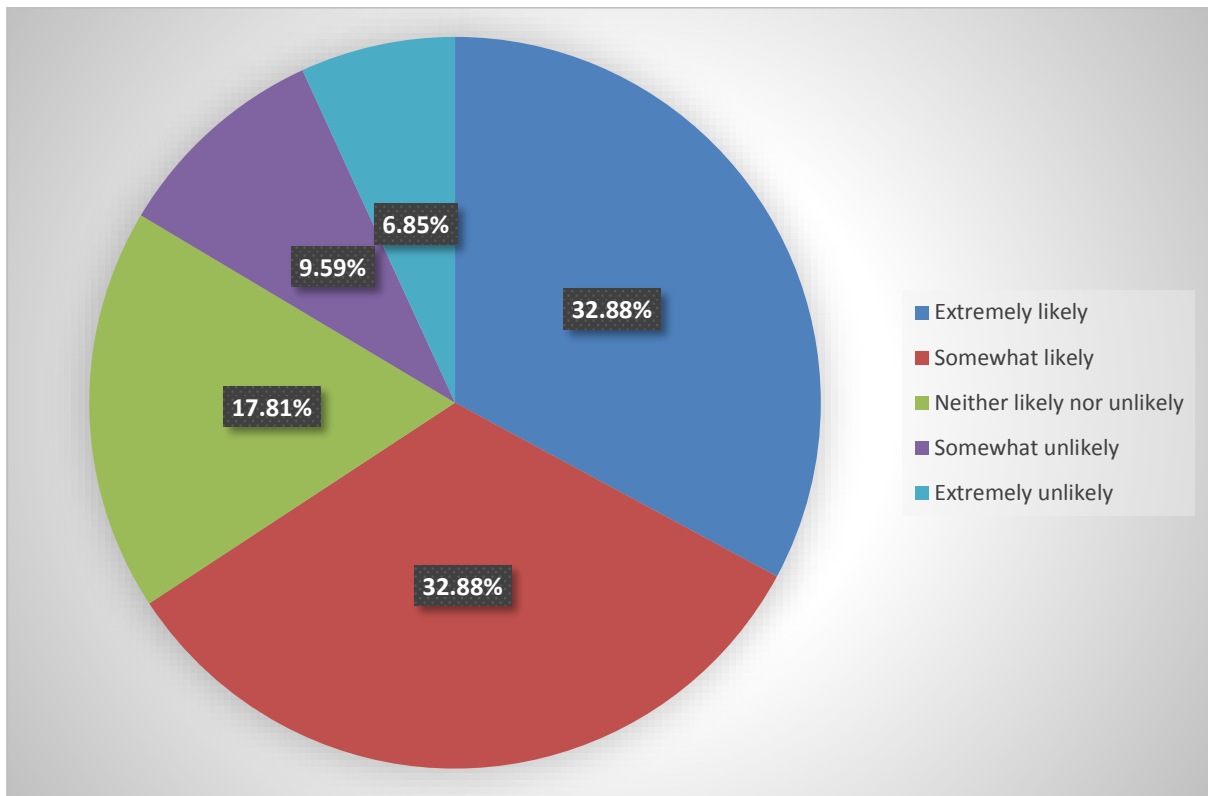
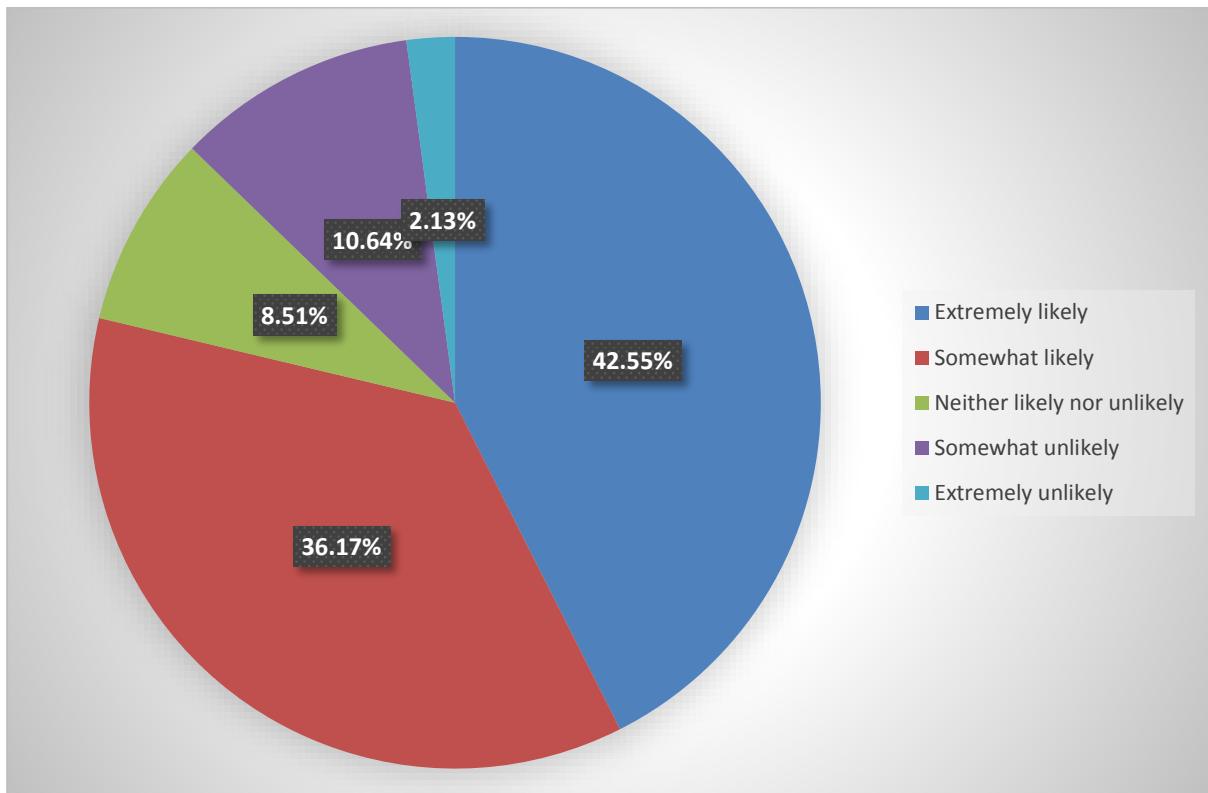


Figure 46 Impact of Brexit related uncertainty on businesses (importers)



## Corporate Characteristics and the Impact of Brexit

As part of our analysis on Brexit we explored the different responses businesses provided to our Brexit related questions and explored their relationship with their industry background, their technological intensity, their customer or partnership focus. Table 10 presents the responses of companies with regards to how well they understand the potential effects Brexit might have on their business. There are no differences with regards to industry participation or customer focus but the companies that have a higher technological intensity and higher partnerships focus have replied that they have a much better understanding of potential Brexit implications than the rest. This result could be attributed to the fact that companies with a higher technological intensity have a better knowledge and understanding of their environment and therefore better mechanisms to accumulate knowledge and respond to environmental changes. Similarly companies with partnerships focus could possibly tap into knowledge generated by other partners and therefore have a better understanding and evaluation of uncertainty (Hilmersson et al., 2015)

*Table 11 Understanding the effect of Brexit on businesses*

	F-stat	Probability
Industry	0.73	0.74
Technological Intensity	<b>1.54</b>	<b>0.09</b>
Customer Focus	1.36	0.22
Partnership Focus	<b>2.00</b>	<b>0.05</b>

We also wished to explore the positive or negative impact of Brexit according to the responses received. As it can be seen from Table 12, overall, Brexit does have a negative impact on companies and this is statistically significant. Despite the overall negative effect we did not identify any industry or other corporate characteristic that could moderate this result. The negative implications of Brexit on organisations span across industries, technological intensity, customer or partnership focus.



Table 12 Impact of Brexit on businesses

	t-stat	Probability
Overall effect	<b>5.40</b>	<b>0.00</b>
	<b>F-stat</b>	<b>Probability</b>
Industry	1.38	0.17
Technological Intensity	1.34	0.18
Customer Focus	1.30	0.25
Partnership Focus	1.02	0.42

Finally, we wanted to explore the impact of Brexit related uncertainty on participating companies. Results presented in Table 13 suggest that there is, once more, a strong statistically significant effect. The vast majority of companies have expressed a view that the Brexit related uncertainty is either extremely likely or somewhat likely to impact their operations. This result is, once more, not moderated by the industry classification or the corporate characteristics. This finding, when seen under the light of the results presented in Table 12 on the negative impact, confirms that Brexit has two effects on businesses. One, in the short term, immediately after the referendum result but also a medium/long term one through the creation of uncertainty in the external environment.

Table 13 Impact of Brexit related uncertainty on businesses

	t-stat	Probability
Overall effect	<b>6.64</b>	<b>0.00</b>
	<b>F-stat</b>	<b>Probability</b>
Industry	1.17	0.30
Technological Intensity	1.36	0.17
Customer Focus	1.63	0.13
Partnership Focus	0.93	0.49

## Conclusion and recommendations

This report focused on the internationalisation activities of SMEs located in Kent (UK) and the ways these firms have and may need to be further supported in the future by national and local government efforts. Importantly, this study also captured the preliminary views of Kent SMEs on the impact of Brexit. The role of SMEs in an economy is crucial both nationally and locally as they significantly contribute to growth by creating employment opportunities, assist in achieving higher production volumes, boosting exports of the country and introducing innovation.

To be precise the primary focus and key research aims were defined as follows:

1. To determine current levels of internationalisation among Kent businesses and compare them with those identified in the 2010 Kent International Business Study (KCC, 2010)
2. To assess the effectiveness of existing business support policies, mechanisms & services and identify gaps & opportunities.
3. To evaluate the potential impact of Brexit on the internationalisation decisions of Kent businesses.
4. To make recommendations about how to increase internationalisation capacity and activity among Kent businesses.

### Kent SMEs – the business profile

An interesting finding of the research project, which makes the study valuable for the wider UK community, is that the business profile of firms in Kent corresponds with the one observed for the whole of the UK. To be precise, key business characteristics such as the distribution of firms by economic size (turnover), employment composition and industry classification are directly comparable to the whole of the UK. This indicates that some of this study's findings, especially in terms of Brexit implications, may be applied to future considerations and planning outside the Kent region. Our sample, despite its small size, is representative of the county's population and shows no evidence of a non-respondent bias. SMEs in our sample show a normal credit score and relatively low failure rate. It is therefore safe to argue that in the current economic climate the likelihood of these firms' bankruptcy

is small although given the expected substantial changes in the external environment due Brexit, the survival rates of some firms may be affected.

### Kent SMEs and internationalisation: gains and future opportunities

Operating internationally has become an important business opportunity for SMEs that have a developed domestic portfolio of valuable and rare resources and wish to expand rapidly. Size, international experience, through building networks, and use of new technologies and innovation are key factors driving SMEs' internationalisation strategies. This study has found that a lot has happened since the prior report in 2010. At that time only a small proportion of companies engaged in international activities whilst we have found a significant increase of the number of companies that have internationalised, with proportions close to 35% for exporters and 25% for importers. Internationalisation is becoming a strategic decision for Kent SMEs, which these firms take in order to increase growth or profits. Indeed expanding internationally is not merely a reactive strategy evoked by the international move of close competitors neither it is considered by SMEs as an approach to secure business survival.

With respect to foreign markets destinations, EU markets are the key ones for exporters and importers with over 80% and 70% of companies suggesting that accessing these markets is crucial for their operations. Interestingly, emerging markets, such as India and China, play a more important role to importers than exporters. Despite this overall positive representation it is worth noting that exports are nevertheless a small proportion of the economic activity of surveyed companies. Further, export levels higher than cross-industry average are observed only in specific sectors, such as manufacturing, professional sciences and information technology.

There are a number of factors facilitating the internationalisation process of Kent SMEs. Key drivers fostering international efforts are following up of opportunities through product differentiation and quality, and the use of new technologies and innovation. On the other hand, the absence of development opportunities for external networks that would allow the accumulation of international

experience, which these firms would capitalize on in the future, is considered the most significant barrier. It is therefore essential to note that any future policy design and policy implementation aims at addressing this by focusing on the creation of external networks with a view to link Kent SMEs with the right-fit international partners.

According to an OECD study (Fliess, Busquets 2006) SMEs are wary of unfavourable foreign rules and regulations, high tariff barriers and inadequate property rights protection. SMEs are significantly influenced by high costs of customs administration and restrictive technical standards. In addition to these substantial external barriers, internal barriers also exist and relate to informational issues causing SMEs no or limited access to important information about internationalisation, functional challenges that correspond to resource constraints faced by SMEs, and finally operational barriers that relate to marketing strategic choices and individual product characteristics. The findings of this study show that Kent SMEs are driven towards internationalisation by product characteristics and not the development of international networks. Policy makers, therefore, should place particular emphasis on the support for the creation of such international networks as these would facilitate access to a wider range of international markets.

### The role of public support

The support SMEs are able to access is present in plurality and in the form of various support mechanisms at national or local (regional) level. It is interesting to note that Kent firms tend to rely less on national government initiatives to support their internationalisation activities than on local support. Kent firms tend to see national and local government bodies as facilitators for their activities offering reduction of obstacles (relaxing legislation and removing bureaucracy) and less as contributors providing direct counselling and funding provision. One can also argue that the substantial number and diversity of support mechanisms creates confusion for SMEs. SMEs have limited resources and are not willing to spend significant time in identifying the best support in a difficult to differentiate support

offering. This effect is further enhanced by the fact that there seems to be a lack of significant coordination between individual support bodies.

To be precise, the Federation of Small Businesses, Institute of Directors and Kent Invicta Chamber of Commerce are the most recognizable ones but the UK Trade and Investment (Department for International trade) and Gov.Uk emerge also as significant support mechanisms, specifically for Kent exporters. It is worth noting that despite the relatively high awareness of business support amongst businesses, there is little actual use of the different support schemes.

The results representation on the actual effectiveness of the existing support mechanisms is also somewhat mixed. General support mechanisms tend to score high in the wider population but when it comes specifically to exporters more specialized mechanisms, such as UK Export Finance, Export Britain and Federation of Small Businesses are considered more effective. This demonstrates again the need for a more focused approach to supporting the internationalisation efforts of SMEs. Importantly, a significant issue around internationalisation strategy noted by SMEs is the one of funding. The lack of access to funding as well as lack of awareness of relevant funding schemes together with the very limited possession of relevant knowledge and in-house experience about various funding mechanisms are considered important barriers to growth through internationalisation for Kent SMEs.

To summarise, two important findings emerge here. The first one is that companies still consider advice and support important but they require access to specialised information such as access to target customers and marketing knowledge. Both these types of information require a tailored approach offered to individual organisations and cannot be substituted effectively by a general type of advice and support which seems to be currently offered. The second finding is that access to this type of specialised information might have a positive effect on the more efficient distribution of internal resources thus tackling the most important factor limiting SMEs – the lack of resources.

## Brexit Implications

Kent SMEs do not have mitigation strategies in place to manage the impact of Brexit, as indeed 1 in 4 companies do not have an understanding of the specific nature of impact. Most industries (primarily services) face the uncertainty of a post Brexit regulatory environment that will no longer be governed by EU regulations. There is no certainty around what the new UK regulations will look like. Liberalization is likely to have positive effects on industries such as accommodation, construction, human health, professional science. On the other hand, it is evident that administrative support, art and recreation, education, information and communications and manufacturing industries clearly anticipate a negative impact due to Brexit, either as a result of the loss of access to markets or uncertainty with regards to the newly set-up regulatory environment.

For exporters, the proportion of companies that expect a negative impact is close to 60%. This is not unexpected given the uncertainty of the post Brexit trade relationship with other EU markets and the importance of these markets for SMEs located in Kent. Any positive impact also diminishes due to a potentially weaker pound sterling and its effect on the competitiveness of these organisations to service through imports the UK market or produce final goods with the use of imported raw materials and intermediate goods.

Not all industries will be affected by the same factors equally. For instance, human resources, low or semi-skilled, such as accommodation, agriculture and transport or highly skilled such as art and recreation, education, information and communications, professional science and trade have indicated that free movement of labour is an important factor in their consideration. Access to markets is an important factor across industries with manufacturing showing the highest overall proportion of firms, slightly over 60%.

The potential for Brexit success or failure will be based on the negotiated trade terms that will give companies access to markets. This study did not explore impact of uncertainty in the short, medium

and long term decision. Frequent analysis and information provision on the process and outcome of negotiations during and post Brexit is important.

## References

- BARNEY, J., 1991. Firm Resources and Sustained Competitive Advantage. *Journal of Management*, **17**(1), pp. 99.
- CRICK, D., 2007. SMEs' Barriers Towards Internationalisation and Assistance Requirements in the UK: Differences Between Exporters and Firms Employing Multiple Modes of Market Entry. *Journal of Small Business & Entrepreneurship*, **20**(3), pp. 233-244.
- FLIESS, B. and BUSQUETS, C., 2006. The Role of Trade Barriers in Sme Internationalisation. *OECD Papers*, **6**(13), pp. 1-19.
- FREEL, M.S., 2005. Perceived Environmental Uncertainty and Innovation in Small Firms. *Small Business Economics*, **25**(1), pp. 49-64.
- GOLOVKO, E. and VALENTINI, G., 2011. Exploring the complementarity between innovation and export for SMEs' growth. *Journal of International Business Studies*, **42**(3), pp. 362-380.
- HEAVIN, C. and ADAM, F., 2012. Dealing With Uncertainty Through KM: Cases in Four Software SMEs. *Proceedings of the European Conference on Information Management & Evaluation*, , pp. 117-126.
- HILMERSSON, M., SANDBERG, S. and HILMERSSON, F.P., 2015. Political knowledge, political turbulence and uncertainty in the internationalization process of SMEs. *European Business Review*, **27**(3), pp. 234-252.
- LU, J.W. and BEAMISH, P.W., 2001. THE INTERNATIONALIZATION AND PERFORMANCE OF SMEs. *Strategic Management Journal*, **22**(6), pp. 565.
- MAKHIJA, M., 2003. Comparing the Resource-Based and Market-Based Views of the Firm: Empirical Evidence from Czech Privatization. *Strategic Management Journal*, **24**(5), pp. 433.
- MILES, R.E. and SNOW, C.C., 1978. *Organizational strategy, structure, and process*. Stanford, Calif.; Stanford, Calif.: Stanford University Press; Stanford University Press.
- MILLIKEN, F.J., 1987. Three Types of Perceived Uncertainty About the Environment: State, Effect, and Response Uncertainty. *Academy of Management Review*, **12**(1), pp. 133-143.
- NARAYANAN, V., 2015. Export Barriers for Small and Medium-sized Enterprises: A Literature Review based on Leonidou's Model. *Entrepreneurial Business & Economics Review*, **3**(2), pp. 105-123.
- NONAKA, I., 1994. A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*, **5**(1), pp. 14-37.
- OJIAKO, U., CHIPULU, M., MARSHALL, A. and BABOOLALL, P., 2014. Thematic elements underlying risk perception amongst small and medium enterprise owner-managers. *Acta Commercii*, **14**(1), pp. 1-9.
- PARNELL, J.A., 2013. Uncertainty, Generic Strategy, Strategic Clarity, and Performance of Retail SMEs in Peru, Argentina, and the United States. *Journal of Small Business Management*, **51**(2), pp. 215-234.



REEVES, M. and CARLSSON-SZLEZAK, P., 2016. A CEO's Guide to Navigating Brexit. *Harvard Business Review Digital Articles*, , pp. 2-5.

SULLIVAN-TAYLOR, B. and BRANICKI, L., 2011. Creating resilient SMEs: why one size might not fit all. *International Journal of Production Research*, **49**(18), pp. 5565-5579.

ZAHRA, S.A., HAYTON, J.C. and SALVATO, C., 2004. Entrepreneurship in Family vs. Non-Family Firms: A Resource-Based Analysis of the Effect of Organizational Culture. *Entrepreneurship: Theory & Practice*, **28**(4), pp. 363-381.

ZHOU, L., WEI-PING WU and LUO, X., 2007. Internationalization and the performance of born-global SMEs: the mediating role of social networks. *Journal of International Business Studies*, **38**(4), pp. 673-690.

## Appendices

### Appendix 1. Definition of variables

#### Likelihood of Failure

The QuiScore is calculated using statistical and modelling techniques to select and apply a weight to data elements (variables and coefficients) that are most predictive of business failure. The data elements are extracted from the following areas, each of which represents a flow of information:

- Account information - Hundreds of indicators related to the following can be collected from the Company balance sheet:
  - Profitability
  - Solvency
  - Leverage
  - Business structure
  - Capitalisation
  - Working capital
  - Cash flow
  - Liquidity
  - Productivity
  - Trend
- Director history
- Registry Trust Information: County Court Judgements (CCJs)
- Shareholder funds
- Lateness in filing accounts

All this information is included during the process that evaluates the QuiScore, taking into consideration the medium-term life cycle of the Company as a whole.

The selection of variables and application of weightings to them is the result of extensive data analysis. The development of calculation models considers a combination of the "good" and "bad" performance of businesses held in the source database.

#### Credit score

The credit score is a measure of the likelihood that a company will become bankrupt in the twelve months following the date of calculation. More specifically, it predicts the likelihood that a company will obtain legal relief from its creditors or cease operations over the next twelve month period.

The credit score is given as a number in the range 0 to 100, where 0 represents companies with the highest likelihood of failure. For ease of interpretation, that range may be considered as comprising five distinct bands:

- 81-100 The Secure Band:

Companies in this sector tend to be large and successful public Companies. Failure is very unusual and normally occurs only as a result of exceptional changes within the Company or its market.

- 61-80 The Stable Band:

Here again, Company failure is a rare occurrence and will only come about if there are major Company or marketplace changes.

- 41-60 The Normal Band:

Companies here tend to represent the average company where failure is still rare but could happen subject to substantial changes to the external environment.

- 21-40 The Cautious Band:

Here, as the name suggests, there is a significant risk of Company failure; in fact, Companies in this band are, on average, four times more likely to fail than those in the Normal Band.

- 00-20 The High Risk Band:

Companies in the High Risk sector may have difficulties in continuing trading unless significant remedial action is undertaken, there is support from a parent Company, or special circumstances apply. A low score does not mean that failure is inevitable.

The credit score is intended to be an aid to the financial part of the overall assessment and has to be considered in conjunction with other relevant information, such as product life cycles competition, interest rates and other micro- and macro-economic factors. The stability of many companies is reliant on that of holding companies or other associates. The model assumes that such related organisations are stable and will provide continuity of support, so separate reports are required to confirm their status. Where the support is provided in the form of current loans, the score will be lower.

A range of reports are available to provide further information on the subject, related concerns and markets. Accounts information is taken from that filed by the subject at the Companies Registry and is

captured accepting the audited criteria. Consolidated accounts reflect the total picture for a subject company and its subsidiaries, so the scores based on consolidated figures give the position for the group as a whole. Scores based on unconsolidated accounts of companies with trading subsidiaries will require further interpretation, as will scores of groups where there have been acquisitions or disposals during the latest registered financial period. The subject's registration of full accounts, rather than taking the exemptions for small and medium-sized companies, enhances the precision of the calculation.

## Appendix 2. Data tables

This appendix provides the data tables for those figures where information has been presented in an aggregate way.

Table A1. Corporate Characteristics

Question	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
Provides a high level of expertise and experience	81.25%	15.63%	2.34%	0.00%	0.78%
Provides a high level of customer service	75.78%	20.70%	2.34%	0.39%	0.78%
Provides products / services of high quality	77.34%	17.97%	2.34%	0.78%	1.56%
Works closely with its customers to better understand their needs	65.76%	26.85%	5.06%	1.17%	1.17%
Employs the necessary qualified staff	61.39%	28.96%	6.56%	1.54%	1.54%
Shows a spirit of co-operation and effective communication	49.03%	35.02%	13.62%	1.17%	1.17%
Has modern technological equipment	48.45%	33.72%	12.40%	3.49%	1.94%
Makes full use of information technologies	42.86%	37.45%	11.97%	5.79%	1.93%
Responds quickly to changes in the business environment - showing flexibility	37.35%	40.86%	15.95%	5.06%	0.78%
Has an efficient organisational structure which helps to do our job better and faster	33.07%	40.86%	17.51%	7.00%	1.56%
Performs better in comparison with our competitors	27.95%	38.98%	28.35%	3.94%	0.79%
Sets long-term business development goals	27.24%	43.58%	21.01%	7.39%	0.78%
Supports our employees to participate in training regularly	29.96%	35.02%	26.07%	7.00%	1.95%
Faces intense competition	28.52%	39.06%	19.53%	8.98%	3.91%
Understands our competitors' strategy	19.92%	39.06%	33.20%	5.86%	1.95%
Faces a great demand for our main products	21.48%	35.55%	35.16%	6.25%	1.56%
Offers products that have a long life	29.53%	24.02%	35.04%	5.51%	5.91%
Invests in the development of innovative products	23.26%	25.19%	31.01%	12.02%	8.53%
Is a family business	39.00%	16.60%	9.65%	6.56%	28.19%
Constantly researches the market for new partnerships in the United Kingdom	15.18%	25.68%	31.13%	16.73%	11.28%
Works for very few customers	19.92%	25.78%	16.02%	16.02%	22.27%
Is facing obstacles in transactions with the public sector	12.16%	17.65%	44.71%	10.20%	15.29%
Constantly researches the market for new partnerships abroad	11.76%	14.90%	23.53%	15.69%	34.12%

Table A2. Factors influencing the company's development

Question	A great deal	A lot	A moderate amount	A little	None at all
Building a powerful brand name	26.56%	32.81%	22.66%	10.94%	7.03%
Investing in new technologies	16.80%	29.69%	28.91%	18.36%	6.25%
Opportunities for developing new domestic markets	19.53%	28.91%	25.39%	15.23%	10.94%
Investing in innovation (new products, new production and organizational processes)	13.33%	26.67%	26.27%	18.82%	14.90%
Adoption/Technology Integration in enterprise processes	12.11%	24.22%	32.42%	16.80%	14.45%
Creating partnerships with other companies to expand activities	14.84%	21.88%	27.73%	17.58%	17.97%
Changes in consumer preferences and inability to meet expectations	11.37%	18.43%	38.43%	16.86%	14.90%
Finding capable executive staff	16.02%	25.78%	20.31%	12.11%	25.78%
Human Resource Training	7.42%	18.75%	35.94%	19.92%	17.97%
Opportunities for developing new markets abroad	10.98%	16.47%	19.22%	13.73%	39.61%
Other (please specify):	15.85%	3.05%	14.02%	4.27%	62.80%

Table A3. Issues affecting the external environment

Question	A great deal	A lot	A moderate amount	A little	None at all
<b>Legislative environment</b>	27.73%	24.22%	30.86%	10.94%	6.25%
<b>Utilisation of communication technologies (e-commerce institutionalisation, electronic communication)</b>	20.31%	23.83%	29.69%	16.41%	9.77%
<b>Tax reforms (reduced tax rates, simplification, fighting tax evasion)</b>	14.45%	17.19%	29.30%	22.27%	16.80%
<b>Modernisation of public administration (structural change, combating bureaucracy, simplify licensing - transfers)</b>	12.16%	14.90%	29.41%	23.53%	20.00%
<b>Competition issues (combating unfair competition, quality control)</b>	9.41%	16.86%	29.41%	24.31%	20.00%
<b>Improvement of infrastructure (road, rail, airports, ports)</b>	9.77%	16.80%	25.78%	19.92%	27.73%
<b>Social Security System (relief, reducing employer contributions)</b>	10.16%	16.02%	22.66%	21.48%	29.69%
<b>Management of energy issues (cost of energy, waste)</b>	8.63%	15.29%	22.75%	27.06%	26.27%
<b>Access to sources of funding (government aid, bank lending, venture capital)</b>	14.96%	11.02%	18.90%	20.08%	35.04%
<b>Improvement of counseling/support to SMEs by the public sector</b>	4.30%	10.94%	21.09%	23.44%	40.23%
<b>Other (please specify):</b>	13.38%	2.55%	12.74%	3.18%	68.15%



Table A4. Reason supporting continuous exporting activity

Question	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
To increase our client base	45.78%	40.96%	10.84%	1.20%	1.20%
To explore new markets	43.37%	37.35%	15.66%	2.41%	1.20%
It is one of the fundamentals of the business - to get involved with non-UK businesses	40.96%	25.30%	22.89%	7.23%	3.61%
Provides resilience for business, particularly as a result of the economic downturn	29.27%	29.27%	30.49%	7.32%	3.66%
To enhance our strategic goals	25.30%	34.94%	28.92%	2.41%	8.43%
To increase our sales through overseas distributors	24.10%	24.10%	27.71%	8.43%	15.66%
To exploit immature markets	19.28%	20.48%	28.92%	20.48%	10.84%
The domestic market is saturated	9.64%	22.89%	40.96%	12.05%	14.46%
We have fallen into it by luck	9.64%	21.69%	18.07%	16.87%	33.73%

Table A5. Barriers influencing the decision to internationalise

Question	A great deal	A lot	A moderate amount	A little	None at all
Finding the right partners and distributors	10.19%	23.79%	16.99%	9.22%	39.81%
Finding access to local markets and reliable local information	6.31%	19.42%	17.96%	16.50%	39.81%
Exchange rate and currency fluctuations	8.74%	12.14%	19.42%	13.11%	46.60%
Lack of internal resources	7.80%	13.17%	15.61%	20.49%	42.93%
Logistics and distance	10.19%	13.11%	13.11%	14.08%	49.51%
Time consuming	7.32%	10.73%	19.02%	18.05%	44.88%
Local bureaucracy	5.34%	12.62%	19.90%	15.05%	47.09%
Increasingly aggressive pricing by competitors	8.25%	10.68%	16.99%	14.56%	49.51%
Competition from other markets	6.31%	11.65%	19.90%	12.14%	50.00%
Purchasing in the UK - unreasonable pricing	7.92%	11.88%	10.40%	11.39%	58.42%
Banking procedures	3.90%	9.27%	17.07%	17.07%	52.68%
Saturated markets	4.88%	7.80%	17.07%	15.61%	54.63%
Cultural and language barriers including different work ethics	1.94%	8.74%	17.48%	14.08%	57.77%
The funding of travel	3.40%	4.85%	14.08%	18.93%	58.74%
Costs for translation of literature (manuals, marketing material)	2.44%	5.85%	12.68%	16.10%	62.93%
Time differences	0.97%	2.43%	14.08%	16.02%	66.50%
Visas for businesses to come to the UK	0.97%	3.88%	7.28%	9.22%	78.64%

Table A6. Factors facilitating the decision to internationalise/export

Question	Extremely important	Very important	Moderately important	Slightly important	Not at all important
We had more internal resources available	13.79%	21.18%	19.70%	4.43%	40.89%
There was advice on where to find information on potential customers	12.81%	19.21%	18.23%	5.42%	44.33%
It was easier to access international markets	11.88%	18.81%	17.82%	9.90%	41.58%
There was help with effective marketing abroad	8.46%	20.90%	16.92%	6.47%	47.26%
There was support with getting money up-front from countries that are traditionally bad payers	11.44%	17.41%	12.44%	9.45%	49.25%
We could locate and co-operate with a reliable distributor abroad	11.39%	15.84%	13.37%	9.41%	50.00%
There was not so much bureaucracy	7.88%	17.24%	16.26%	11.33%	47.29%
The cost of exporting was lower than selling locally	6.90%	12.32%	16.26%	8.37%	56.16%
There was available support and advice on cultural differences	4.46%	12.87%	12.38%	13.37%	56.93%
There was assistance on different human rights issues in other countries	3.96%	7.43%	10.89%	13.37%	64.36%
We could share the risk with another UK company	1.97%	5.42%	12.81%	15.27%	64.53%
Other (please specify):	7.04%	2.82%	13.38%	1.41%	75.35%

Table A7. Factors contributing to the decision to internationalise/export

Question	Far too much	Moderately too much	Neither too much nor too little	Moderately too little	Far too little
Other	1.49%	2.99%	43.28%	2.24%	50.00%
Stricter regulation of competition rules in the EU	3.05%	10.15%	52.28%	11.17%	23.35%
Certification of products / services	4.04%	12.63%	50.51%	8.08%	24.75%
Service counseling and support for business development	2.53%	12.63%	53.54%	8.08%	23.23%
More suitable administrative and financial regulations	3.03%	11.11%	57.07%	9.09%	19.70%
Availability of skilled labour force	6.57%	13.64%	46.97%	10.61%	22.22%
Financing of participation in international exhibitions and seminars	6.09%	15.74%	44.67%	11.17%	22.34%
Availability of information on new market trends	5.05%	15.66%	50.00%	5.56%	23.74%
Strengthen our business's technological capacity	5.58%	12.69%	53.81%	8.63%	19.29%
Favourable tax system	7.58%	17.68%	44.95%	8.59%	21.21%

Table A8. Average score of effectiveness evaluation (only if used)

	Extremely effective	Very effective	Moderately effective	Slightly effective	Not effective at all
<b>Innovative Sector Exchange Project</b>				100%	
<b>Department for International Trade</b>		14.29%	28.57%	14.29%	42.86%
<b>Kent International Business</b>		33.33%		33.33%	33.33%
<b>UK Trade and Investment</b>	6.67%	16.67%	30.00%	20.00%	26.67%
<b>UK Export Finance</b>		33.33%	33.33%		33.33%
<b>Export Britain - British Chambers of Commerce</b>	14.29%	14.29%	28.57%	14.29%	28.57%
<b>Enterprise Europe Network</b>	20.00%		20.00%	60.00%	
<b>Kent Invicta Chamber of Commerce</b>	13.64%	22.73%	31.82%	9.09%	22.73%
<b>Federation of Small Businesses</b>	18.18%	15.15%	36.36%	9.09%	21.21%
<b>Locate in Kent</b>	30.77%	7.69%	23.08%	7.69%	30.77%
<b>Institute of Directors</b>	16.67%	12.50%	41.67%	16.67%	12.50%
<b>Gov.uk</b>	16.67%	20.00%	33.33%	30.00%	

Table A9. Average score of effectiveness evaluation (only if used - exporters)

	Extremely effective	Very effective	Moderately effective	Slightly effective	Not effective at all
<b>Gov.uk</b>		40.00%	45.00%	10.00%	5.00%
<b>Department for International Trade</b>	30.77%	7.69%	30.77%	23.08%	7.69%
<b>UK Trade and Investment</b>	40.00%	20.00%	40.00%		
<b>UK Export Finance</b>	50.00%		50.00%		
<b>Enterprise Europe Network</b>		75.00%			25.00%
<b>Export Britain - British Chambers of Commerce</b>	33.33%	16.67%	33.33%	16.67%	
<b>Federation of Small Businesses</b>	40.00%	10.00%	30.00%	10.00%	10.00%
<b>Institute of Directors</b>	16.67%	16.67%	41.67%	8.33%	16.67%
<b>Kent Invicta Chamber of Commerce</b>	33.33%	11.11%	33.33%	11.11%	11.11%
<b>Locate in Kent</b>	37.50%		37.50%		25.00%