



Crowe Horwath™



Final Report to



An Roinn Airgeadais
Department of Finance

in respect of a Survey of R&D Active Companies

9th October 2013

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Executive Summary

Introduction and Background

Crowe Horwath was commissioned in May 2013 by the Department of Finance to conduct a survey of research and development (R&D) active firms in respect of the R&D tax credit. As part of an overall review of the R&D tax credit being undertaken by the Department itself, it was decided to undertake a survey of companies active in R&D in order to elicit a body of information that would be of relevance in determining the take-up and effectiveness of the R&D tax credit among Irish industry.

The terms of reference were to design and conduct a survey, aimed at R&D active companies that have a presence in the State, based on the guidance contained in the RFT document and to prepare a report that synthesises and presents the findings from the survey.

Crowe Horwath set out a methodology to meet the terms of reference, commencing with project initiation and a review of background information, followed by the design and roll-out of the survey itself. This was succeeded by the analysis phase, incorporating quantitative SPSS analysis and qualitative analysis using NVivo software. Finally, the draft and final reports were developed in conjunction with the Department, setting out all the findings from the survey process.

The survey itself, once the content was agreed with the Department, was developed using online survey software LimeSurvey and constructed as an online questionnaire, allocating individual “tokens” or access codes to the survey to participants. The survey was presented as a series of grouped questions, and included many dependent or conditional questions, only presenting to those who had answered previous questions in specific ways.

Profile of Survey Respondents

- Approximately 1525 valid contacts were invited to participate in the survey. A number of incomplete responses were discarded, resulting in a final dataset of 331 responses, representing approximately 21.7%. Based on our experience, this is a very strong response rate for a survey such as this.
- As set out in the report, 81% (269) of the respondents were active in R&D in Ireland – 103 described themselves multinational firms (39.8%) and 156 as indigenous Irish organisations (60.2%) – and this cohort effectively represents the dataset used for the analysis because those who were not active were eliminated from the survey process at the first stage. A total of 217 respondents indicated that they currently claim the R&D tax credit; this represents approximately 14.7% of the total number claiming the R&D tax credit according to Department records.
- The dominant economic sectors among the survey respondents are manufacturing (46.1%) and information and communication (23%), with professional, scientific and technical activities and financial and insurance activities also represented well. There are some discrepancies between this sector breakdown and that of the firms claiming the R&D tax credit according to Department figures but the overall pattern of the sector profile is similar – dominated by manufacturing and information and communication categories.
- The average turnover figure among survey respondents is €170.4m (this figure is skewed upwards due to a small number of very high turnover figures). The total turnover of all responding firms amounts to €41.7bn. 60% of respondents had turnover of more than €5m in the past financial year, with 15% having turnover of less than €1m.
- The average number of employees in responding firms is 220, ranging from 3 to 4,500. Respondents employ a total of 55,800 employees. More than half of the firms surveyed had fewer than 50 employees, with more than three-quarters employing fewer than 150 employees.

- Multinationals tend towards the higher turnover figures, with 41.6% reporting turnover of more than €50m in the last year, and only 14.6% indicating turnover of less than €5m. By contrast, more than half (55.6%) of the indigenous firms have turnover of less than €5m; more than three-quarters of the indigenous firms (76.5%) have turnover of less than €10m, with only one-quarter (25.8%) of the multinationals having turnover of less than €10m.
- The contrast in organisation size between multinational and indigenous organisations continues when examining employee numbers: nearly half (48%) of multinational respondents employ 150 or more, by contrast to just 10.5% of indigenous firms employing 150 or more. More than two-thirds (68.4%) of indigenous firms employ fewer than 50 people, versus only 21.4% of multinationals. The average employee numbers in multinational firms are 432, by contrast with an average of 88 for indigenous firms, and multinational respondents employ a total of 42,291, with indigenous firms employing 13,378.

Multinational respondent firms are on average larger than the indigenous respondents, both in terms of employee numbers and turnover.

Key Findings

- Firms claiming the R&D tax credit, currently or previously, indicate that they have more than 50,000 employees collectively, and on average employ 213 employees.
- More than half of the survey respondents (147 or 54.6%) had received R&D grants from Enterprise Ireland, with a further 46 (17.1%) having received such grants from the IDA. 82.5% of those currently claiming the R&D tax credit are also recipients of R&D grants, whilst 62.5% of those who previously claimed the R&D tax credit have been in receipt of R&D grants.

Firms whose base year (2003) and 2011 spend could be compared showed overall increases in spending on R&D activities.

We asked respondents about their R&D expenditure in 2003, the base year for the purposes of claiming the R&D tax credit and a baseline figure for comparing pre-credit activity. The 2003 spend is dominated by relatively low levels – below €200,000, with more than three-quarters of firms falling into this category. When we asked respondents about their spend in 2011, the last relevant tax year for which claims would have been prepared, we can see an increase in R&D expenditure: the 2011 figures show just over 35% of firms in the same low-spend category, with 37% now spending more than €500,000, by comparison with 13% in 2003.

- 57% of firms who responded (62) indicated there had been changes in R&D expenditure in the years following the first claim for the R&D tax credit. When asked to clarify what had changed, 86.9% of those responding to the question indicated that expenditure had increased. It appears that the R&D tax credit had an influence on the increased expenditure for the (small number of) firms in question, with 32.7% indicating that it had a greater influence than the R&D grant and a further 30.8% stating that the credit and the grant had the same level of influence.
- The majority (132 or 67%) indicated that have not used and do not intend to use the key employee provision, with only a very small number (7 or 3.6%) having used this to date. Despite a low number of those who have used or intend to use it, there is a large majority of respondents (88 respondents or 72.1%) with a positive view towards the provision. Some negative perceptions in relation to this provision include applicability, difficulty, risk, restrictiveness, and divisiveness.

- 60% of those who answered believe that the firm would have invested less in the R&D being conducted in the absence of the R&D tax credit. The perceptions differ between multinational and indigenous firms: e.g. the risk of losing R&D functions to other countries is high for multinationals, whereas more indigenous companies indicate that they might have undertaken less risky R&D.
- The most common R&D activities were experimental development (124 respondents or 46.1%), mixed activities (109 respondents or 40.5%), and applied research (95 respondents or 35.3%).
- Strengths of the general R&D environment in Ireland included State supports, corporation tax rate, links with third-level institution, Ireland's overall attractiveness, and the qualified and skilled workforce.
- Weaknesses included the difficulties in recruiting and retaining skilled staff, complexities in support structures, restrictions in relation to the tax credit, current economic climate, high costs, and infrastructure issues.
- Nearly half of respondents (49.8%) have R&D links with third parties, with 30.5% of respondents indicating that such links were with third-level institutions in Ireland.
- A total of 82 firms (30.4% of the total cohort) gave details of outsourcing above 0%. The average amount of R&D activity outsourced is 13.8%, with a range from 0% to 85% in terms of how much is outsourced.

More than half of respondents believe that the firm would have invested less in the R&D being conducted in the absence of the R&D tax credit.

Most of the firms who have won R&D projects to Ireland in competition within a wider global group believe that the R&D tax credit played a part in their win

We asked respondents if they had to compete at times for R&D investment/projects within the wider global organisation. 74 or 31.1% indicated that this was the case. We then asked these respondents if they had ever lost an embedded R&D project to an overseas location: just over half of whom had lost such an investment. They were also asked if the Irish base had won R&D projects within the wider group; out of the 56 responses, three-quarters (75% or 42) had done so, and of those 33, or 84.6%, responded that the R&D tax credit had played a part in their win.

- More than one-third (103 or 38.3%) of respondents indicated that there had been no impact on their R&D activity following the economic downturn, with nearly 15% (40) stating that there had been an increase in R&D activity since the downturn. 21.9% (59) reported a reduction in activity, and 27.5% (74) reported a change in nature or focus of R&D activity
- Just under half of the individual respondents (47.2%) held responsibility for R&D financing currently, with 41.6% currently responsible for R&D decision-making.
- When asked for overall comments on the R&D tax credit, the following were the key themes:
 - Positivity: the most prominent theme arising from the responses was positivity towards the R&D tax credit and strong support for the scheme;
 - There are concerns regarding the outsourcing, key employee, and base year provisions;
 - Improvements suggested focus on simplifying the processes and bringing the criteria into line with the grant regime.

The most prominent theme arising from the free-format opinion responses was positivity towards the R&D tax credit and strong support for the scheme

1 Introduction

1.1 Preamble

Crowe Horwath was commissioned in May 2013 by the Department of Finance to conduct a survey of research and development (R&D) active firms in respect of the R&D tax credit.

The Department is currently undertaking a review of the research and development (R&D) tax credit. This credit is intended to incentivise investment in research and development activities by relevant firms. The review, which aims to establish the economic rationale, cost, take-up, impact, effectiveness, and competitiveness of the R&D tax credit, is being conducted by the Department itself.

As part of the overall review of the R&D tax credit, it was decided to undertake a survey of companies active in R&D in order to elicit a body of information that would be of relevance in determining the take-up and effectiveness of the R&D tax credit among Irish industry.

1.2 Terms of Reference and Key Deliverables

The Department issued the terms of reference for this assignment in its request for tender (RFT) document issued on 5th April 2013. The survey commissioned by the Department was one element in a wider review of the R&D tax credit being conducted by the Department. Key points in relation to the terms of reference for the survey are outlined below:

- *This brief is a contract to design and conduct a survey based on the guidance contained in the RFT document and to prepare a report that synthesises and presents the findings from the survey*
- *The survey is aimed at R&D active companies that have a presence in the State. Indigenous and multi-national companies (MNCs) (large and small) that are not active in R&D may also be included in the survey.*
- *The key deliverable from the contract will be a report and presentation to the Department setting out the key findings from the survey.*

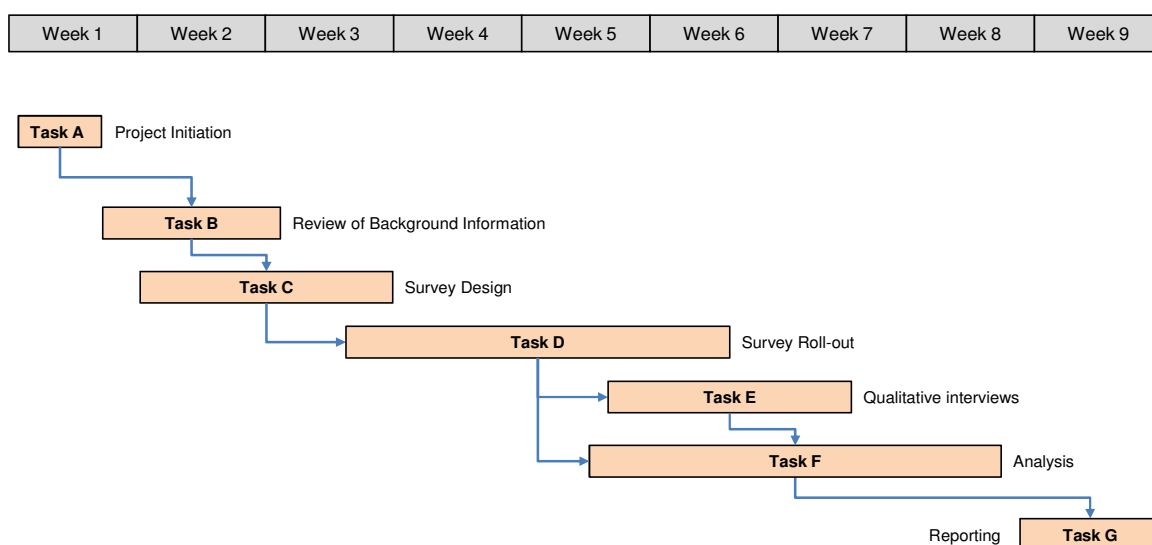
1.3 Methodology

The methodology for the assignment involved a strict timeline, whereby the final report was to be provided to the Department in late August 2013. A brief outline of the methodology tasks is set out below.

Task	Description
A	Project Initiation: The purpose of the activity at Task A was to formally initiate the project with the Department
B	Review of Background Information: Task B consisted of a brief review of the relevant background information relating to the review of the R&D tax credit
C	Survey Design: this task entailed designing a survey based on an online questionnaire, using LimeSurvey software to build the survey interface, hosted on a secure server; it was decided to use quota sampling, i.e. establishing a pre-determined acceptable response rate, or quota, across a number of key variables
D	Survey Roll-out: This task involved the distribution of the survey tool to the relevant selected firms

Task	Description
E	Optional Qualitative Interviews/Focus Groups: having been an optional element of the methodology, this task was not undertaken by agreement with the Department
F	Analysis: Once the survey responses had been received we used SPSS statistical analysis software to analyse the quantitative data gathered, and NVivo to assist in the analysis of the qualitative information
G	Reporting and Sign-Off: this represented the final element of the project and brought together all of the outputs from the tasks above into this report for the Department

The timeline and sequencing for the assignment was as follows:



1.4 Survey Structure

The survey was developed using online survey software LimeSurvey and constructed as an online questionnaire.

Participants were allocated individual “tokens” or access codes to the survey. These tokens allow for greater tracking and profiling of survey responses, whilst also providing advantages to the respondents by allowing them to complete the survey in stages whilst retaining all previous responses. Token-based surveys also provide a greater ability to support individual respondents in the event of problems accessing or submitting responses to the survey.

The survey was presented as a series of grouped questions, under the following headings:

- Key Information – these were critical questions to establish the “pathway” for survey participants, such as whether the firm was active in R&D, claimed the tax credit, etc;
- R&D Tax Credit – this group of questions focused on the use and perceptions of the tax credit by the firms responding;
- R&D Activity – these questions sought information on the extent and nature of the R&D activity carried out in Ireland by the firm;
- Company Background and Profile – a series of profile questions examining the nature and size of the responding firms;
- Respondent Information – this last set of questions was focused on the role of the person completing the questionnaire on behalf of the firm.

A final “any other comments” question completed the survey.

Throughout the questionnaire, there were a number of “dependent” or “conditional” questions, that is, questions that were only relevant depending on the answer to a previous question. The online survey software allows these questions to be constructed such that they appear on screen only when the relevant answer to a previous question has been selected by the respondent. This means that each respondent was presented with the minimum number of questions for their particular circumstance.

1.5 Contact Data

The initial project plan anticipated that a set of contact data was to be provided to the project team by the Department. However, some issues arose for the Department in sourcing the contact details required, in particular from the IDA’s records, which could not be released with individual contact email addresses under the IDA’s data protection policies.

Nonetheless, the IDA kindly offered to act as a proxy and send the survey invitations to their contact list from their own email, so that the contact details were not passed on but the relevant firms had an opportunity to participate in the survey. Once the technical considerations were dealt with, this course of action proved effective in disseminating the survey invitation to the appropriate contacts.

There was some delay in rolling out the survey to all the target recipients because of these issues.

Crowe Horwath would like to take this opportunity to thank the IDA and Enterprise Ireland for their assistance and co-operation in the provision of contact information for relevant firms. We would also like to thank IBEC, who assisted the process by advising members of the survey and encouraging their participation.

1.6 Response Rate and Profile

Approximately 1525 valid contacts were invited to participate in the survey. A number of incomplete responses were discarded, resulting in a final dataset of 331 responses, representing approximately 21.7% of the target population. Based on our experience, this is a very strong response rate for a survey such as this.

As set out in the report’s subsequent sections, 81% (269) of the respondents were active in R&D in Ireland – 103 multinational firms and 156 indigenous Irish organisations – and this cohort effectively represents the dataset used for the analysis because those who were not active were eliminated from the survey process at the first stage.

A total of 217 respondents indicated that they currently claim the R&D tax credit; this represents approximately 14.7% of the total number claiming the R&D tax credit according to Department records.

The profile of respondents varies somewhat from the known profile of R&D tax credit claimants, in terms of economic sector (the survey dataset has a higher representation from manufacturing firms (46% as opposed to 33%) and agriculture, forestry and fishing (8.5% as compared to 1%); however, the survey dataset allowed respondents to choose more than one

category, and there was a substantial “Other” (10.5%) category – not included in Department figures, which ensure that firms select a specific category – which may account for some discrepancies.

There are also variations in the profile from a size perspective, with the turnover distribution indication that the survey respondents are on average larger in terms of turnover than the known profile of R&D tax credit claimants:

Turnover Quartile	Survey Dataset	Department Figures
1st Quartile	€1,612,000	€321,609
2nd Quartile	€6,500,000	€1,804,562
3rd Quartile	€34,050,600	€9,759,226

We do not have a pre-existing definitive profile of all R&D active firms, inclusive of those who do *not* claim the credit, and it may be that the profile differs somewhat. It may also be that manufacturing firms are in general larger from a turnover perspective, and if more such firms are represented in the survey sample, the turnover profile is consequently higher.

2 Survey Responses

2.1 Introduction

The following sections set out the responses to the individual questions set out in the survey. The data is presented in a mixture of tables, graphs, and text.

Notes

- *In several tables and graphs, the percentages do not add up to 100%: in these instances, the responses indicate the percentage of the total respondents relating to those who answered for each individual option, because respondents could choose more than one response.*
- *Figures set out, unless otherwise noted, are “valid” percentages, i.e. the percentage breakdown of the total number who responded to the question, rather than the percentages of the total number of respondents to the survey as a whole.*
- *For a number of questions, in which respondents could choose more than one option or no option at all as relevant to them, we give percentages of those who chose at least one option along with the percentages of the total cohort.*

2.2 Key Profile Elements

2.2.1 Introduction

This section sets out some of the key features of the respondent firms, several of which are used in further analyses of survey data in later sections. As described in Section 1.6 above, the dataset comprises 331 responses in the first instance. This section describes the breakdown of these responses by various factors, such as the nature and size of the organisations in the dataset.

2.2.2 Active in R&D in Ireland

Respondents were asked as a primary question whether the firm was active in R&D in Ireland. 269 respondents (81.3%) were active, with the remaining 62 (18.7%) not active in R&D in Ireland.

It should be noted that respondents who indicated they were not active in R&D were effectively excluded from the remainder of the survey; a “No” answer brought them to a screen explaining this and they were not presented with any further questions.

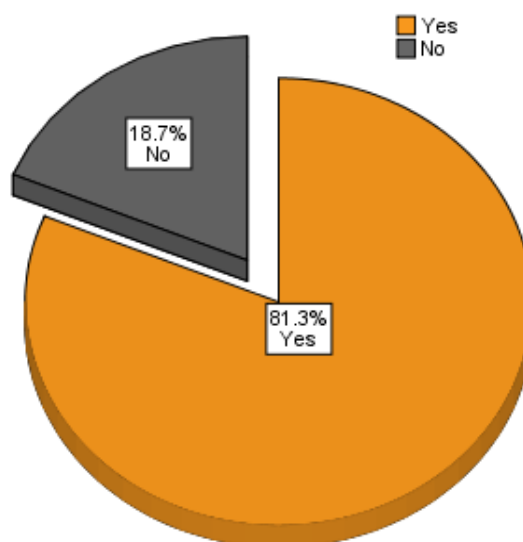


Figure 2.2.2-1: Active in R&D in Ireland

2.2.3 Nature of Organisation

Participants were asked to indicate whether the firm was a multinational or an indigenous Irish organisation. Of the 269 respondents, 156 (60.2% of the 259 who answered this question) described themselves as indigenous Irish firms, with 103 (39.8%) of the respondents considering themselves multinational firms, as illustrated below.

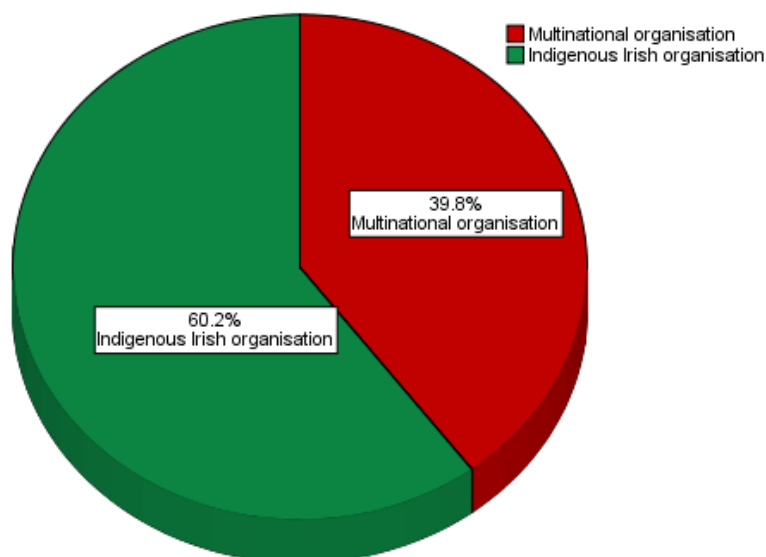


Figure 2.2.3-1: Nature of Organisation

2.2.4 Size of Organisation – Turnover

Respondents were asked for turnover figures for the last financial year as a measure of organisational size. 245 respondents provided turnover information, with a mean turnover figure of €170.4m (this figure is skewed upwards due to a small number of very high turnover figures). The total turnover of all firms amounts to €41.7bn. When broken into subcategories, the turnover distribution is set out in the table below.

Turnover	Number of Firms	Percentage	Cumulative Percentage
€0	5	2.0%	2.0%
€1 - €199,999	7	2.9%	4.9%
€200,000 - €499,999	6	2.4%	7.3%
€500,000 - €999,999	19	7.8%	15.1%
€1,000,000 - €1,999,999	32	13.1%	28.2%
€2,000,000 - €4,999,999	29	11.8%	40.0%
€5,000,000 - €9,999,999	43	17.6%	57.6%
€10,000,000 - €24,999,999	32	13.1%	70.6%
€25,000,000 - €49,999,999	21	8.6%	79.2%
€50,000,000+	51	20.8%	100.0%
Total	245	100.0%	

As can be seen, 60% of respondents had turnover of more than €5m in the past financial year, with only 15% having turnover of less than €1m.

These figures are illustrated in the following chart:

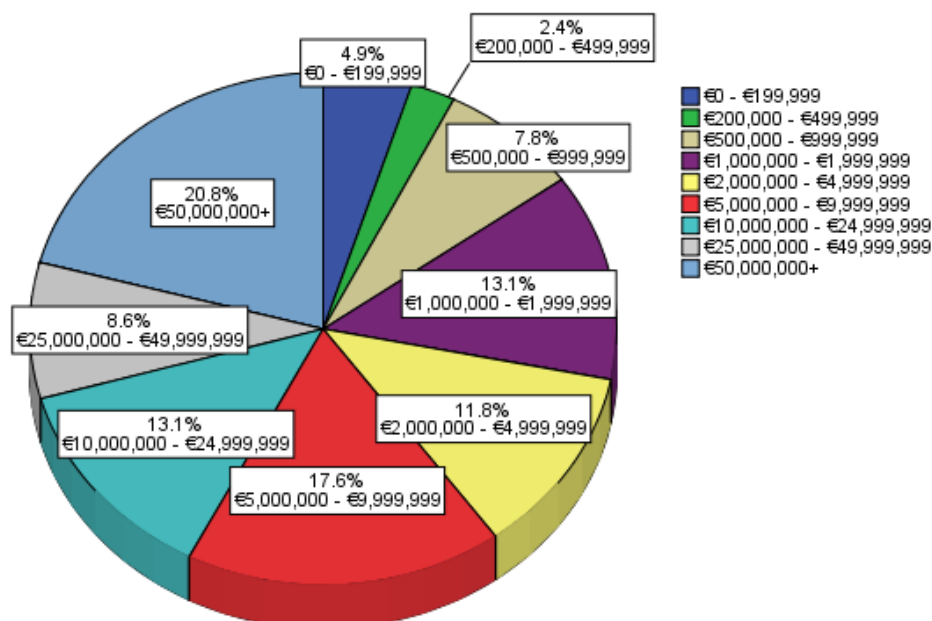


Figure 2.2.4-1: Turnover

The following table examines the distribution of company size (in terms of turnover) across the different types of organisation.

Turnover	Multinational organisation			Indigenous Irish organisation		
	Number	%	Cumulative %	Number	%	Cumulative %
€0	4	4.5%	4.5%	1	0.1%	0.1%
€1 - €199,999	1	1.1%	5.6%	7	4.5%	4.6%
€200,000 - €499,999	0	0.0%	5.6%	6	3.9%	8.5%
€500,000 - €999,999	1	1.1%	6.7%	18	11.8%	20.3%
€1,000,000 - €1,999,999	3	3.4%	10.1%	29	19.0%	39.3%
€2,000,000 - €4,999,999	4	4.5%	14.6%	25	16.3%	55.6%
€5,000,000 - €9,999,999	10	11.2%	25.8%	32	20.9%	76.5%
€10,000,000 - €24,999,999	16	18.0%	43.8%	14	9.2%	85.7%
€25,000,000 - €49,999,999	13	14.6%	58.4%	8	5.2%	90.9%
€50,000,000+	37	41.6%	100.0%	14	9.2%	100.0%
Total	89	100.0%		153	100.0%	

We can see that multinationals tend towards the higher turnover figures, with 41.6% reporting turnover of more than €50m in the last year, and only 14.6% indicating turnover of less than €5m. By contrast, more than half (55.6%) of the indigenous firms have turnover of less than €5m; more than three-quarters of the indigenous firms (76.5%) have turnover of less than €10m, with only one-quarter (25.8%) of the multinationals having turnover of less than €10m.

2.2.5 Size of Organisation – Employee Numbers

Another mechanism to judge the size of responding organisations is the number of employees. The following table and graph set out the breakdown of employee numbers:

Employee Numbers	Number of Firms	Percentage	Cumulative Percentage
<10	22	8.7%	8.7%
10-49	106	41.7%	50.4%
50-149	63	24.8%	75.2%
150-249	21	8.3%	83.5%
250-499	19	7.5%	90.9%
500+	23	9.1%	100.0%
Total	254	100.0%	

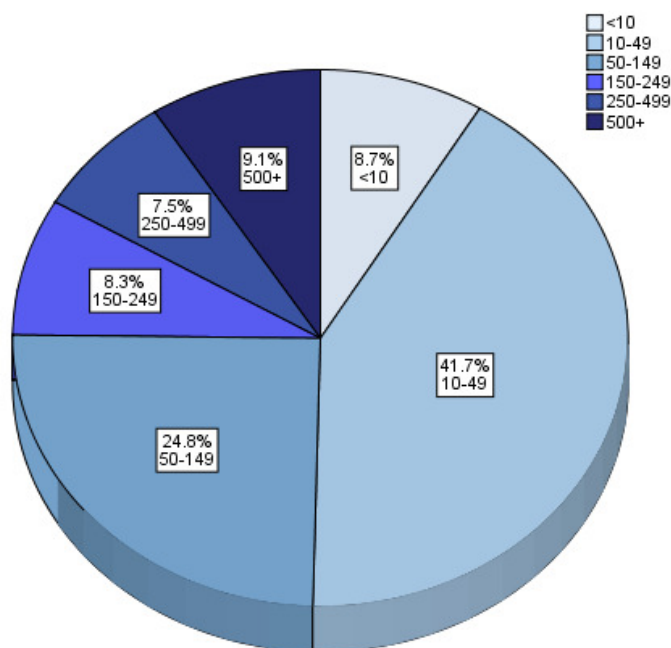


Figure 2.2.5-1: Employee Numbers

As we can see, more than half of the firms surveyed had fewer than 50 employees, with more than three-quarters employing fewer than 150 employees.

The average number of employees in responding firms is 220, ranging from 3 to 4,500. Respondents employ total of 55,800 employees.

The table below looks at the relative size of multinational and indigenous firms in the dataset by employee numbers.

Employee Numbers	Multinational organisation			Indigenous Irish organisation		
	Number	%	Cumulative %	Number	%	Cumulative %
<10	0	0.0%	0.0%	21	13.8%	13.8%
10-49	21	21.4%	21.4%	83	54.6%	68.4%
50-149	30	30.6%	52.0%	32	21.1%	89.5%
150-249	13	13.3%	65.3%	8	5.3%	94.8%
250-499	17	17.3%	82.6%	2	1.3%	96.1%
500+	17	17.3%	100.0%	6	3.9%	100.0%
Total	98	100.0%		152	100.0%	

Additional information on this breakdown can be found in Appendix 1 p2.

This data is represented graphically in the chart to the right, showing the relative employee numbers in multinational and indigenous organisations.

Again, we see clearly the **contrast in organisation size between multinational and indigenous organisations**: nearly half (48%) of multinational respondents employ 150 or more, by contrast to just 10.5% of indigenous firms employing 150 or more. More than two-thirds (68.4%) of indigenous firms employ fewer than 50 people, versus only 21.4% of multinationals.

The average employee numbers in multinational firms are 432, by contrast with an average of 88 for indigenous firms, and those who designated themselves as multinational respondents employ a total of 42,291, with indigenous firms employing 13,378.

In general terms, we can see that the respondents identifying as multinationals in general represent larger firms both in terms of employee numbers and in terms of turnover.

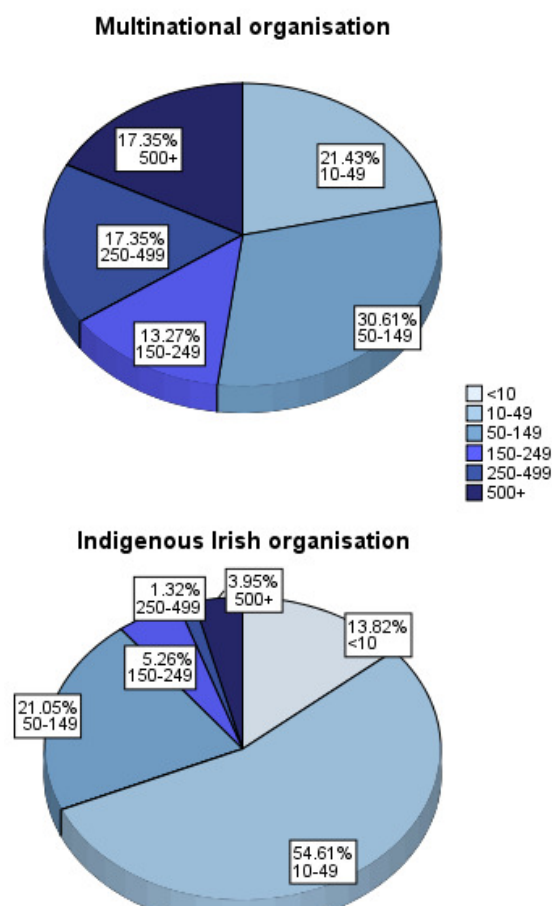


Figure 2.2.5-2: Employee Numbers by Organisation Type

2.2.6 Economic Sector

Respondents were asked which economic sector their firms operated in. 261 respondents provided data for this question, and the chart below sets out the responses (note that firms could and did choose more than one economic sector). As can be seen, the dominant economic sectors are **manufacturing** (46.1%) and **information and communication** (23%), with **professional, scientific and technical activities** and **financial and insurance activities** also represented well.

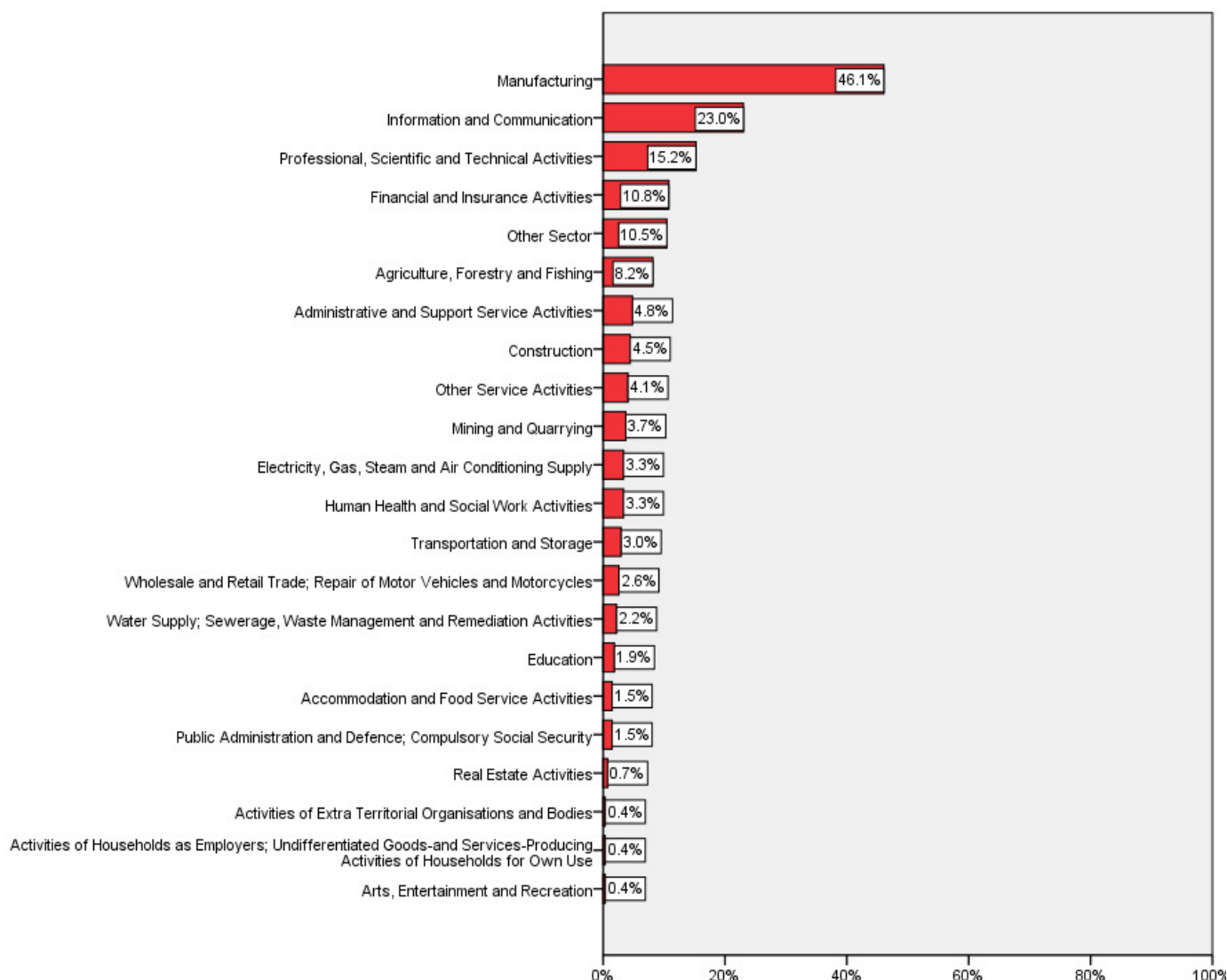


Figure 2.2.6-1: Economic Sector of Respondents

“Other” sectors indicated by respondents included the following:

- | | | |
|---|--|-----------------------------------|
| ■ Banking Software | ■ IT Development/Services | ■ Medical Diagnostics Pharma |
| ■ Computer based testing development and delivery | ■ Life sciences / Pharmaceuticals | ■ Software Development Technology |
| ■ Electronics | ■ Media | ■ Telecoms Software/Services |
| ■ Fibre optics | ■ Medical and Scientific products distribution | ■ Timber Processing |
| ■ Food | ■ Medical Devices | ■ Waste to Fuel |
| ■ IT/Software Laboratory | | ■ Wholesale Banking |

The Department of Finance supplied a breakdown of economic sector for all claimants of the R&D tax credit in 2011 as a comparator for the survey response profile. By comparison with the economic sector profile supplied by the Department, the profile of survey respondents differs somewhat: in particular, manufacturing appears to have a greater representation in the dataset. There are a number of possible reasons for this, including:

- The profile of respondents tends towards larger companies when compared to the distribution of those claiming the credit, and it may be that larger companies tend to be in manufacturing;
- By allowing companies to identify as more than one company, each sector is likely to be larger than a sector from the Department's distribution which only allows companies to have one sector;
- The "Other" category has more than 10% response rate: this means that these firms are effectively uncategorised, and if redistributed might change the overall survey profile;
- It is possible that the distribution of companies claiming the credit is naturally different from the wider R&D community: the survey was not restricted only to those claiming the credit.

A full comparison and further breakdown of this data is available in Appendix 1 p3-4.

2.2.7 Main Markets

We asked respondents to indicate in which markets they chiefly operate, geographically. The responses are set out in the table and chart below. (Note that most firms operated in more than one market so percentages do not add to 100%.) A total of 262 respondents answered at least one option in this question, and percentages are given for the total cohort of 269 (i.e. including those who ticked none of the responses) and for the 262 who selected at least one option.

Market	Number	Percentage of those who answered	Percentage of total responses
Domestic Irish	201	76.7%	74.7%
UK	223	85.1%	82.9%
Europe	216	82.4%	80.3%
North America	160	61.1%	59.5%
South America	77	29.4%	28.6%
Asia	139	53.1%	51.7%
Africa	73	27.9%	27.1%
Australia/New Zealand	94	35.9%	34.9%
Other markets	18	6.9%	7.0%

The UK (83%) and Europe (80%) feature as the strongest markets for the firms surveyed, following by the domestic Irish market (75%). The US and Asia are also markets for more than half the respondents. This indicates a very high level of export activity among firms active in R&D.

When we look at the breakdown of the main markets between multinational and indigenous firms, we see the following:

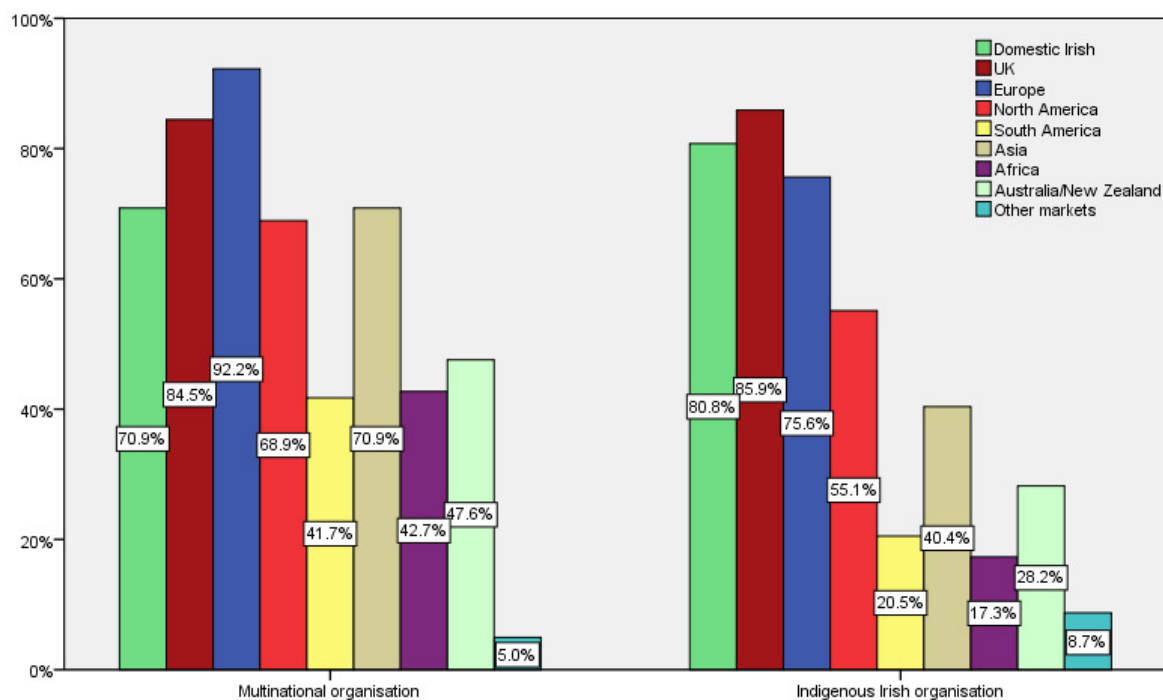


Figure 2.2.7-1: Main Markets by Organisation Type

As can be seen from the chart, the overseas markets, with the exception of the UK, are more important to the multinational firms, whereas the indigenous firms identify their main markets as Ireland and the UK to a greater extent than the multinational firms.

2.3 R&D Tax Credit

2.3.1 Overview

This section examines the use, impact, and perceptions of the R&D tax credit according to the firms surveyed.

2.3.2 Claiming R&D Tax Credit

Respondents were asked if they currently claimed the R&D tax credit or had done so in the past. As set out in the table below, 269 respondents (the full dataset once those not active in R&D were excluded) answered the question, with more than 80% indicating that they were current claimants, and just over 10% (28 respondents) indicating they do not claim or have not previously claimed the credit.

Claims Credit	Number	Percentage
Currently claims	217	80.7%
Claimed previously	24	8.9%
Does not claim	28	10.4%
Total	269	100.0%

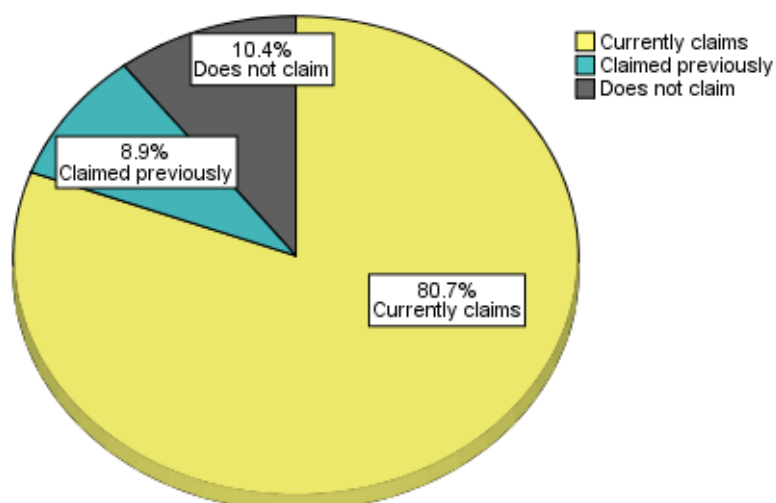


Figure 2.3.2-1: Claiming R&D Tax Credit

A breakdown of the average and total employee numbers of those who claim or have claimed the credit is set out below. Firms claiming currently or previously indicate that they have more than 50,000 employees collectively, and on average employ 213 employees. Further breakdowns of this data are contained in Appendix 1 p5.

Claims Credit	Number	Average Employee Numbers	Total Employee Numbers
Currently claims	217	229	47,459
Claimed previously	24	190	4,561
Total	244	213	52,020

There were very few differences between the multinational and indigenous firms in terms of the claim profile: 79.6% (82) of the multinational respondents were current claimants, with 82.1% (128) of the indigenous firms currently claiming the credit.

2.3.3 Barriers to Claiming

Respondents who indicated that they did not claim and had not previously claimed the R&D tax credit, but who were active in R&D, were asked the reasons why they had not claimed the credit. As can be seen in the table and chart below, the chief issues appear to be perceptions in relation to the administrative burden, the complexity, and a perceived lack of certainty about the credit. (It must be noted that the numbers responding to this question were small in total (24), representing most of the 28 respondents (10.4%) who answered “No” to the question above.)

Barrier	Number	Percentage
Lack of awareness of credit	4	16.7%
Scheme complexity	9	37.5%
Level of administrative burden	11	45.8%
Lack of access to tax advisors with expertise in R&D tax credit	2	8.3%
Lack of certainty about the scheme	8	33.3%
High base-year spend	4	16.7%
R&D activities ineligible	7	29.2%
Sub-contracting thresholds too low	0	4.2%
More attractive tax scheme(s) in other jurisdictions	1	20.8%
Other reason	5	16.7%

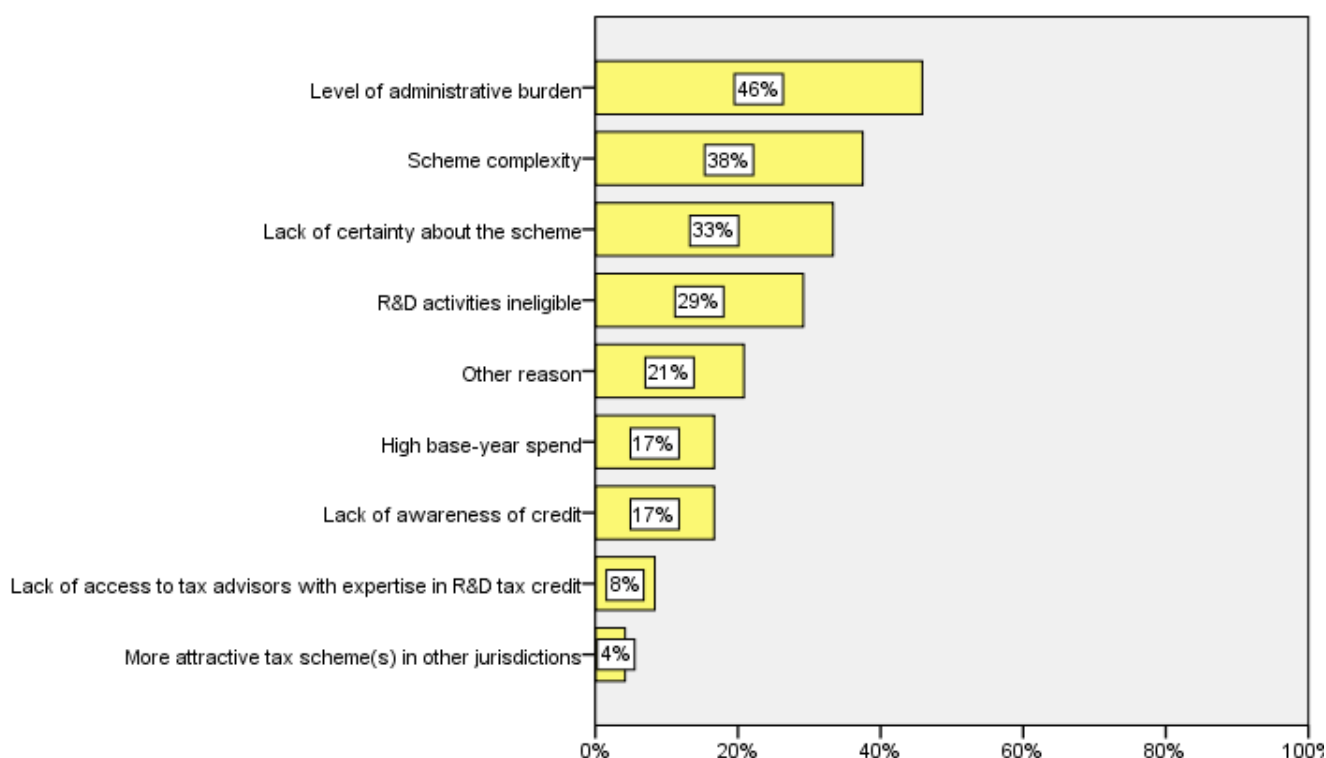


Figure 2.3.3-1: Barriers to Claiming R&D Tax Credit

“Other” barriers mentioned by respondents include the following:

- “No profits”
- “Low level of R&D booked spend”
- “It is too focused on IT development needing to take place in the State - we use offshore developers”
- “First year of expenditure”
- “Currently consulting with our tax advisors to ascertain whether our R&D costs fall within the definitions set out in the tax legislation”

2.3.4 Familiarity with Aspects of R&D Tax Credit

Participants were asked which features of the credit they were familiar with; the responses are indicated in the table and graph below. Percentages – which do not add to 100% as there was the option to select more than one answer – are given for the total cohort of 269 (i.e. including those who ticked none of the responses, which may have indicated some were not familiar with any aspects listed) and for the 261 who selected at least one option.

Aspects of Credit	Number	Percentage of those who answered	Percentage of total responses
Rate	217	83.1%	65.6%
Allowable expenditure	239	91.6%	72.2%
Capital versus operating expenditure regimes	172	65.9%	52.0%
Payable credits	152	58.2%	45.9%
Credits in other jurisdictions	37	14.2%	11.2%
Outsourcing	107	41.0%	32.3%
Other aspects of credit	10	3.8%	3.0%

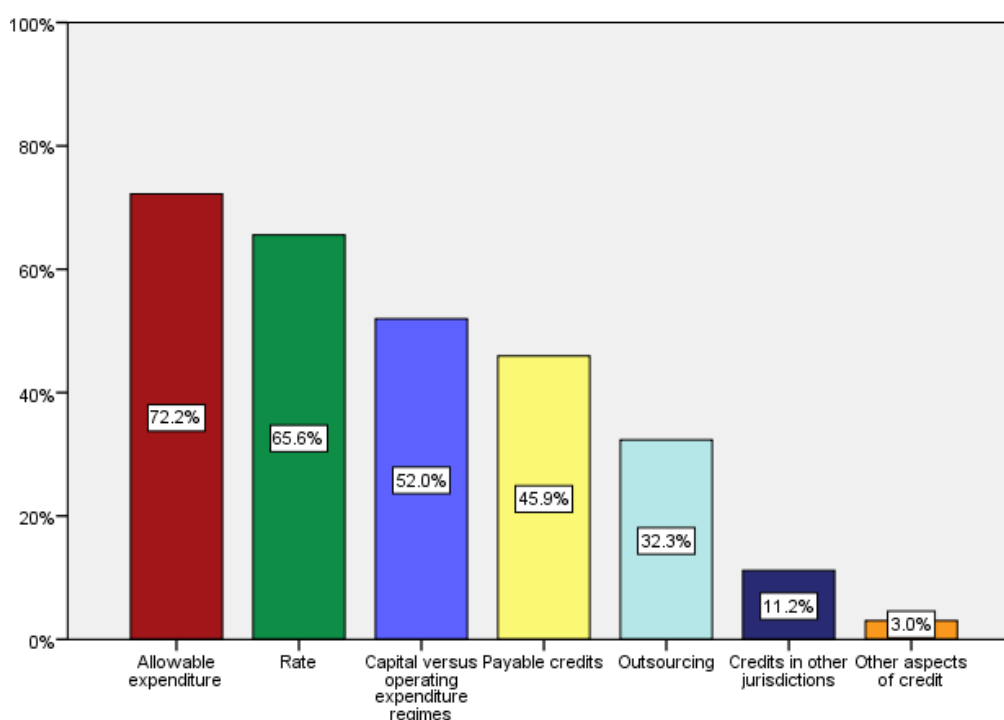


Figure 2.3.4-1: Familiarity with Aspects of T&D Tax Credit

As can be seen from the chart and table above, most respondents (239 or 72.2%) are familiar with the allowable expenditure, with more than half also familiar with the rate and the capital-vs-operating expenditure regimes. Fewer are familiar with the payable credits and outsourcing features, and only 11% (37) indicated familiarity with the credits operating in other jurisdictions.

“Other” responses comprised the following:

- “Not familiar with the structure of the tax credit.” ■ “Currently consulting with our tax advisors”
- “Have not looked at in past 18 months”

There is some further examination of this data in Appendix 1 p6: we have cross-referenced the answers to this question with the profiles of the roles and responsibilities of respondents, i.e. whether those answering the survey on behalf of their firms have responsibility in terms of financing and/or decision-making in relation to R&D.

2.3.5 R&D Grants

We asked respondents whether they received R&D grants and from which organisations these originated: the responses are illustrated below:

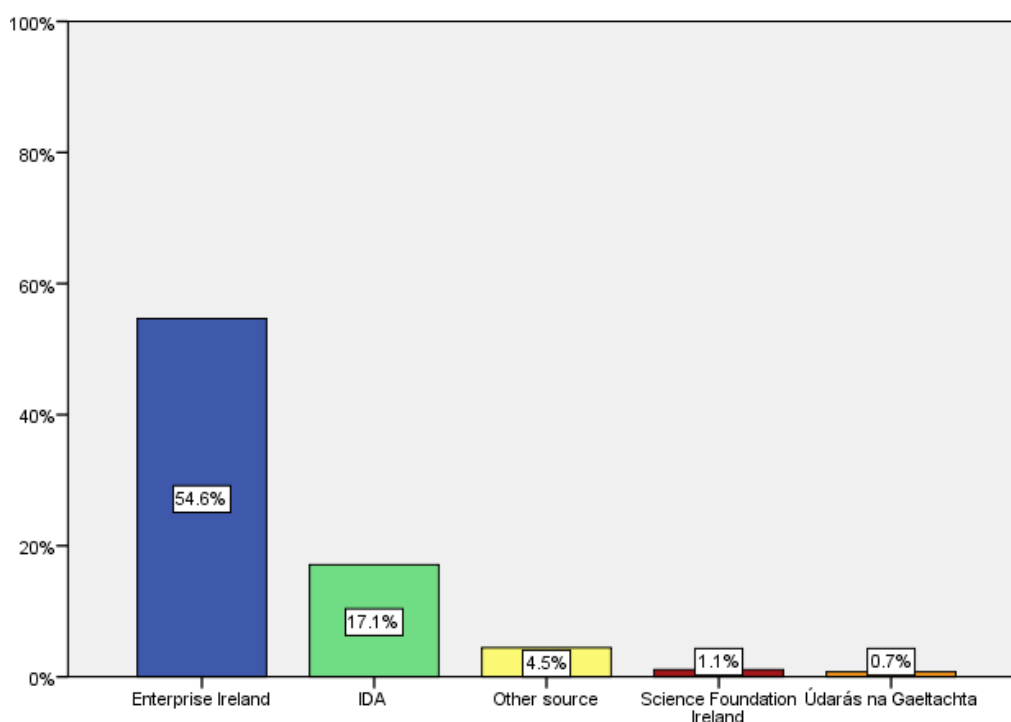


Figure 2.3.5-1: R&D Grants

The following table sets out the detail. Percentages – which do not add to 100% as there was the option to select more than one answer – are given for the total cohort of 269 (i.e. including those who ticked none of the responses, which may have indicated that they were not in receipt of grants from any organisation) and for the 200 respondents who selected at least one option.

R&D Grant Source	Number	Percentage of those who answered	Percentage of total responses
IDA	46	23.0%	17.1%
Enterprise Ireland	147	73.5%	54.6%
Údarás na Gaeltachta	2	1.0%	0.7%
Science Foundation Ireland	3	1.5%	1.1%
Other source	12	6.0%	4.5%

More than half of the survey respondents (147 or 54.6%) had received R&D grants from Enterprise Ireland, with a further 46 (17.1%) having received such grants from the IDA. Very small numbers had received grants from Science Foundation Ireland or Údarás na Gaeltachta. "Other" grants sources included Shannon Development, and responses noting that they had received R&D grants in the past but not in recent times, or that they had received investment support rather than the R&D grant specifically.

The table below shows the breakdown of grant recipients by organisation type. (Note these percentages do not add to 100% as they each represent the proportion of the total – 103 multinationals and 156 indigenous firms.) As can be seen from the figures below, 84% of indigenous firms have received R&D grants from Enterprise Ireland, with the multinationals overall receiving fewer grants from any of the State agencies, with 39.8% having received R&D grants from the IDA and 13.6% from Enterprise Ireland.

Source	Multinational		Indigenous	
	Number	Percentage	Number	Percentage
IDA	41	39.8%	1	0.6%
Enterprise Ireland	14	13.6%	131	84.0%
Údarás na Gaeltachta	1	1.0%	1	0.6%
Science Foundation Ireland	3	2.9%	0	0.0%
Other source	3	2.9%	8	5.1%
<i>Did not indicate grant receipt</i>	41	39.8%	15	9.6%
Total	103	100.0%	156	100.0%

The following table compares those who indicated that they had received R&D grants with those who claimed the R&D tax credit. As can be seen from the table, 82.5% of those currently claiming the R&D tax credit are also recipients of R&D grants, whilst 62.5% of those who previously claimed the R&D tax credit have been in receipt of R&D grants.

R&D Grant Source	Claiming R&D Tax Credit					
	Currently claiming		Claimed previously		Does not claim	
	Number	Percent	Number	Percent	Number	Percent
IDA	41	18.9%	3	12.5%	2	7.1%
Enterprise Ireland	126	58.1%	8	33.3%	13	46.4%
Údarás na Gaeltachta	2	0.9%	0	0.0%	0	0.0%
Science Foundation Ireland	2	0.9%	1	4.2%	0	0.0%
Other source	8	3.7%	3	12.5%	1	3.6%
<i>Did not indicate grant receipt</i>	38	17.5%	9	37.5%	12	42.9%
Total	217	100.0%	24	100.0%	28	100.0%

2.3.6 How Respondents Became Aware of R&D Tax Credit

We asked respondents how they had become aware of the tax credit and/or R&D grants; the results are set out in the table and chart below. As can be seen, tax advisors represent the single most common means of awareness of the credit, selected by 135 or 52.5% of respondents.

Mechanism	Number	Percentage
Tax advisor	135	52.5%
Other advisor	24	9.3%
Govt/Revenue	11	4.3%
IDA	21	8.2%
EI	35	13.6%
Other	31	12.1%
Total	257	100.0%

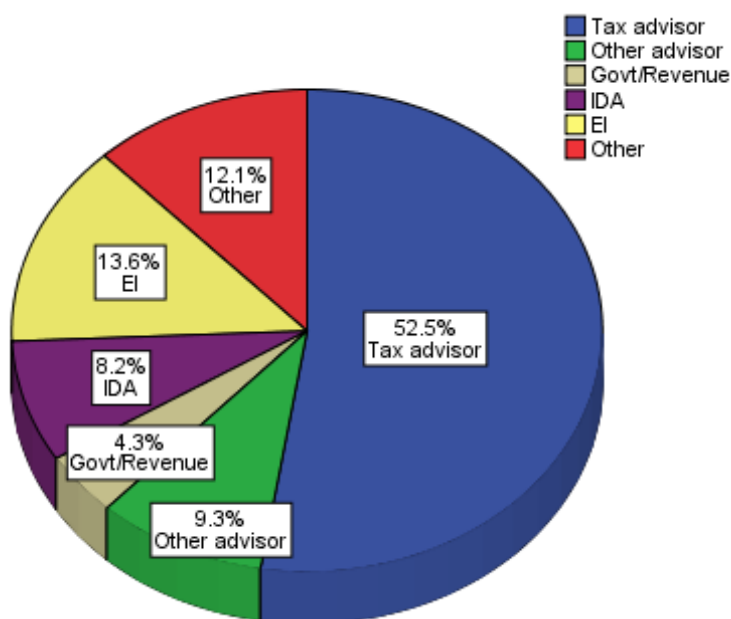


Figure 2.3.6-1: Means by which Respondents Became Aware of R&D Credit

“Other” methods by which respondents became aware of the credit include the following:

- Business consultant
- Canvassing Firm
- General awareness
- Internal expertise
- IRDG
- IRDG & Tax advisor
- ISME
- Media
- Newspapers, public talks by accounting firms
- Personal investigation
- Previous experience
- Self awareness
- Self research by staff
- Tax Advisor, EI, IRDG

When we look at the ways in which different types of respondent became aware of the tax credit, we can see the following:

Mechanism	Multinational		Indigenous	
	Number	Percent	Number	Percent
Tax advisor	51	52.0%	81	53.6%
Other advisor	8	8.2%	16	10.6%
Govt/Revenue	4	4.1%	6	4.0%
IDA	18	18.4%	0	0.0%
EI	4	4.1%	30	19.9%
Other	13	13.3%	18	11.9%
Total	98	100.0%	151	100.0%

Unsurprisingly, the IDA was the source of the information for 18.4% of multinationals who responded, with a corresponding 19.9% of indigenous firms being advised by Enterprise Ireland in relation to the existence of the R&D credit. Both still list tax advisors as the chief mechanism for awareness of the credit, however, with more than half of both types of organisation indicating this as the way in which they became aware of the credit.

2.3.7 Credit Claimed for R&D Expenditure or Capital/Buildings

Respondents were asked whether they had claimed the credit for R&D expenditure only (181 or 76.4%), capital/buildings (0%), both (54 or 22.8%), or "Other" (2 or 0.8%). The responses are indicated in the table and chart below.

Type of expenditure	Number	Percentage
R&D expenditure only	181	76.4%
Both	54	22.8%
Other	2	0.8%
Total	237	100.0%

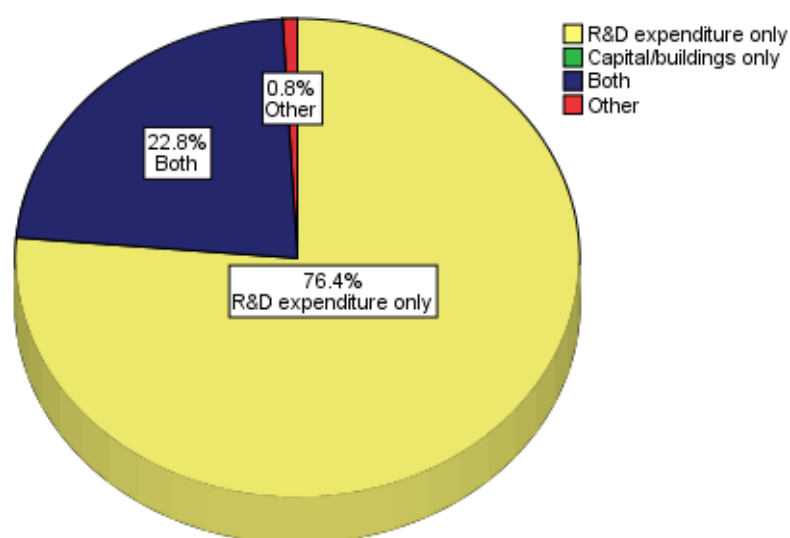


Figure 2.3.7-1: Type of Expenditure Claimed

There is a difference in the profile of organisation type in terms of what is claimed, as can be seen from the table below:

Type of Expenditure	Multinational		Indigenous	
	Number	Percent	Number	Percent
R&D expenditure only	58	63.0%	120	87.0%
Capital/buildings only	0	0.0%	0	0.0%
Both	32	34.8%	18	13.0%
Other	2	2.2%	0	0.0%
Total	92	100.0%	138	100.0%

As we can see from the figures above, 63% of multinationals claimed for R&D expenditure only, versus 87% of indigenous firms. 34.8% of multinational firms claimed for both R&D expenditure and capital/buildings, whereas only 13% of indigenous firms did so.

2.3.8 Expenditure on R&D Activity in Ireland in 2003 (Base Year)

The following table and charts illustrate the expenditure in Ireland on R&D activity in the “base year” for the purposes of the R&D tax credit, i.e. 2003.

We have set out two sets of figures: one incorporating all the responses entered for this question, including those who indicated a zero spend in 2003, and another excluding the zero-spend responses, to get a sense of what was being spent on actual activity in the base year.

Base-year Expenditure	All responses	Excluding zero-spend	Multinational >0	Indigenous >0
Number	232	110	45	63
Mean Average	846,016	1,792,016	3,641,401	495,866
Minimum	0	1,000	5,000	1,000
Maximum	56,000,000	56,000,000	56,000,000	19,901,816
Sum	197,121,725	197,121,725	163,863,026	31,239,559

We have subdivided the total spend figures into bands to illustrate the distribution of spend, as follows:

Expenditure in base year	Number	Percentage	Number when zero-spend removed	Percentage when zero-spend removed
Zero-spend	122	52.6%	-	-
€0 - €200,000	57	24.6%	57	51.8%
€200,000 - €500,000	22	9.5%	22	20.0%
€500,000 - €1,000,000	11	4.7%	11	10.0%
More than €1,000,000	20	8.6%	20	18.2%
Total	232	100.0%	110	100.0%

This is illustrated in the chart below:

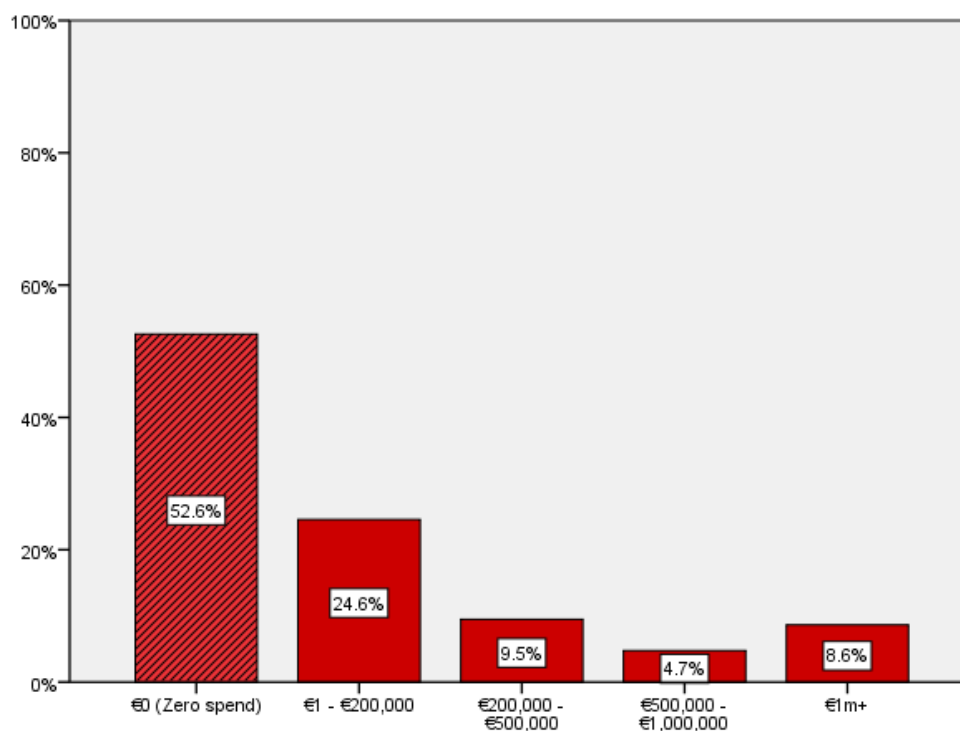


Figure 2.3.8-1: Base-Year Spend

By way of comparison, the following table and chart indicates the comparative expenditure in the base year and that on R&D activity claimed for the purposes of the tax credit in 2011, according to the respondents.

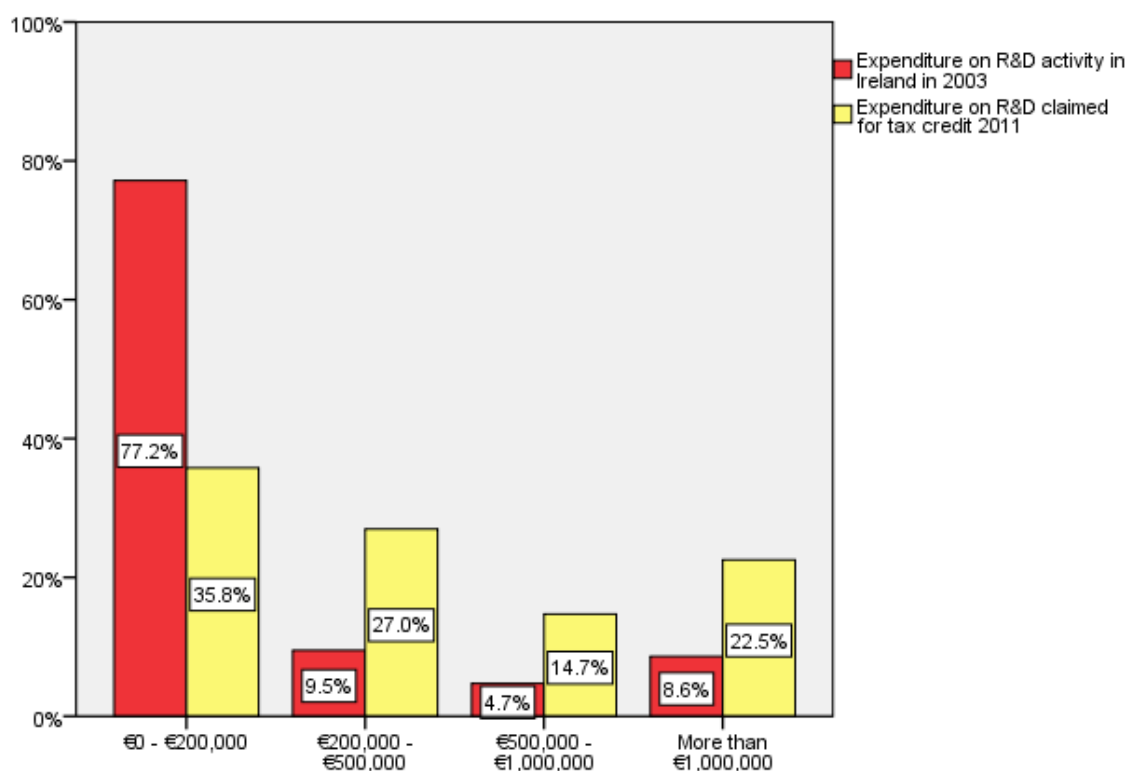


Figure 2.3.8-2: Base-Year vs. 2011 (Inclusive of zero-spend)

It can be seen that the 2003 (base year) spend is dominated by low levels, with 77% of firms who had expenditure falling into the €0-€200,000 category. By 2011, only 35.8% of firms with expenditure on R&D were at this lower level. The percentage of respondents with expenditure of over €1,000,000 is up from 8.6% in 2003 to 22.5% in 2011.

This illustrates a clear upward trend with firms spending more on R&D in 2011 than in 2003.

2.3.9 Claimed R&D Tax Credit on 2003 Spend

We asked the respondents if they had claimed the tax credit in respect of any expenditure incurred in 2003, and the results are set out in the table and chart below. As can be seen, only 18% (36) respondents claimed the credit in respect of 2003 expenditure.

Claimed R&D tax credit in respect of expenditure in 2003	Number	Percentage
Yes	36	18.3%
No	161	81.7%
Total	197	100.0%

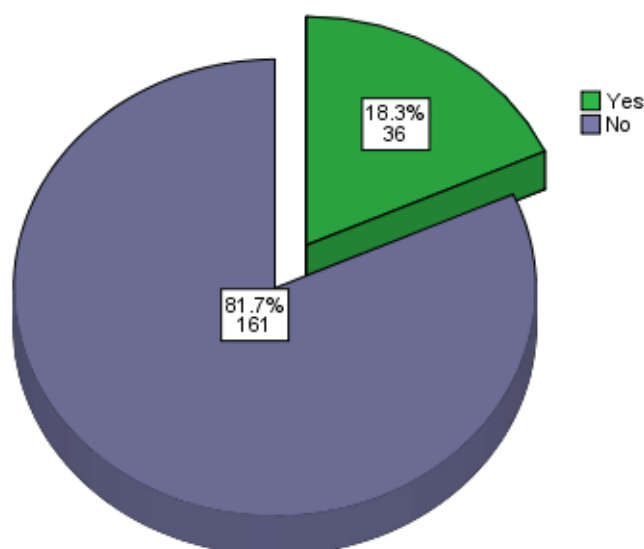


Figure 2.3.9-1: Claimed for 2003 R&D Expenditure

All respondents had the opportunity to answer this question, rather than only those who had entered a figure for 2003 R&D spend. A total of 83 respondents who entered figures for their 2003 spend answered this question, with 31 of those (37.3%) indicating they had claimed for this expenditure and 52 (62.7%) stating they had not done so. This suggests that there were 5 respondents who claimed for base-year expenditure but who did not give data on the level of that spend.

It is interesting to note that a higher percentage of multinationals claimed in 2003, as can be seen in the table below. 23.8% of multinationals claimed versus 15% of indigenous firms.

Claimed R&D tax credit in respect of expenditure in 2003	Multinational		Indigenous	
	Number	Percentage	Number	Percentage
Yes	19	23.8%	17	15.0%
No	61	76.2%	96	85.0%
Total	80	100.0%	113	100.0%

It is also interesting to note that the **average base-year expenditure** of those who did claim was significantly higher than those who did not: €1,532,325 as opposed to €520,036.

2.3.10 Base Year – Barrier to Claiming?

Those who had claimed in respect of 2003 (i.e. those who answered “Yes” to the question in Section 2.3.9 above) were asked whether the base-year spend was a barrier to claiming the tax credit. 32 of the possible 36 respondents answered the question, as set out in the table below:

Base Year a Barrier to Claiming Credit	Number	Percentage
Yes	11	34.4%
No	21	65.6%
Total	32	100.0%

Given the small numbers, it is not appropriate to break them down further by organisation type or size. There is some breakdown of the figures in Appendix 1 p7 in relation to whether the firms in question claim the R&D tax credit.

Note of interest: the **average base-year spend** of those who perceive the base year to be a barrier is significantly higher than the average spend of those who do not: approximately €3.74m versus €632,000.

2.3.11 Active in R&D in Ireland before Tax Credit Claimed

Participants were asked if the firm had been active in R&D in Ireland before they first claimed the R&D tax credit. The responses are illustrated in the following table and chart:

Active in R&D in Ireland before tax credit claimed	Number	Percentage
Yes	128	65.6%
No	67	34.4%
Total	195	100.0%

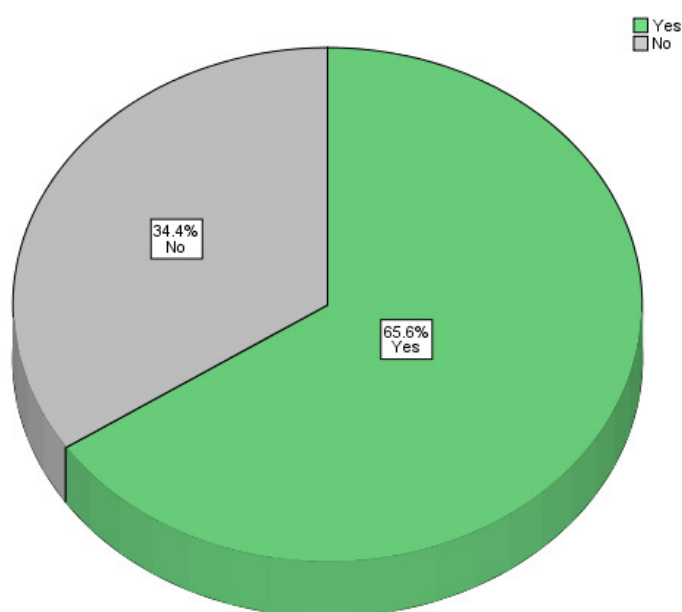


Figure 2.3.11-1: Active Before R&D Credit Claimed

As can be seen from the data, just under two-thirds of the respondents (128 or 65.6%) were active in R&D in Ireland before they claimed the R&D tax credit.

There is no significant difference when we look at the profile of organisation type, as set out below: 62% of multinationals and 68% of indigenous firms were active in R&D in Ireland before they claimed the credit.

Active in R&D in Ireland before credit claimed	Multinational		Indigenous	
	Number	Percentage	Number	Percentage
Yes	49	62.0%	76	67.9%
No	30	38.0%	36	32.1%
Total	79	100.0%	112	100.0%

When we examine the employee numbers for firms who answered this question, we see the following:

Active in R&D in Ireland before tax credit claimed	Total employees in Ireland	
	Average	Total
Yes	270	32,884
No	159	10,312

There are more than 10,000 current employees in firms who state that they were not active in R&D in Ireland before they first claimed the R&D tax credit.

In terms of the base-year spend of firms who mentioned being active in R&D before claiming the tax credit, the following table sets out the average and total spend of the respondents:

Active in R&D in Ireland before tax credit claimed	Base-Year Spend	
	Average	Total
Yes	€1,493,248	€174,710,053
No	€61,260	€3,798,090

Some further breakdowns of this data can be found in Appendix 1 p8.

2.3.12 Changes in R&D Expenditure in Ireland in Subsequent Years

For those who had been active in R&D prior to claiming the credit (i.e. the 128 who answered “Yes” to the question in Section 2.3.11 above), we asked them to indicate whether there had been any changes in the R&D expenditure since then; the responses are in the following table. 57% of firms who responded (62) indicated there had been changes in R&D expenditure in the years following the first claim for the R&D tax credit.

Any direct changes in R&D expenditure in Ireland in subsequent years	Number	Percentage
Yes	62	56.9%
No	47	43.1%
Total	109	100.0%

There was some difference between multinationals and indigenous firms in this respect, with a higher percentage of multinationals reporting changes in R&D expenditure:

Any direct changes in R&D expenditure in Ireland in subsequent years	Multinational		Indigenous	
	Number	Percentage	Number	Percentage
Yes	28	66.7%	32	50.0%
No	14	33.3%	32	50.0%
Total	42	100.0%	64	100.0%

Some further breakdowns of this data can be found in Appendix 1 p9.

When asked to clarify **what had changed**, 86.9% of those responding to the question indicated that expenditure had increased, as set out in the following table and chart.

Changes in R&D Expenditure	Number	Percentage
R&D expenditure in Ireland increased	53	86.9%
R&D expenditure in Ireland decreased	4	6.6%
R&D expenditure was directed towards different type(s) of R&D activity in Ireland	4	6.6%
Total	61	100.0%

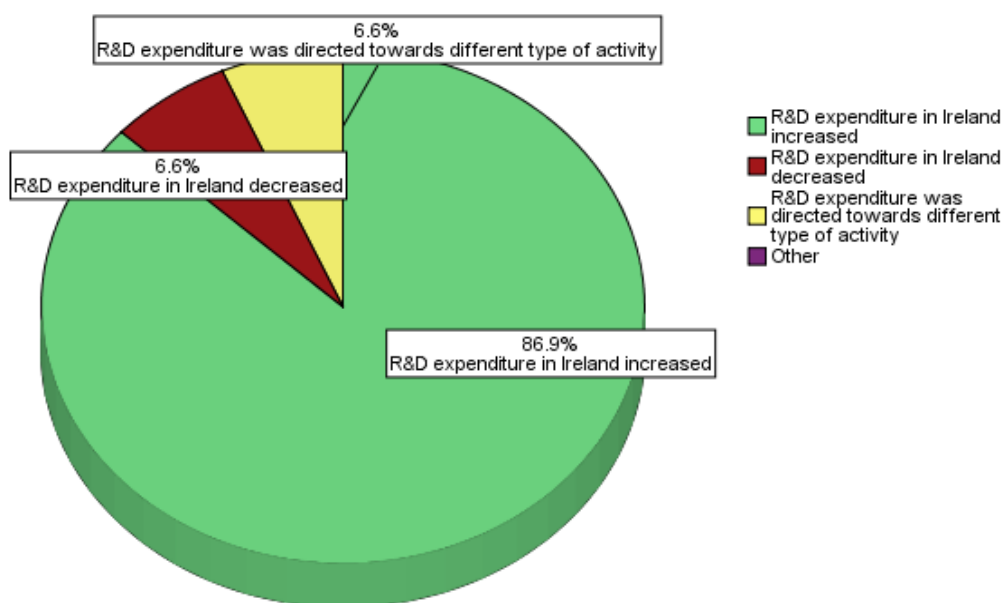


Figure 2.3.12-1: Changes in R&D Expenditure

For those indicating that the expenditure had increased, we asked them **which had more influence on this, the R&D tax credit or the R&D grants**. The table below illustrates the responses:

Influence on Increased R&D Expenditure	Number	Percentage
R&D tax credit had a greater influence	17	32.7%
R&D grant had a greater influence	5	9.6%
Same level of influence for both	16	30.8%
Neither had any influence on decision to increase R&D expenditure	10	19.2%
Other	4	7.7%
Total	52	100.0%

Whilst there is a small number of responses, it appears that the R&D tax credit had an influence on the increased expenditure for the firms in question, with 32.7% indicating that it had a greater influence than the R&D grant and a further 30.8% stating that the credit and the grant had the same level of influence.

Some further breakdowns of this data by grant source are contained in Appendix 1 p9.

2.3.13 Awareness of Changes to the R&D Tax Credit

We asked respondents whether they were aware of a range of recent changes to the tax credit. The table and chart below set out the responses. Percentages – which do not add to 100% as there was the option to select more than one answer – are given for the total cohort of 269 (i.e. including those who ticked none of the responses) and for the 237 respondents who selected at least one option.

Awareness of Changes to the R&D Tax Credit	Number	Percentage of those who answered	Percentage of total responses
Aware of new €100,00 and €200,000 exemptions	126	53.2%	46.8%
Aware of new key employee provision	148	62.4%	55.0%
Aware of payable credit	120	50.6%	44.6%
None of the above	62	26.2%	23.0%
Other	1	0.4%	0.4%

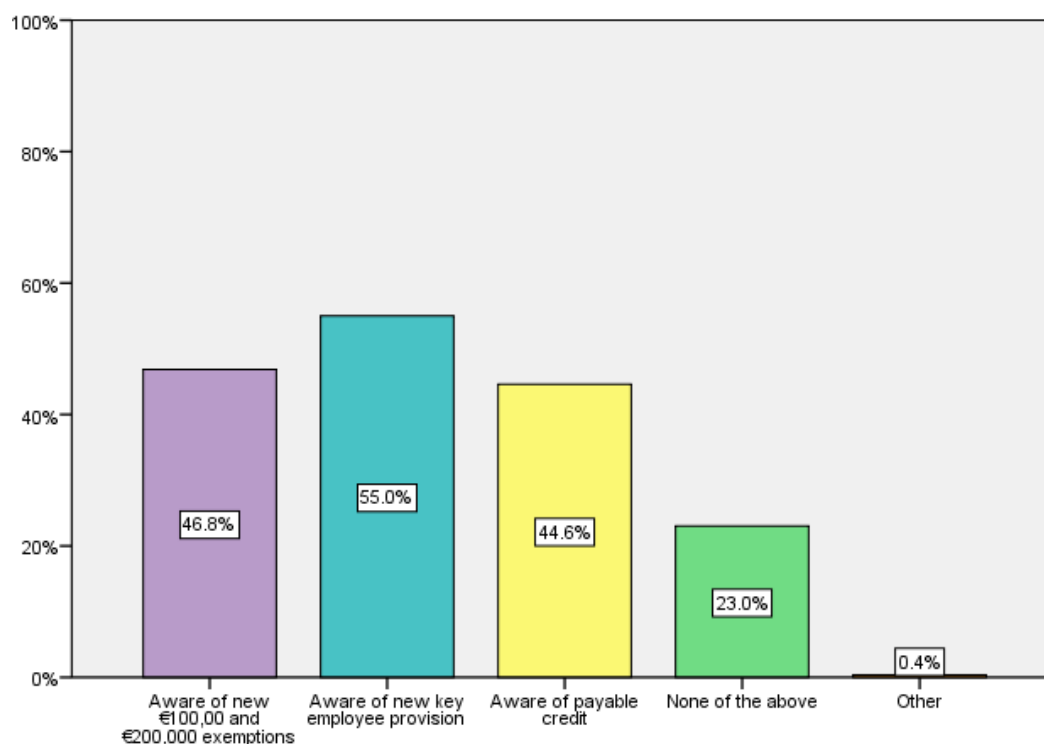


Figure 2.3.13-1: Awareness of Features of R&D Tax Credit

More than half (148 or 55%) were aware of the key employee provision, with a little less than half (126 respondents or 46.8% and 120 respondents or 44.6% respectively) aware of the exemptions and the payable credit changes.

In general, multinational firms are more aware of the changes than indigenous firms, as can be seen from the table below.

Awareness of Changes to R&D Credit	Multinational		Indigenous	
	Number	Percentage	Number	Percentage
Aware of new €100,00 and €200,000 exemptions	60	58.3%	63	40.4%
Aware of new key employee provision	68	66.0%	75	48.1%
Aware of payable credit	56	54.4%	63	40.4%
None of the above	17	16.5%	43	27.6%
Other	0	0.0%	1	0.6%

2.3.14 Key Employee Provision

The table and chart below illustrate the responses when participants were asked about their **use of the key employee provision**:

Use of the Key Employee Provision	Number	Percentage
Have used this provision	7	3.6%
Have not used this provision to date but intend to do so	36	18.3%
Have not used this provision and do not intend to do so	132	67.0%
Other	22	11.2%
Total	197	100.0%

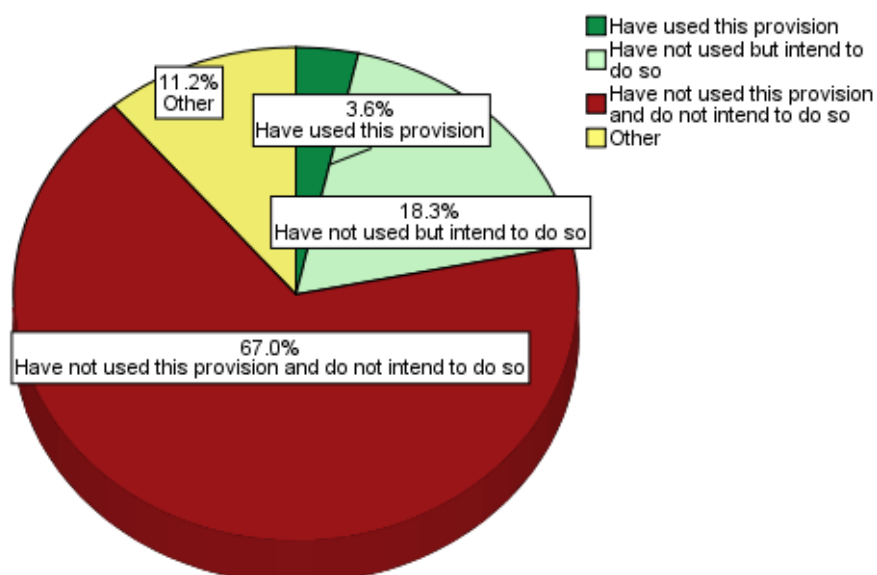


Figure 2.3.14-1: Use of Key Employee Provision

The majority (132 or 67%) indicated that they have not used and do not intend to use the key employee provision, with only a very small number (7 or 3.6%) having used this to date. "Other" answers included a lack of awareness of the provision and a lack of certainty over whether the respondent will use it in future, with one or two responses to the effect that it was too restrictive or not usable.

When we look at the different organisation types, there is a small difference in the intention to use the provision in future: more indigenous firms (21%) indicated that they intend to use the provision in future than multinational firms (13.4%), as set out below.

Use of Key Employee Provision	Multinational		Indigenous	
	Number	Percentage	Number	Percentage
Have used this provision	2	2.4%	5	4.6%
Have not used this provision to date but intend to do so	11	13.4%	23	21.1%
Have not used this provision and do not intend to do so	63	76.8%	65	59.6%
Other	6	7.3%	16	14.7%
Total	82	100.0%	109	100.0%

Respondents were also asked their **view on the key employee provision**: Interestingly, despite a relatively low number of those who have used or intend to use it, there is a large majority of respondents (88 respondents or 72.1%) with a positive view towards the provision.

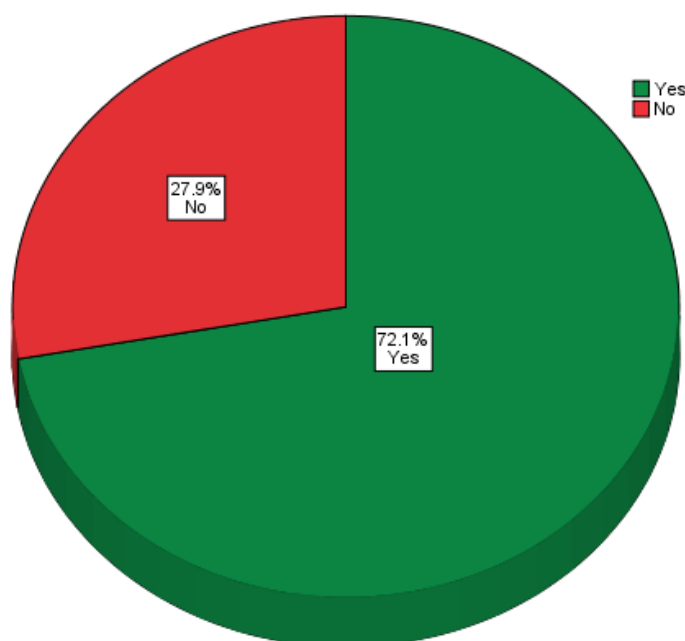


Figure 2.3.14-2: View of Key Employee Provision

Some further breakdown of the key employee provision data is in Appendix 1 p10.

Negative Perceptions of the Key Employee Provision

Those who had a negative perception of the key employee provision were asked what such negative perceptions were. The responses focused on five core themes:

- **Applicability:** respondents did not see the credit as applicable to their situation:
- **Difficulty:** this was cited by several respondents as a negative element of the provision:
- **Risk:** there were concerns about the risk of clawback:

- **Restrictiveness:** Respondents deemed the provision to be too restrictive, and there was particular emphasis on the exclusion of directors in this regard:
- **Divisiveness:** respondents expressed concern about the potential to be divisive in singling out particular employees:

2.3.15 Use of Tax Consultants/Advisors

Respondents were asked if they used tax advisors or consultants in claiming the R&D tax credit. The table and chart below indicates that the majority (88.4% or 189 respondents) of those who answered do avail of tax advisors or consultants to assist in claiming for the R&D tax credit.

Use of Tax Consultants/Advisors	Number	Percentage
Yes	189	88.3%
No	25	11.7%
Total	214	100.0%

2.3.16 What Would Have Happened in the Absence of the R&D Tax Credit

Respondents were asked what the firm might have done in the absence of the R&D tax credit. As can be seen from the table and chart below, more than half of respondents (135 respondents or 50.2% – 60% of those who chose at least one answer option) believe that the firm would have invested less in the R&D being conducted. Percentages – which do not add to 100% as there was the option to select more than one answer – are given for the total cohort of 269 (i.e. including those who ticked none of the responses) and for the 225 respondents who selected at least one option.

What would have changed in absence of credit	Number	Percentage of those who answered	Percentage of total responses
Not undertaken R&D that would otherwise not have been financially viable	39	17.3%	14.5%
Invested less in the R&D the firm was conducting	135	60.0%	50.2%
Conducted R&D at a later stage than would otherwise have been the case	45	20.0%	16.7%
Had a reduced quality of R&D outputs	59	26.2%	21.9%
Undertaken less risky R&D activity	40	17.8%	14.9%
Lost R&D functions or activity to other countries	61	27.1%	22.7%
Other action	33	14.7%	12.3%

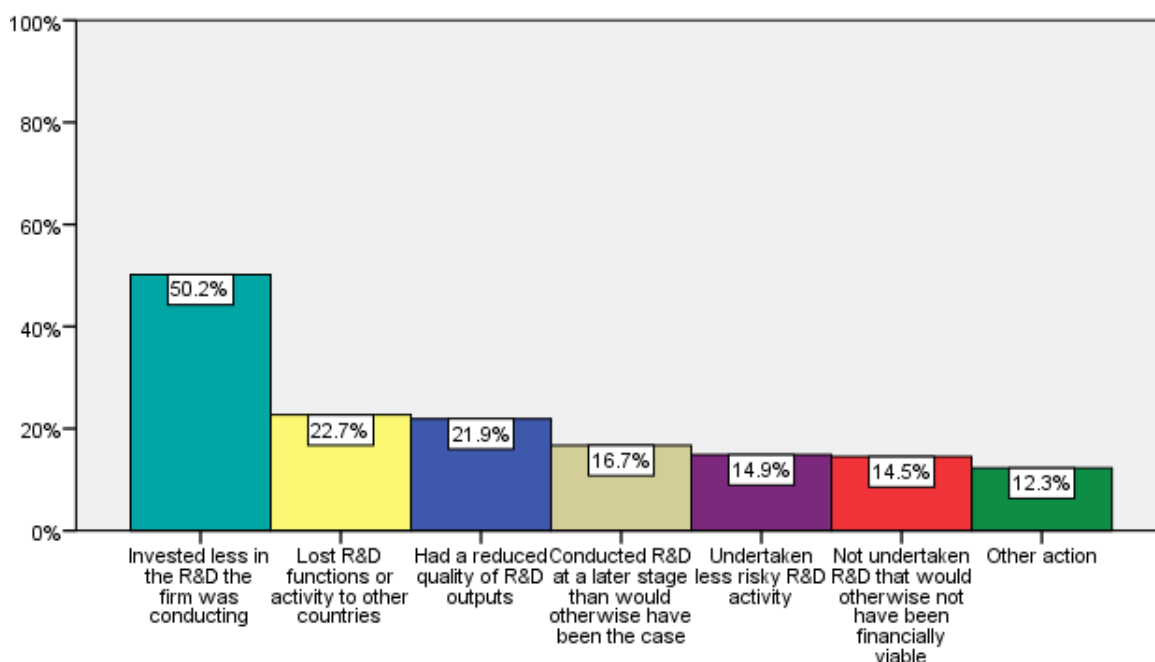


Figure 2.3.16-1: What Would Have Happened in Absence of R&D Tax Credit

“Other” actions included several references to “no change”: 26 of the 33 responses to “Other” (9.6% of the overall cohort) suggested that the activity would have carried on regardless of the existence of the credit.

If we look at the differences between multinational and indigenous firms, we can see that the risk perceptions differ: for example the risk of losing R&D functions to other countries is high for multinationals, whereas more indigenous companies indicate that they might have undertaken less risky R&D, as illustrated below.

What would have changed in absence of credit	Multinational		Indigenous	
	Number	Percentage	Number	Percentage
Not undertaken R&D that would otherwise not have been financially viable	16	15.5%	23	14.7%
Invested less in the R&D the firm was conducting	51	49.5%	81	51.9%
Conducted R&D at a later stage than would otherwise have been the case	8	7.8%	37	23.7%
Had a reduced quality of R&D outputs	18	17.5%	41	26.3%
Undertaken less risky R&D activity	10	9.7%	29	18.6%
Lost R&D functions or activity to other countries	39	37.9%	19	12.2%
Other action	15	14.6%	17	10.9%

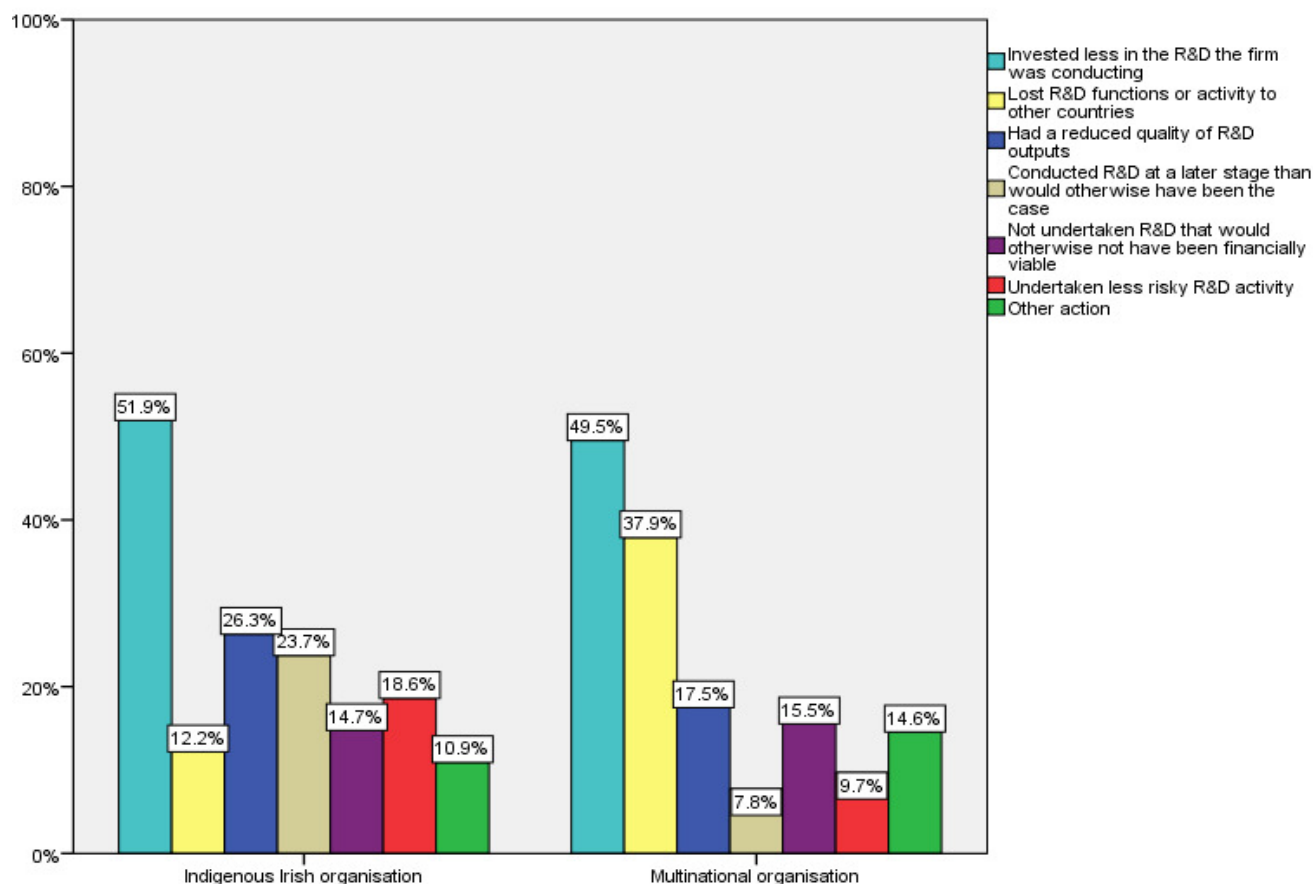


Figure 2.3.16-2: What Would Have Happened in Absence of Credit by Organisation Type

2.3.17 Length of Time of R&D Activity in Ireland

The following table and graph indicate the responses when we asked how long the firm had been undertaking R&D activity in Ireland. Very few (4 respondents or 1.5%) had been undertaking such activity for less than one year, and otherwise the numbers were more evenly distributed, with 5-10 years representing the most common answer with 84 responses (32.4%).

Length of Time of R&D Activity in Ireland	Number of Firms	Percentage	Cumulative Percentage
Less than 1 year	4	1.5%	1.5%
1-5 years	52	20.1%	21.6%
5-10 years	84	32.4%	54.0%
10-15 years	62	23.9%	77.9%
15 years +	57	22.0%	100.0%
Total	259	100.0%	

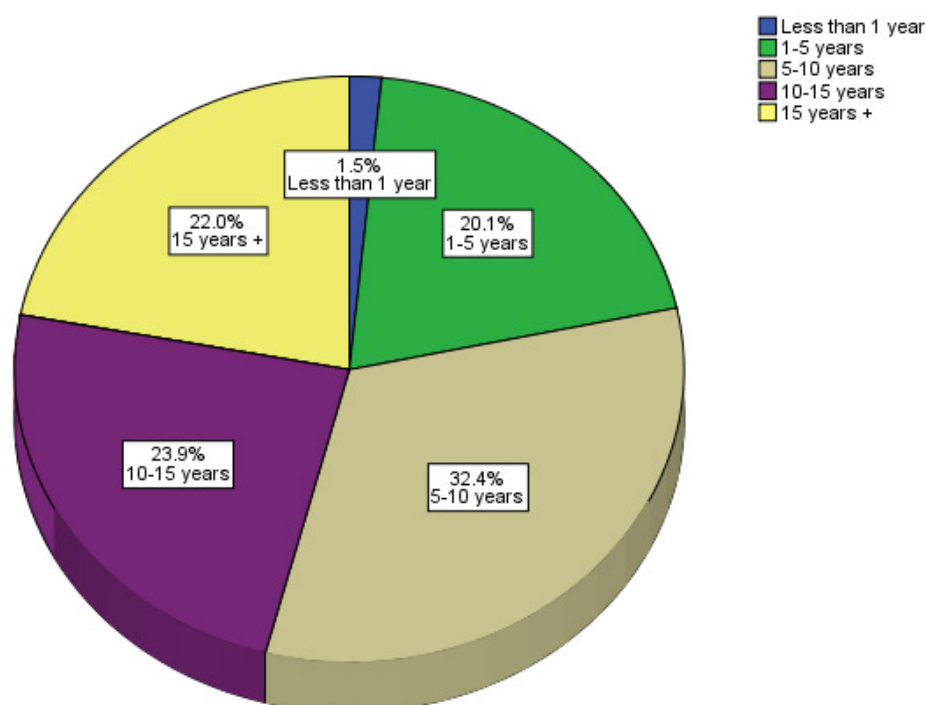


Figure 2.3.17-1: Length of Time of R&D Activity in Ireland

There were no significant differences in this profile for the different organisation types.

2.3.18 R&D Activity in Ireland and Overseas

We asked respondents to indicate the percentage of R&D activity taking place within Ireland and in other regions. The responses are set out below.

Where R&D Activity Takes Place	Average Percentage	Minimum	Maximum
R&D activity - Ireland	75.7%	1.0%	100.0%
R&D activity - UK	18.3%	0.0%	95.0%
R&D activity - other EU countries	29.0%	0.0%	99.0%
R&D activity - USA	49.7%	0.0%	98.0%
R&D activity - other countries	22.86%	0.0%	100.0%

This is evidently a question affecting multinationals for the most part, and the table below indicates the differences:

Where R&D Activity Takes Place	Multinational	Indigenous
	Average Percentage	Average Percentage
R&D activity - Ireland	47.2%	93.0%
R&D activity - UK	14.1%	21.2%
R&D activity - other EU countries	33.8%	15.1%
R&D activity - USA	55.8%	10.1%
R&D activity - other countries	24.1%	20.0%

2.3.19 Types of R&D Activity Undertaken

The following table and chart set out the types of R&D activity undertaken by responding firms in Ireland. Percentages – which do not add to 100% as there was the option to select more than one answer – are given for the total cohort of 269 (i.e. including those who ticked none of the responses) and for the 260 respondents who selected at least one option. The most common activities were experimental development (124 respondents or 46.1%), mixed activities (109 respondents or 40.5%), and applied research (95 respondents or 35.3%).

Types of R&D Activity Undertaken	Number	Percentage of those who answered	Percentage of total responses
Basic research	49	18.8%	18.2%
Applied research	95	36.5%	35.3%
Experimental development	124	47.7%	46.1%
Mixed	109	41.9%	40.5%
Uncertain/don't know	12	4.6%	4.5%
Other R&D activities	3	1.2%	1.2%

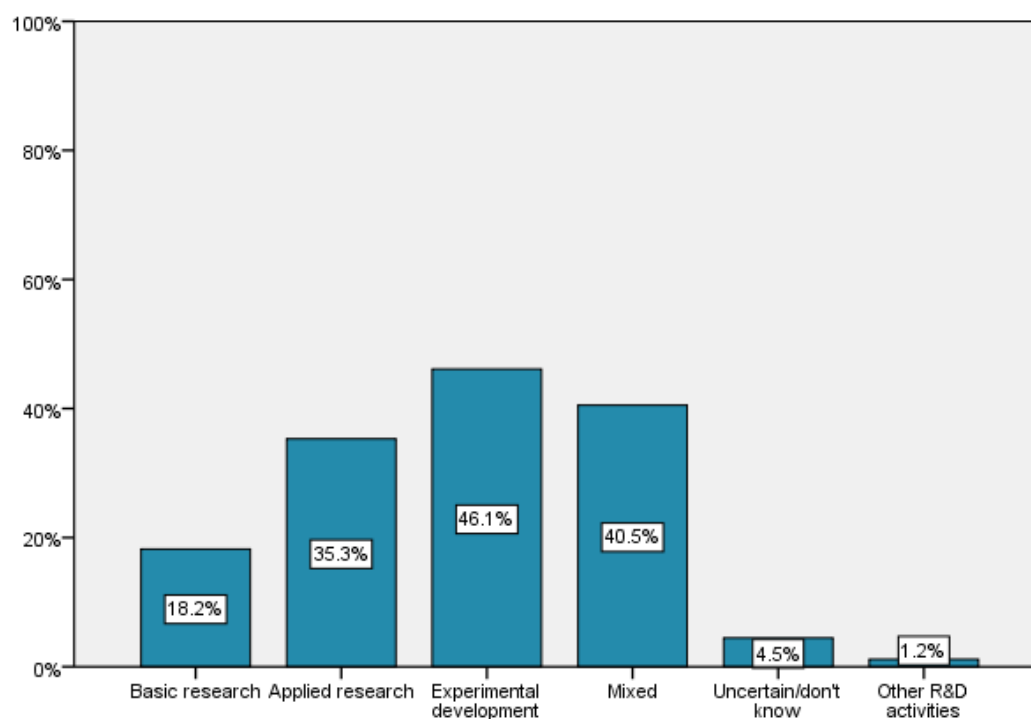


Figure 2.3.19-1: Types of R&D Activity Undertaken

“Other” activities were as follows:

- “Stopped R&D at present”
- “Product and process development”
- “New product development”

When these activities are broken down by organisation type, we see the following:

Types of R&D Activity Undertaken	Multinational		Indigenous	
	Number	Percentage	Number	Percentage
Basic research	11	10.7%	37	23.7%
Applied research	33	32.0%	60	38.5%
Experimental development	52	50.5%	69	44.2%
Mixed	45	43.7%	61	39.1%
Uncertain/don't know	5	4.9%	7	4.5%
Other R&D activities	2	2.0%	1	0.7%

More indigenous than multinational firms are undertaking basic and applied research, for example, whilst the multinationals do a little more experimental development and mixed research, but not by a significant margin.

2.3.20 Typical Duration of R&D Activity (Cycle) in Ireland

We asked respondents what the typical duration of the current R&D activity in Ireland, and the results are set out in the table and chart below, which show that most activity has a typical duration of 1-5 years (177 responses or 65.8%).

Typical Duration of R&D Activity	Number	Percentage
<1 year	42	15.6%
1-5 years	177	65.8%
5-10 years	42	15.6%
10+ years	26	9.7%
Other duration	2	0.8%

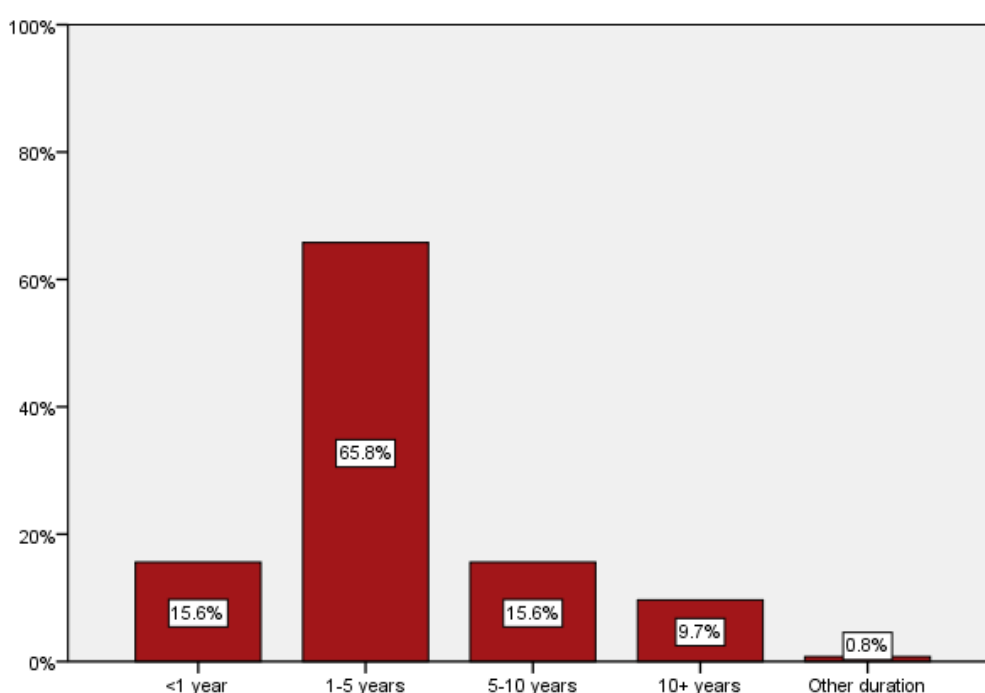


Figure 2.3.20-1: Typical Duration of R&D Activity (Cycle)

There were no significant differences in terms of the organisation type in the profiles of R&D activity duration.

2.3.21 Strengths and Weaknesses of the R&D Environment in Ireland

Respondents were asked what they considered the main strengths and weaknesses of the R&D environment in Ireland. Whilst some respondents interpreted the question as one asking about the strengths and weaknesses of the R&D tax credit, there were a substantial number (154) of responses to the question overall. Interestingly, many of the issues identified as strengths are also points of weakness in the R&D environment, such as the support available, the workforce, and the tax credit.

The key themes evident from the responses are as follows:

Strengths	Weaknesses
<ul style="list-style-type: none"> ■ Supports from the State, including the R&D tax credit and the R&D grants, and other forms of support were considered a strength: <ul style="list-style-type: none"> • Good support from Enterprise Ireland for private entrepreneurs (financial and non-financial) • Understandable and sensible financial supports from EI and directly from the Government through the tax credit scheme • State bodies are a significant help and make it easy • Environment is good because of tax credits and state support for R&D institutions • Emergence of various industry based R&D forums over recent years is a positive development (e.g. IRDG) • Incentive program of grants and tax credits is excellent and highly important ■ A few mentioned the corporation tax rate as an additional strength: <ul style="list-style-type: none"> • Combination of tax credits and 12.5% rate - effective versus conducting R&D in the U.S. ■ Several mentioned links with third-level institutions as a positive: <ul style="list-style-type: none"> • Good third level activities • Availability of experts, test houses and university facilities • Ability to partner with universities • Output from colleges for food design R&D good • Good links to third level education 	<ul style="list-style-type: none"> ■ In relation to support, some weaknesses identified were: <ul style="list-style-type: none"> • Complex and slow support structure by way of grants • No incentives (esp. since no patent royalty exemption) • Lack of available ad-hoc consultancy ■ The difficulty in recruiting and retaining suitably qualified workforce is another concern: <ul style="list-style-type: none"> • Not enough people in that educated local workforce • Finding suitable staff resident in Ireland • Shortage of scientists with practical experience in Ireland. Impossible for the private sector to match the full package the Public sector offer to R&D personnel • Irish SME are finding it difficult to compete with the large multinationals and there is significant upward pressure on salaries and benefits ■ The tax credit and its restrictions and/or application was also identified as a weakness for the R&D environment: <ul style="list-style-type: none"> • The base year restriction • Narrow scope of key employee provision.

Strengths	Weaknesses
<ul style="list-style-type: none"> ■ The attractiveness of Ireland as a location for firms and employees was also mentioned: <ul style="list-style-type: none"> • Worldview ingrained in our culture • Attractive location to attract skilled immigrants • English speaking location making multicultural workforce more easily integrated and making it easier to do business internationally • Pool of talent attracted by reputation for software development (our sector) • Euro zone economy with a can-do attitude • Tax credit attracts inward investment into Ireland ■ The workforce was cited by many as a considerable strength in the R&D environment in Ireland: <ul style="list-style-type: none"> • Educated local workforce • Critical mass of employees with knowledge in fintech • Good level of expertise • Generates employment in Ireland for highly skilled individuals • Good access to people at PhD level. • Skilled labour force • Excellent people • Ireland has an excellent pool of innovative graduates eager to work • Access to the right type of technical people 	<ul style="list-style-type: none"> ■ The current economic climate, and its impact on business, was cited: <ul style="list-style-type: none"> • The current trading conditions in Ireland have squeezed revenues to a point that inhibits the extent of R&D we would like to be engaged in • For SME's , the focus on survival detracts from the appetite to experiment on the future and invest in R&D ■ Costs are a concern for some respondents: <ul style="list-style-type: none"> • Labour costs • Energy costs • Cost of production of new products against for example China. ■ Whilst links with third-level institutions were considered a strength, for some they are a weakness: <ul style="list-style-type: none"> • Lot of government funding provided to third-level projects of questionable value • Poor conversion of third-level research into private sector businesses • Little linkage between universities and industry • Dependence on very slow third level education institutions ■ A few respondents commented on Ireland's infrastructure: <ul style="list-style-type: none"> • Location to peripheral, infrastructure inadequate • Isolation from the main technical centres in Europe • Transport connections - it is difficult to arrange efficient flight connections to and from UK / Europe poor industrial infrastructure within which to work

2.3.22 R&D Links with Third Parties

The responses to the question in relation to whether participants had R&D links with third parties are set out in the table below.

R&D links with third parties	Number	Percentage
Yes	114	49.8%
No	115	50.2%
Total	229	100.0%

As can be seen from the figures, just under half (114 respondents or 49.8%) indicated they had links with third parties for R&D activity. The table and graph below outline the third parties with whom respondents have such links, the highest of which is third-level institutions in Ireland. Percentages – which do not add to 100% as there was the option to select more than one answer – are given for the total cohort of 269 (i.e. including those who ticked none of the responses) and for the 110 respondents who selected at least one option.

R&D links with third parties	Number	Percentage of those who answered	Percentage of total responses
Other firm(s) in Ireland	53	48.2%	19.7%
Other firm(s) outside Ireland but within the EU	58	52.7%	21.6%
Other firm(s) outside the EU	27	24.5%	10.0%
Third-level institutions in Ireland	82	74.5%	30.5%
Third-level institutions outside Ireland but within the EU	29	26.4%	10.8%
Third-level institutions outside the EU	11	10.0%	4.1%
Subcontractor(s): individual	36	32.7%	13.4%
Subcontractor(s): company	43	39.1%	16.0%
Other links	1	0.9%	0.4%

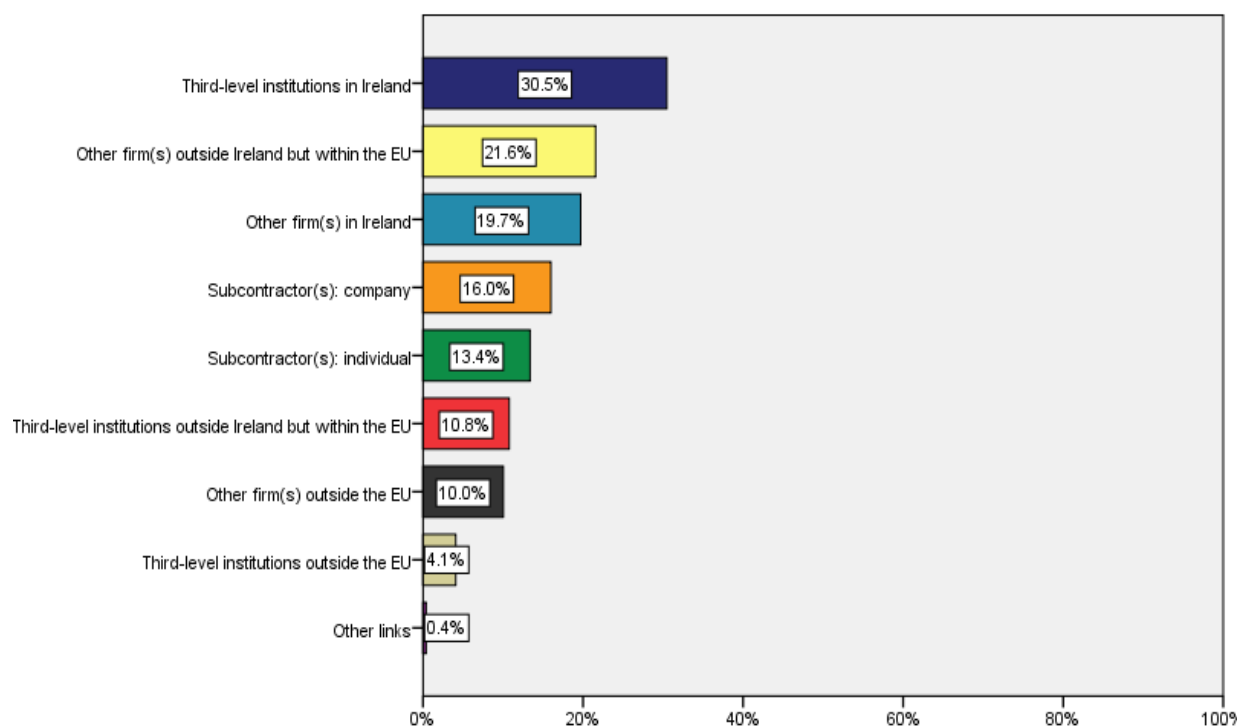


Figure 2.3.22-1: Links with Third Parties

When we look at the links by organisation type, we can see some differences: more multinationals have links with company subcontractors, for example, as set out in the table below:

Links with Third Parties	Multinational		Indigenous	
	Number	Percentage	Number	Percentage
Other firm(s) in Ireland	21	20.4%	32	20.5%
Other firm(s) outside Ireland but within the EU	25	24.3%	33	21.2%
Other firm(s) outside the EU	12	11.7%	15	9.6%
Third-level institutions in Ireland	36	35.0%	45	28.8%
Third-level institutions outside Ireland but within the EU	14	13.6%	14	9.0%
Third-level institutions outside the EU	5	4.9%	6	3.8%
Subcontractor(s): individual	15	14.6%	20	12.8%
Subcontractor(s): company	22	21.4%	21	13.5%
Other links	1	1.0%	0	0.0%

2.3.23 Proportion of R&D Funding Outsourced

The table below indicates the responses to our question in relation to the proportion of R&D activity that is outsourced: the average amount of R&D activity outsourced is 13.8%, with a range from 0% to 85% in terms of how much is outsourced.

Proportion of R&D Activity Outsourced	
Number of respondents	100
Average	13.8%
Minimum	0.0%
Maximum	85.0%

The profile for multinational and indigenous firms differs somewhat: multinational firms' average outsourcing is lower and their maximum is less than half that of indigenous firms, as set out in the table below.

Proportion of R&D Activity Outsourced	Multinational	Indigenous
Average	12%	15%
Minimum	0%	0%
Maximum	40%	85%

A total of 82 firms (30.4% of the total cohort) gave details of outsourcing above 0%, of which 32 were multinationals (31.1% of the multinational cohort) and 48 were indigenous (30.8% of the cohort of indigenous firms).

2.3.24 Where Decisions Are Made regarding General Investments in Ireland

We asked respondents to tell us where decisions were made in respect of investment generally in the Irish operations. As the table and chart below indicate, just over two-thirds of respondents (68.1% or 171 respondents) indicated that such decisions were made in Ireland, with 29.5% (74) made overseas, and 2.4% (6) made both in Ireland and overseas.

Where Decisions are Made regarding General Investments in Ireland	Number	Percentage
Ireland	171	68.1%
Overseas	74	29.5%
Combination	6	2.4%
Total	251	100.0%

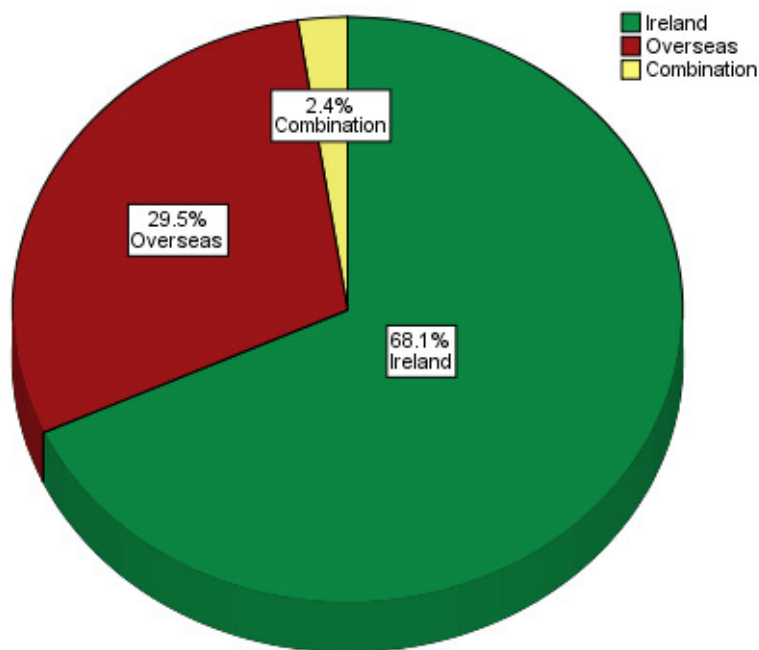


Figure 2.3.24-1: Where General Investment Decisions Are Made

Again, this is an issue chiefly for multinational organisations, and we have separated the organisation types in the table and chart below to examine this more closely.

Where Decisions Are Made regarding General Investments in Ireland	Multinational		Indigenous	
	Number	Percentage	Number	Percentage
Ireland	16	17.2%	152	99.3%
Overseas	71	76.3%	1	0.7%
Combination	6	6.5%	0	0.0%
Total	93	100.0%	153	100.0%

Multinational organisation

Indigenous Organisation

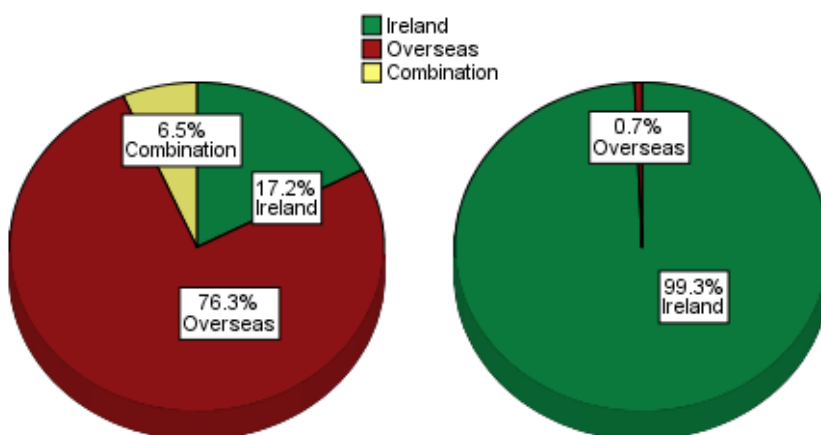


Figure 2.3.24-2: Where General Investment Decisions Are Made by Organisation Type

As can be seen from the figures, for multinational firms, 76.3% (71) of them have general investment decisions in relation to Ireland made overseas. Unsurprisingly, almost no indigenous firms have investment decisions made elsewhere.

Countries where such investment decisions are made include the US (most frequently cited), the UK, Switzerland, Japan, Italy, Germany, France, Denmark, China, and Bermuda.

2.3.25 Where R&D Activity Decisions are Made

In relation to R&D decisions specifically, we asked firms to identify where these were made, in Ireland or overseas. The responses are set out below, subdivided to indicate the split between multinational and indigenous firms. The percentage of R&D decisions made in Ireland ranges from 27.8% to 40%.

Decisions	Multinational				Indigenous			
	Ireland		Overseas		Ireland		Overseas	
	No.	%	No.	%	No.	%	No.	%
Project approval	30	32.6%	62	67.4%	153	100.0%	0	0.0%
Location of R&D activities	27	30.7%	61	69.3%	150	99.3%	1	0.7%
Funding	25	27.8%	65	72.2%	150	99.3%	1	0.7%
Other	14	40.0%	21	60.0%	92	98.9%	1	1.1%

The countries where such approval takes place echo the list above: US, UK, Germany, Italy, Japan, China, France, Taiwan, Bermuda, and Switzerland.

2.3.26 Competing within a Wider Group for R&D Projects

We asked respondents if they had to **compete at times for R&D investment/projects** within the wider global organisation. The tables below set out the responses for the dataset as a whole and then by organisation type. As before, this is a key issue for multinationals rather than indigenous firms, with only 6.9% of the latter competing for R&D investment versus 70.8% of multinational respondents.

Compete for R&D Investments	Number	Percentage
Yes	74	31.1%
No	164	68.9%
Total	238	100.0%

Compete for R&D Investments	Multinational		Indigenous	
	Number	Percentage	Number	Percentage
Yes	63	70.8%	10	6.9%
No	26	29.2%	134	93.1%
Total	89	100.0%	144	100.0%

We then asked these respondents if they had **ever lost an embedded R&D project** to an overseas location, to which 61 participants responded, just over half of whom had lost such an investment.

Lost Embedded R&D Project	Number	Percentage
Yes	31	50.8%
No	30	49.2%
Total	61	100.0%

Of those who had lost an embedded project, 28 were multinationals and 3 were indigenous firms (the remaining 2 had not given an organisation type)

Conversely, respondents were asked **if the Irish base had won R&D projects** within the wider group; out of the 56 responses, three-quarters (75% or 42) had done so.

Won R&D Projects	Number	Percentage
Yes	42	75.0%
No	14	25.0%
Total	56	100.0%

This group was then asked if the R&D tax credit had played a part in the decision to award the R&D investment to Ireland, to which 33, or 84.6%, responded that it had played a part in their win.

R&D Tax Credit Play a Part	Number	Percentage
Yes	33	84.6%
No	6	15.4%
Total	39	100.0%

Further breakdown of this data, including employee numbers and organisation type are contained in Appendix 1 p11-12.

2.3.27 Impact on R&D Activity of the Economic Downturn

We asked participants what impact, if any, the economic downturn had had on their R&D activity; the results are set out below:

Impact of Downturn on R&D Activity	Number	Percentage
No impact	103	38.3%
Reduction in R&D activity	59	21.9%
Change in nature or focus of R&D activity	74	27.5%
Increase in R&D activity	40	14.9%
Other impact	10	3.9%

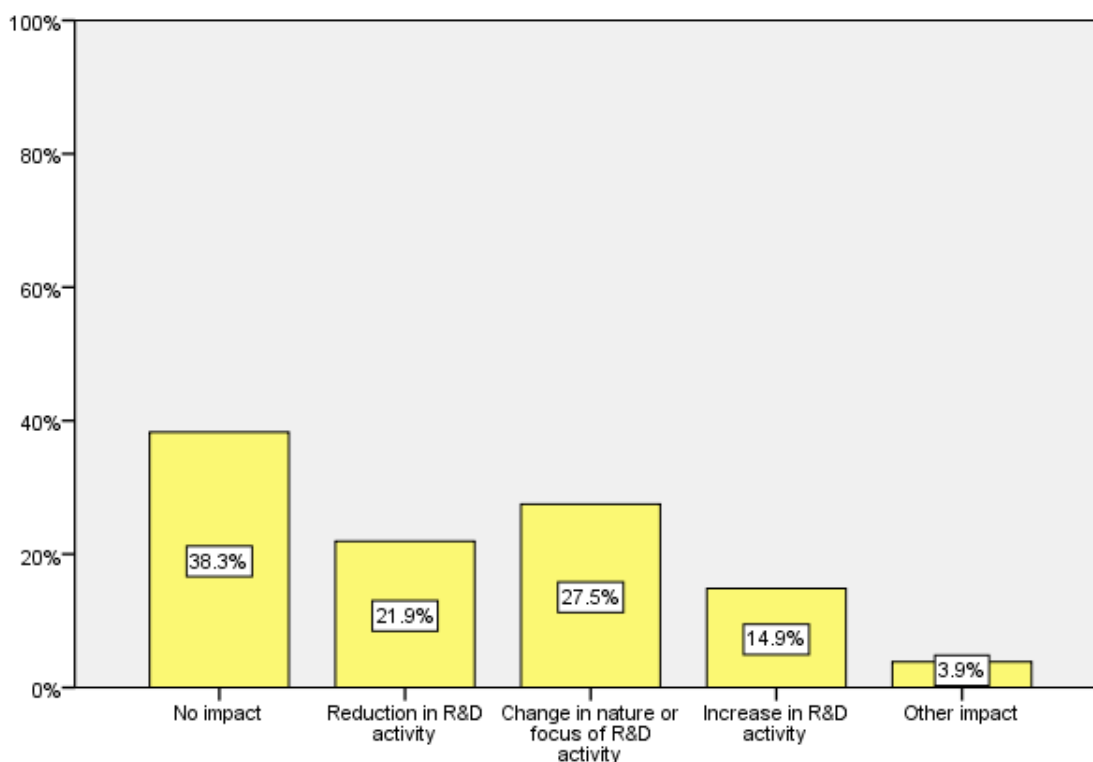


Figure 2.3.27-1: Impact of Economic Downturn

More than one-third (103 or 38.3%) of respondents indicated that there had been no impact on their R&D activity following the economic downturn, with nearly 15% (40) stating that there had been an increase in R&D activity since the downturn. 21.9% (59) reported a reduction in activity, and 27.5% (74) reported a change in nature or focus of R&D activity.

The table below sets out the breakdown of responses by organisation type, indicating that more multinationals perceive no impact from the downturn than indigenous firms (47.6% versus 34.0%), whereas more indigenous firms report changes in activity, both negative (27.6% of indigenous firms indicate a reduction in activity by contrast to 15.5% of multinationals) and positive (17.9% of indigenous firms indicate an increase in R&D activity versus 11.7% of multinational respondents).

Impact of Downturn	Multinational		Indigenous	
	Number	Percentage	Number	Percentage
No impact	49	47.6%	53	34.0%
Reduction in R&D activity	16	15.5%	43	27.6%
Change in nature or focus of R&D activity	26	25.2%	43	27.6%
Increase in R&D activity	12	11.7%	28	17.9%
Other impact	4	4.0%	6	4.0%

2.4 Respondent Information

2.4.1 Role/Responsibility in respect of R&D within the Firm

We asked those responding to the survey to indicate their role in relation to R&D activity within the firm. The responses are set out in the table and chart below.

Role/Responsibility in relation to R&D	Number	Percentage
Currently hold responsibility for R&D decision-making	112	41.6%
Currently hold responsibility for R&D financing	127	47.2%
Previously held responsibility for R&D decision-making	34	12.6%
Previously held responsibility for R&D financing	29	10.8%
None of the above	83	30.9%
Other responsibility	5	1.9%

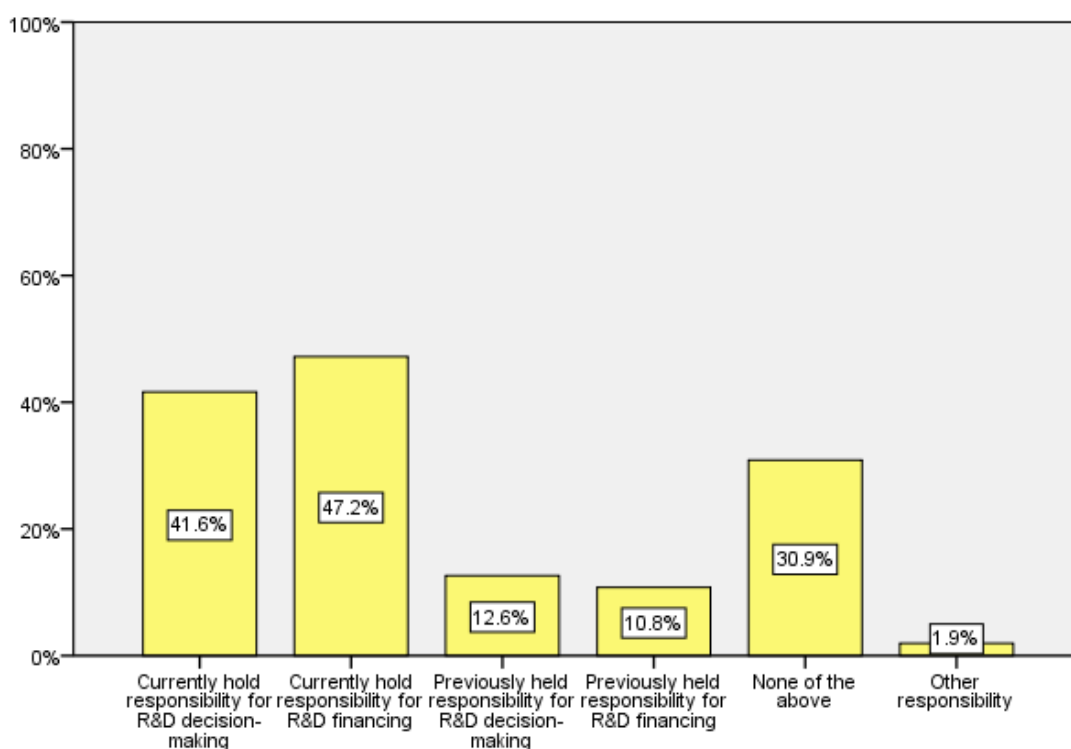


Figure 2.4.1-1: Role/Responsibility for R&D within Firm

Just under half of respondents (47.2% or 127) held responsibility for R&D financing currently, with 41.6% (112) of respondents currently responsible for R&D decision-making

3 Concluding Remarks

The survey findings present a body of data to the Department that may be used in the overall review of the R&D tax credit. Set alongside the other aspects of the review, they will inform the Department's work and provide insight into the operation of the tax credit and perceptions in relation to the scheme from the perspective of firms active in R&D in Ireland.

Key information within the survey data includes the significant number of employees working in R&D active firms in Ireland: more than 55,000 employees within the surveyed firms alone, and more than 52,000 in those firms who are current or previous claimants of the R&D tax credit. Whilst we know that the firms responding to the survey are on average larger than the overall profile of firms claiming the R&D tax credit, it still indicates a considerable body of employment in the sector overall.

Multinational respondent firms are on average considerably larger than the indigenous respondents, both in terms of employee numbers (on average almost five times larger by number employed) and turnover (two and a half times larger approximately by turnover).

In terms of the impact of the R&D tax credit, this can be considered from a number of angles. It is possible to compare the spend on R&D in the base year (2003) with that for 2011, and it is clear from this analysis that the overall spend on R&D activity has increased in the intervening period. Even when it is taken into account that many firms were not active in R&D in the base year, the spend of those who did have expenditure in R&D in the base year is still higher in 2011 than in 2003.

Firms who confirmed that they were active in R&D prior to first claiming the tax credit also report an increase in R&D expenditure when asked what changed subsequently.

If impact is viewed from the perspective of the opinion of the respondents, more than half believe that the firm would have invested less in the R&D being conducted in the absence of the R&D tax credit; less than 10% of respondents believed that there would have been no negative impact on the level or quality of R&D activity in the absence of the credit.

More positive opinion attributed to the credit can be seen where those firms who have won R&D projects to Ireland as part of a competitive process within a wider global group place a strong emphasis on the role of the tax credit in assisting them to win such activity to this country.

This is borne out by the free-format opinion responses, which are characterised by a strong positivity towards the R&D tax credit overall, albeit with some largely detail-oriented concerns in relation to specific provisions or the administrative elements of the credit.

Overall, it appears that the survey suggests a positive impact on R&D activity and a favourable perception of the R&D tax credit among firms R&D active in Ireland.

Appendix 1: Supplementary Data

Additional Data Breakdowns

The following tables are examples of how many of the variables have been broken down by turnover and/or employee numbers.

Average Employees in Multinational and Indigenous Organisations for each Employee Category

This data supplements that presented in Section 2.2.5 of the main report.

Number of employees in Ireland (Subcategories)	Multinational or indigenous	Number	Average Employees
<10	Multinational organisation	0	0.00
	Indigenous Irish organisation	21	6.48
	Total	21	6.48
10-49	Multinational organisation	21	26.71
	Indigenous Irish organisation	83	24.24
	Total	104	24.74
50-149	Multinational organisation	30	93.83
	Indigenous Irish organisation	32	80.06
	Total	62	86.73
150-249	Multinational organisation	13	181.69
	Indigenous Irish organisation	8	186.38
	Total	21	183.48
250-499	Multinational organisation	17	338.59
	Indigenous Irish organisation	2	386.00
	Total	19	343.58
500+	Multinational organisation	17	1811.59
	Indigenous Irish organisation	6	1067.50
	Total	23	1617.48
Total	Multinational organisation	98	431.54
	Indigenous Irish organisation	152	88.01
	Total	250	222.68

Economic Sector Comparison

These tables supplement the findings presented in Section 2.2.6 of the main report.

Comparison of Survey and Department Data

Economic Sector	Survey Number	Survey Percentage	Department Percentage
Manufacturing	124	46.1%	33%
Information and Communication	62	23.0%	29%
Professional, Scientific and Technical Activities	41	15.2%	14%
Financial and Insurance Activities	29	10.8%	3%
Other Sector	27	10.5%	0%
Agriculture, Forestry and Fishing	22	8.2%	1%
Administrative and Support Service Activities	13	4.8%	2%
Construction	12	4.5%	2%
Other Service Activities	11	4.1%	1%
Mining and Quarrying	10	3.7%	0%
Electricity, Gas, Steam and Air Conditioning Supply	9	3.3%	1%
Human Health and Social Work Activities	9	3.3%	1%
Transportation and Storage	8	3.0%	1%
Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	7	2.6%	11%
Water Supply; Sewerage, Waste Management and Remediation Activities	6	2.2%	1%
Education	5	1.9%	0%
Accommodation and Food Service Activities	4	1.5%	0%
Public Administration and Defence; Compulsory Social Security	4	1.5%	0%
Real Estate Activities	2	0.7%	0%
Arts, Entertainment and Recreation	1	0.4%	0%
Activities of Households as Employers; Undifferentiated Goods-and Services-Producing Activities of Households for Own Use	1	0.4%	0%
Activities of Extra Territorial Organisations and Bodies	1	0.4%	0%

Economic Sector – Multinational and Indigenous Profiles

Economic Sector	Multinational	Indigenous
Manufacturing	55.3%	41.0%
Information and Communication	18.4%	26.9%
Professional, Scientific and Technical Activities	17.5%	14.1%
Financial and Insurance Activities	15.5%	8.3%
Other Sector	12.9%	9.4%
Mining and Quarrying	4.9%	3.2%
Electricity, Gas, Steam and Air Conditioning Supply	4.9%	2.6%
Administrative and Support Service Activities	4.9%	5.1%
Human Health and Social Work Activities	4.9%	2.6%
Water Supply; Sewerage, Waste Management and Remediation Activities	3.9%	1.3%
Construction	3.9%	5.1%
Transportation and Storage	3.9%	2.6%
Agriculture, Forestry and Fishing	2.9%	12.2%
Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	2.9%	2.6%
Other Service Activities	2.9%	5.1%
Public Administration and Defence; Compulsory Social Security	1.9%	1.3%
Education	1.9%	1.9%
Accommodation and Food Service Activities	1.0%	1.9%
Real Estate Activities	1.0%	0.6%
Arts, Entertainment and Recreation	1.0%	0.0%
Activities of Households as Employers; Undifferentiated Goods-and Services-Producing Activities of Households for Own Use	1.0%	0.0%
Activities of Extra Territorial Organisations and Bodies	1.0%	0.0%

Breakdown of Current and Previous Claimants by Turnover and Employee Numbers

These tables supplement the findings presented in Section 2.3.2 of the main report.

Turnover in last financial year subcategorised	€0 - €199,999		€200,000 - €499,999		€500,000 - €999,999		€1,000,000 - €1,999,999		€2,000,000 - €4,999,999		€5,000,000 - €9,999,999		€10,000,000 - €24,999,999		€25,000,000 - €49,999,999		€50,000,000+	
Claim Status	No.	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Currently claims	8	66.7%	4	66.7%	16	84.2%	25	78.1%	24	82.8%	36	83.7%	30	93.8%	15	71.4%	43	84.3%
Claimed previously	1	8.3%	1	16.7%	1	5.3%	4	12.5%	1	3.4%	3	7.0%	2	6.2%	4	19.0%	5	9.8%
Does not claim	3	25.0%	1	16.7%	2	10.5%	3	9.4%	4	13.8%	4	9.3%	0	0.0%	2	9.5%	3	5.9%
Total	12	100%	6	100%	19	100%	32	100%	29	100%	43	100%	32	100%	21	100%	51	100%

Employee Numbers subcategorised	<10		10-49		50-149		150-249		250-499		500+	
Claim Status	No.	%	No	%	No	%	No	%	No	%	No	%
Currently claims	16	72.7%	90	84.9%	50	79.4%	16	76.2%	14	73.7%	21	91.3%
Claimed previously	1	4.5%	9	8.5%	6	9.5%	3	14.3%	4	21.1%	1	4.3%
Does not claim	5	22.7%	7	6.6%	7	11.1%	2	9.5%	1	5.3%	1	4.3%
Total	22	100%	106	100%	63	100%	21	100%	19	100%	23	100%

Familiarity with Aspects of Tax Credit Cross-Tabulated with Role/Responsibility in respect of R&D

This table supplements the findings presented in Section 2.3.4 of the main report.

Role re R&D	Currently hold responsibility for R&D decision-making		Currently hold responsibility for R&D financing		Previously held responsibility for R&D decision-making		Previously held responsibility for R&D financing		None of the above		Other responsibility	
	No.	%	No	%	No	%	No	%	No	%	No	%
Rate	106	83.5%	24	70.6%	22	75.9%	72	86.7%	85	75.9%	3	60.0%
Allowable expenditure	116	91.3%	29	85.3%	26	89.7%	77	92.8%	98	87.5%	5	100.0%
Capital versus operating expenditure regimes	81	63.8%	19	55.9%	19	65.5%	60	72.3%	66	58.9%	3	60.0%
Payable credits	76	59.8%	17	50.0%	18	62.1%	48	57.8%	63	56.2%	2	40.0%
Credits in other jurisdictions	15	11.8%	9	26.5%	7	24.1%	13	15.7%	16	14.3%	1	20.0%
Outsourcing	51	40.2%	10	29.4%	12	41.4%	38	45.8%	40	35.7%	2	40.0%
Other aspects of credit	6	4.7%	1	2.9%	0	0.0%	2	2.4%	6	5.4%	0	0.0%

Breakdown of Base-Year Barrier by Whether Claiming Credit

This table supplements the findings presented in Section 2.3.10 of the main report.

Base Year a Barrier to Claiming Credit	Claiming R&D Tax Credit			
	Currently Claims		Claimed Previously	
	Number	Percentage	Number	Percentage
Yes	10	35.7%	1	25.0%
No	18	64.3%	3	75.0%
Total	28	100.0%	4	100.0%

Breakdown of Active in R&D in Ireland before Tax Credit Claimed by Employee Numbers

These tables supplement the findings presented in Section 2.3.11 of the main report.

Employee Numbers subcategorised	<10		10-49		50-149		150-249		250-499		500+	
Active before Claiming	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	11	84.6%	45	58.4%	32	68.1%	13	76.5%	8	57.1%	13	68.4%
No	2	15.4%	32	41.6%	15	31.9%	4	23.5%	6	42.9%	6	31.6%
Total	13	100.0%	77	100.0%	46	100.0%	17	100.0%	14	100.0%	19	100.0%

Breakdown of Active in R&D in Ireland before Tax Credit Claimed by Base-Year Spend

Base-Year Spend subcategorised	€0 (Zero spend)		€1 - €200,000		€200,000 - €500,000		€500,000 - €1,000,000		€1m+	
Active before Claiming	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	35	38.0%	39	92.9%	17	100.0%	10	90.9%	16	94.1%
No	57	62.0%	3	7.1%	0	0.0%	1	9.1%	1	5.9%
Total	92	100.0%	42	100.0%	17	100.0%	11	100.0%	17	100.0%

Breakdown of Changes in R&D Expenditure by Employee Numbers

These tables supplement the findings presented in Section 2.3.12 of the main report.

Employee Numbers subcategorised	<10		10-49		50-149		150-249		250-499		500+	
Changes in R&D Expenditure	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	4	44.4%	21	56.8%	18	69.2%	5	41.7%	3	37.5%	8	72.7%
No	5	55.6%	16	43.2%	8	30.8%	7	58.3%	5	62.5%	3	27.3%
Total	9	100.0%	37	100.0%	26	100.0%	12	100.0%	8	100.0%	11	100.0%

Breakdown of Influence on Changes by Grant Source

R&D Grants	IDA		Enterprise Ireland		Údarás na Gaeltachta		Science Foundation Ireland		Other source	
Influence on decision to increase expenditure	No.	%	No.	%	No.	%	No.	%	No.	%
R&D tax credit had a greater influence	3	27.3%	8	25.0%	0	0.0%	2	100.0%	0	0.0%
R&D grant had a greater influence	0	0.0%	4	12.5%	0	0.0%	0	0.0%	1	100.0%
Same level of influence for both	4	36.4%	13	40.6%	1	100.0%	0	0.0%	0	0.0%
Neither had any influence on decision to increase R&D expenditure	1	9.1%	7	21.9%	0	0.0%	0	0.0%	0	0.0%
Other	3	27.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	11	100.0%	33	100.0%	1	100.0%	2	100.0%	1	100.0%

Breakdown of Key Employee Provision Use by Employee Numbers

This table supplements the findings presented in Section 2.3.14 of the main report.

Employee Numbers subcategorised	<10		10-49		50-149		150-249		250-499		500+	
Use of Key Employee Provision	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Have used this provision	0	0.0%	5	6.5%	0	0.0%	1	5.6%	1	6.7%	0	0.0%
Have not used this provision to date but intend to do so	3	25.0%	20	26.0%	9	18.4%	2	11.1%	1	6.7%	0	0.0%
Have not used this provision and do not intend to do so	7	58.3%	44	57.1%	34	69.4%	14	77.8%	11	73.3%	17	85.0%
Other	2	16.7%	8	10.4%	6	12.2%	1	5.6%	2	13.3%	3	15.0%
Total	12	100.0%	97	100.0%	49	100.0%	18	100.0%	15	100.0%	20	100.0%

Breakdown of Won R&D project to Ireland by Employee Numbers

These tables supplement the findings presented in Section 2.3.26 of the main report.

Note: this table totals the rows rather than the column, i.e. the 2.4% in the first percentage box indicates that 2.4% of those who won an R&D project to Ireland employed fewer than 10 employees.

Employee Numbers subcategorised	<10		10-49		50-149		150-249		250-499		500+		Total	
Won an R&D project to Ireland	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	1	2.4%	8	19.0%	11	26.2%	4	9.5%	6	14.3%	12	28.6%	42	100.0%
No	1	8.3%	2	16.7%	5	41.7%	1	8.3%	3	25.0%	0	0.0%	12	100.0%

Won an R&D project to Ireland	Total employees in Ireland	
	Average	Total
Yes	629	26,407
No	155	1,860

Breakdown of Won R&D project to Ireland by Organisation Type

Won an R&D project to Ireland	Multinational		Indigenous	
	Number	Percentage	Number	Percentage
Yes	37	77.1%	5	62.5%
No	11	22.9%	3	37.5%
Total	48	100.0%	8	100.0%

Breakdown of Influence of Tax Credit on Winning by Employee Numbers

These tables supplement the findings presented in Section 2.3.26 of the main report.

Note: like some tables above, this totals the rows rather than the column, i.e. the 30.3% in the 500+ “Yes” percentage box indicates that 30.3% of those who believe the credit influenced the winning of R&D activity to Ireland employed more than 500 employees.

Employee Numbers subcategorised	<10		10-49		50-149		150-249		250-499		500+		Total	
R&D Tax Credit Influence	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	0	0.0%	6	18.2%	7	21.2%	4	12.1%	6	18.2%	10	30.3%	33	100.0%
No	1	16.7%	1	16.7%	3	50.0%	0	0.0%	0	0.0%	1	16.7%	6	100.0%

R&D Tax Credit Influence	Total employees in Ireland	
	Average	Total
Yes	724	23,902
No	311	1,867

Breakdown of Influence of Tax Credit on Winning by Organisation Type

Won an R&D project to Ireland	Multinational		Indigenous	
	Number	Percentage	Number	Percentage
Yes	30	88.2%	3	60.0%
No	4	11.8%	2	40.0%
Total	34	100.0%	5	100.0%