

SDI Policy Evaluation

Final report

May 2010

Contents

Executive Summary	1
1: Introduction	11
2: Background	16
3: Activities overview.....	21
4: Rationale for intervention	32
5: Internationalisation econometric analysis.....	37
6: Inward investment econometric analysis	43
7: Internationalisation survey	47
8: Inward investor survey.....	73
9: Economic impact	87
10: Consultations	100
11: Conclusions and recommendations.....	105
Annex A: SE Additionality tables	A-1
Annex B: Internationalisation questionnaire	B-1
Annex C: Inward Investment questionnaire	C-1

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SDI Policy Evaluation

Executive Summary

May 2010

Executive Summary

Introduction

1. International activity, both inward investment and internationalisation, is extremely important for relatively small and open economies such as ours. Indeed, the recession has focused even more attention on the role of exporting in particular as offering an effective route to economic growth. With a weaker currency and reduced domestic demand, exporting and other international activity present exciting new opportunities for Scottish companies. Scotland also has a strong reputation in attracting inward investors which can bring new jobs, higher levels of productivity and new technologies.
2. This report sets out the findings of an evaluation of Scottish Development International (SDI) activities. The study was undertaken in late 2009 and early 2010. It uses several different methodologies to provide an overview of past performance and to make suggestions for the future development of SDI's operations.
3. The report covers two areas of SDI activity; *internationalisation*, relating to the international activities of Scottish-based businesses, and *inward investment*, relating to investment in Scotland by foreign-owned companies. The main elements were:
 - interviews with 305 companies that had benefited from inward investment or internationalisation support¹. 250 interviews were undertaken for internationalisation and 55 for inward investment.
 - econometric analysis of inward investment and internationalisation activities carried out by Professor Richard Harris²
 - consultations with SE, SDI, Highlands and Islands Enterprise (HIE), the Scottish Government and external partner organisations.
4. Overall, the report provides some very positive findings for SDI; these are evidenced by the results of the econometric analysis and by the impacts reported by the assisted companies in the surveys. Both of these sources demonstrate that the support provided by SDI has had a significant and positive impact on the businesses worked with.
5. There is a strong consensus in Scotland in support of internationalisation activity, both inward and outward; businesses and partner organisations concur in this. Looking forward, the evaluation also raises a number of important points that SDI should consider in order to further improve its performance.

¹ Interviews with businesses were carried out by IBP Strategy and Research as a subcontractor to SQW for this assignment

² Professor Richard Harris, Alec Cairncross Chair of Applied Economics and Director of the Centre for Public Policy for Regions, Department of Economics, Glasgow University

Activities

Internationalisation

6. The analysis of this element of SDI's activities covers the period 2005/06 to mid 2009. In total, the SDI data indicate that there were around 9,000 business 'assists' between 2006 and mid 2009, with the annual figure increasing each year. These assists were provided to an estimated 2,370 companies.

Inward investment

7. The analysis of this element of SDI's activities covers the period 2001/02 to 2007/08. SDI provides access to both financial and non-financial assistance to non-Scottish firms when they set up, maintain or expand their operations in Scotland. The main sources of financial assistance offered to inward investors are Regional Selective Assistance (RSA), R&D Grants and Training Plus.
8. From 2001/02 to 2007/08, SDI data reports 440 assists to 328 companies. Between 46 and 65 companies were assisted each year over that period.

Econometric analysis

9. This was carried out by Professor Richard Harris using econometric techniques and data from the Annual Business Inquiry to estimate the correlation between business performance and SDI support. The analysis is separated into two parts, internationalisation and inward investment. Both sections used a technique known as '*matching*'. Using 'matched' data means that in the absence of SDI assistance, the average performance of assisted and non-assisted businesses should be the same and any statistical difference between the two can be attributed to the 'treatment' effect (that is, the assistance provided).

Internationalisation results

10. The econometric analysis has demonstrated that
 - higher productivity companies are the ones that are more inclined to enter international markets
 - businesses that enter international markets gain from significant post-entry 'learning-by-exporting' and outward investment effects. The former resulted in a boost to productivity³ of around 16-18%

³ For this evaluation, we have used Total Factor Productivity (TFP) as the principal indicator of productivity. TFP is the level of output that is not attributable to factor inputs (employment, intermediate inputs and capital). Rather it measures the contribution to output of other influences such as technological progress and/or changes in efficiency (factors which are more susceptible to the beneficial effects of internationalisation or of SDI support). This measures the *productivity* of all factors of production (and not labour alone).

- **specifically, SDI assistance has had a strong and significant impact with assisted businesses nearly 19% more productive than ‘matched’ cases with no assistance**
- SDI assisted businesses also had lower employment of between 13-19% when compared to non-assisted businesses (based on using the full data set and ‘matched’ cases).

Inward investment results

- generally, average labour productivity, wages and levels of employment are higher among SDI assisted businesses than among other firms in Scotland
 - SDI assisted businesses had higher employment (than comparable unassisted plants) of around 10%
 - SDI assisted businesses also paid higher real wages (around 15%) when compared to non-assisted plants.
11. In these cases SDI assistance has supported employment, provided higher wage jobs and raised the average of Scotland’s *labour* productivity. That said, SDI-assisted businesses had lower Total Factor Productivity (see footnote 3.) than non-assisted inward investment cases, this may be due to SDI support safeguarding jobs, where without it, the business would have to reduce the scale of operations.
 12. Securing employment and higher value jobs were SDI’s objectives over the period covered by this evaluation. However, in moving forward, the use of Total Factor Productivity could encourage a fresh look at the nature of inward investment. It also raises questions about how we attract higher productivity businesses in the future and the balance between supporting/safeguarding employment and longer-term competitiveness of the Scottish economy.

Business survey results

Internationalisation survey

13. The business survey results have been based on telephone interviews with 250 Scottish companies assisted by SDI to develop their international activities. The sample was chosen from a total population of 2,228⁴ companies that have been assisted⁵. The main results were as follows:
 - 35% of assisted businesses reported that SDI had had some positive influence on their decision to trade internationally at all (this represents almost 800 companies)
 - the most significant barrier to internationalising their business was finance (32%), followed by management time and establishing dialogue with prospective customers

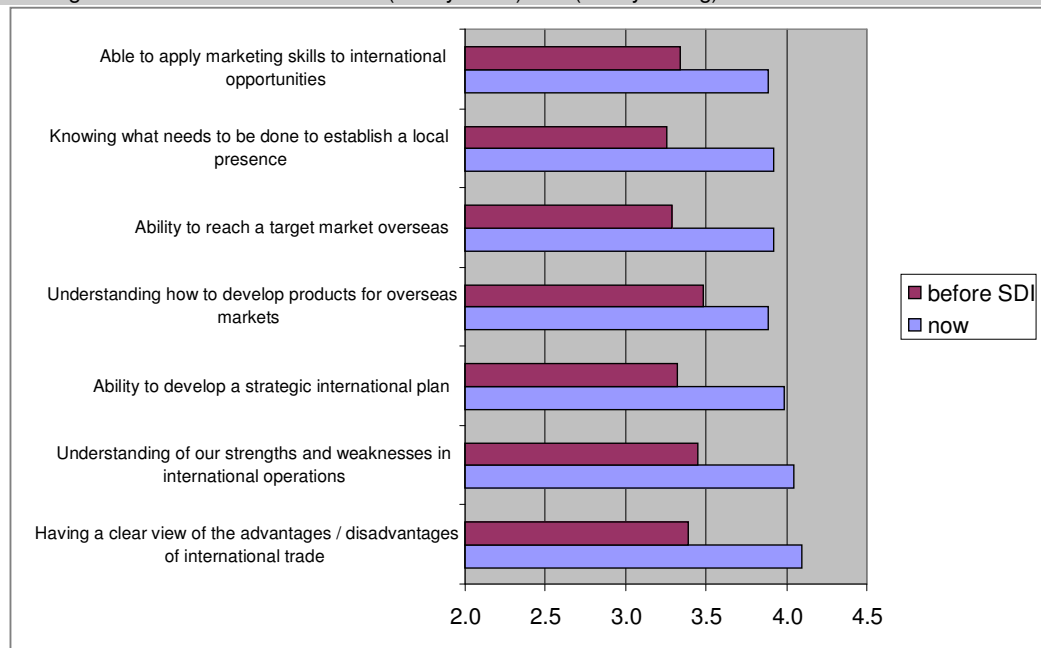
⁴ This is the number of assisted companies that are estimated to be trading at the time of the survey

⁵ This sample and the population give a margin of error of +/- 6% (at a 95% confidence level).

or partners. The top three barriers are all areas that SDI/SE/HIE can, and do, influence

- 60% of those interviewed had made or planned to make changes of some kind as a result of working with SDI
- in a ‘before and after’ comparison (Fig. 1) businesses showed significant improvements in perceptions of their internationalisation capabilities following support from SDI, particularly in relation to ‘knowing what needs to be done to establish a local presence’, ‘ability to develop a strategic plan’ and ‘having a clear view of the advantages and disadvantages of international trade’.

Figure 1: Changes to businesses’ internationalisation capabilities as a result of working with SDI. Average values based on scores of 1 (= very weak) to 5 (= very strong)



Source: SQW internationalisation survey 2009

14. Consequently:

- 41% have achieved sales in *new* overseas markets and 80% expect to achieve this as a result of the SDI supported internationalisation activities
- 36% of the sample had adopted new ideas following SDI support *and* this had led, in their view, to improved competitiveness
- for 74% of the businesses interviewed, the SDI support has or is expected to impact on their export sales (in 43% of cases this impact is considered to be “major”).

15. The principal difference that SDI support has made is in helping to speed up and increase the scale and quality of firms’ international plans rather than through making non-international firms international. This is important in relation to the ‘ladder’ of internationalisation support that will be complemented by the *Smart Exporter* programme which focuses more on raising the awareness of internationalisation opportunities with businesses, broadening the number of

companies undertaking international activity and developing the skills to successfully trade internationally.

What generated the strongest impacts?

The profile of the companies that reported that SDI had the strongest impacts on internationalisation were those that:

- received more strategic support - 58% of those engaged in some form of preparation support reported an actual, or expected, major impact on exports (compared with 32% among those receiving support to attend exhibitions or travelling on missions)
- are in the energy or food and drink sectors – these, along with the digital and enabling technologies sector, were more likely to report stronger impacts while manufacturing, education and life sciences were less likely
- are account-managed by SE/HIE (these were more likely to participate in the more strategic elements of support).

Inward investment survey

16. The results have been based on telephone interviews with 55 foreign-owned companies that have received SDI inward investment support from a population of 265 companies that are trading.⁶ The main results were as follows:

- around half of all the cases supported relate to the location of new operations in Scotland, with others relating to safeguarding activity (40%) and expanding sites (38%)
- 56% of cases reported employment/activity safeguarded as a result of the support and 55% reported that they had set up new premises or plant in Scotland
- the most commonly identified barrier was recruitment of staff; the second, identifying local suppliers, indicates that there is an important role for SDI to play in embedding these investments in local economies
- as a result of SDI support, 53% of companies had increased their investment at an existing site, 44% had increased training, 38% had improved their access to Scottish universities, 25% had increased R&D activity and 25% had increased their use of local suppliers
- 35% of companies are producing new products (described as new to the world) and 50% are using business models, ways of working or technical processes at their site that are considered new to Scotland
- 70% of the sales made by these companies were made outside Scotland, with over 40% made outside the UK
- 73% considered that their site produced goods or services that could be described as 'hi-tech' or 'highly innovative' to Scottish customers, business or otherwise, and 30% believed that their presence in the market had encouraged Scottish customers to introduce new technologies themselves

⁶ The sample of 55 from a population of 265 gives a margin of error of +/- 12% (at a 95% confidence level).

- half of the businesses interviewed had grown since arriving in Scotland while only 7% had contracted.
17. Overall, 73% of the businesses considered SDI to have been very or fairly important in ensuring the continuing presence of the business in Scotland, this includes 39% who said the support had been very important.

Economic impact summary

18. In addition to the econometric analysis, a more common way to assess the economic benefit of the support is to ask the assisted businesses themselves to provide estimates of the contribution that SDI assistance has made to sales (exports) and employment. The following figures are based on the businesses' estimates of the additional sales and employment adjusted to reflect the full population of businesses that SDI has worked with on internationalisation and inward investment. Both sets of analysis (econometric and business survey) produce results that reinforce one another and that are favourable in comparison with the main estimates produced for all English Regional Development Agency activity and spending⁷.

Internationalisation

19. The net investment in *internationalisation* by SDI was £19.3 million (2005/06 to mid 2009); an average of around £5 million per annum.
20. For internationalisation, businesses indicated that the support provided by SDI between 2005/06 and 2008/09 has led to:
- an additional *cumulative* value of exports of £174 million (an average of £58 million per annum to date – taking full account of displacement, deadweight and including the application of the multiplier effect)
 - net additional Gross Value Added (GVA) of £75 million to date
 - around 1,100 additional jobs (net) to date
 - the ratio GVA : per £ invested is 7:1
 - net cost per job to date is £11,000⁸.

The methodology used is consistent with the evaluation of SE Account and Client Managed Companies.⁹

⁷ Impact of RDA spending, PwC, on behalf of BERR March 2009 – the report found that every £1 of RDA spend added £4.50 to regional GVA.

⁸ The equivalent figures without the addition of multiplier values are; ratio of GVA : £ invested to date, 4:1; net cost per job to date, £18,000; GVA : £ invested including future benefits is 8:1 and net cost per job figures including future benefits is £13,000.

⁹ Economic Impact Evaluation of SE's Interventions with Account and Client Managed Companies, 2009 (Gen Consulting, Hayton Consulting, Research Resource).

21. Businesses were also asked to estimate the value of additional sales the support would lead to *in the future*. These are more uncertain and the values have been reduced to reflect any “optimism bias”. Businesses’ estimated potential effects amounting to:
- a further £72 million over the next three years (including the application of the multiplier effect)
 - including these future estimates, the GVA : £ invested ratio doubles to 13:1
 - there would be a further 380 jobs created on the basis of expected future effects¹⁰
 - including future estimates, net cost per job becomes £8,000.

Inward investment

22. Between 2001 and 2008, investment by SDI averaged £6 million a year, with RSA and other public sources providing an annual average investment of £29 million per annum; a total of £35 million a year.
23. For inward investors, the results relate to the support provided in the period 2001-2008. Businesses were asked to estimate the number of jobs that they would attribute to the package of SDI support that they received (i.e. how many more jobs are there than would have been the case without assistance). These figures were adjusted to reflect the impact over the population as a whole and indicate:
- net additional employment supported including multiplier effects was 18,000¹¹
 - net cost per job was £14,000
 - consequent ratio of GVA to investment was 11:1.
24. Even assuming 100% labour market displacement (i.e. all the jobs created through inward investment might have existed anyway in Scottish-owned businesses) the higher GVA per employee generated by foreign-owned firms would mean that the ratio of GVA to investment would still be 4:1 (including multiplier effects).

Conclusions

25. The results of the business survey and econometric results provide reassurance that SDI support is delivering significant benefits to businesses and the Scottish economy. The analysis provides new insights into the ways in which this support is working and highlights a number of areas where better intelligence could help strengthen the delivery of support, for example in working with exporters to maximise productivity through learning generated by internationalisation.

¹⁰ This is based only on the cases that reported no impact on exports to date but expected an impact in the future. These results are reduced by 50% to allow for optimism bias. The associated employment is calculated using the same ratio of export value to jobs found in the survey.

¹¹ Excluding multiplier effects, the number of jobs was 13,000; cost per job was £19,000; and the ratio of GVA to investment was 8:1.

26. A further set of conclusions is around raising the profile of internationalisation among Scottish companies and making it a more central part of SE's and HIE's work. The econometric analysis in particular highlights the importance in tackling productivity as the main determinant in encouraging international activity and in seeing exporting not as an end point but as an integral part of helping Scottish companies becoming more competitive.
27. The route to this is both through the work of SE/HIE account managers and aligned with SDI's increasing role in much of what SE and HIE do. A stronger focus on internationalisation should be led by an emphasis on capacity-building within companies. The survey results suggest that support for international strategies and preparation has the strongest effect on business performance and this should be extended. Finally, with a sharper focus by SDI, SE and HIE on key sectors and on emerging markets, businesses will expect increasingly specialist expertise.
28. A final set of conclusions is around building from a stronger rationale. This should be at the heart of strategy as it shapes the way in which SDI operates, the way it allocates resources and the tools and programmes it develops. A lot of good work has been done by SDI recently in developing the recent *Internationalisation: Strategic Direction, Priorities and Approach* paper and subsequent consultation. Follow-up work could be done to explain and develop the rationale for intervention, the allocation of resources, the options and priorities that have been chosen and the way in which these will contribute to productivity improvements.
29. Demonstrating the contribution to businesses' performance requires good monitoring and evaluation which must then be translated into learning. A central part of this is a performance measurement framework and the resources (and support) to use it effectively. This ranges from more robust management of data on client businesses through to specific evaluation or impact work on some of the larger inward investments.

Summary points

30. Overall, we can reiterate that the report provides some very positive findings for SDI, evidenced by the results of the econometric analysis and by the impacts on the Scottish economy reported by the assisted companies in the surveys, both of which show that the support provided has had a significant and positive impact on the businesses worked with. Businesses report improvement in relation to internationalisation capabilities and performance and inward investing companies report influence on their decisions to invest in Scotland and to remain here. Operationally, there have also been positive developments in recent years in relation to:
 - strategic background - within SE and SDI, the Industry Demand Statements are seen as providing direction for activity, for example in identifying key target businesses or business types or those that might fill supply chain gaps in Scotland
 - this has been augmented by the *Internationalisation: Strategic Direction, Priorities and Approach* paper which sets out in more detail than previously SDI's plans for delivery and the evidence which guides it. It has been developed following consultation with partners and describes the overarching objectives, the global

landscape and the implications for Scotland. It also describes SDI's contribution, how it will be delivered and how SDI will work with others

- there is now more joined-up activity between the *inward* and *outward-facing* work of SDI, confirmed by the consultations
- there is also more effective joint working with businesses between SDI, SE and HIE. The single main point of contact with the main assisted companies for all SE/HIE/SDI matters is the account manager, supported by an account team which will include SDI staff as appropriate
- there are good relationships with external partners. All of the external partner organisations consulted reported a generally good working relationship with SDI

31. The conclusions of the evaluation suggest some areas that SDI can build on.

Rationale and strategy

- There continues to be a strong rationale for supporting international activity. There are significant benefits that can be achieved and 'market failures' that assistance can help overcome.
- Development in strategy has been positive; this could be taken further to demonstrate the rationale for priorities.
- SDI's strategic thinking should be communicated to partners on a regular basis.

Balance of resources

- It would be helpful for SDI to explain how the balance of resources between the two main activities is arrived at, although we note that in relation to the take-up of RSA, SDI has little control.

Operations

- Internationalisation should have a higher profile within SE and HIE business support and especially among account managed companies.
- The route to achieving this is through continuing to strengthen relationships between the account manager/account team role and SDI.
- SDI, SE and HIE should consider how the support that account managers need can be provided, for example, by giving internationalisation a higher profile within its guidance.

Focus of support

- In relation to internationalisation, SDI should consider expanding its activities to support preparatory or strategic work with companies.
- Many of SDI's customers are likely to look for increasingly sophisticated support in the future. SDI should ensure that this can be delivered by, for example, flexible arrangements with specialists or working with partner organisations where appropriate.

Learning, monitoring and evaluation

- More analysis and learning from past investments would help shape future activity. SDI and SE could consider how best to capture learning from investments that proved not to be sustainable in Scotland.
- SDI should continue to develop a full performance measurement framework and ensure that this reflects strategy, objectives and the underpinning rationale...
- Specifically, we would suggest introducing *productivity* and the *potential for positive spillover effects* into the framework.
- Monitoring data on inward investment cases in particular should be collected and kept up-to-date.

- The scale of support for some inward investments merits a more thorough evaluation in specific cases. A rolling programme of evaluation of projects over a certain size could be carried out.
- Evaluations should be planned to ensure that gaps in timing between them are reasonable and to allow proper preparation for future studies.
- Having undertaken the econometric analysis for SDI for the first time, there is an opportunity to repeat the exercise in later years as new Annual Business Inquiry data becomes available.

1: Introduction

1.1 This report sets out the findings from an evaluation of Scottish Development International (SDI) activities. It reports from a number of perspectives using different methodologies to provide an overview of past performance and to make suggestions for the future development of SDI's operations. The work covers a very large range of activities including both support for internationalisation and inward investment. In this report *internationalisation* relates to the international activities of Scottish-based businesses whereas *inward investment* relates to investment in Scotland made by foreign-owned companies.

1.2 International activity, both inward investment and internationalisation, is extremely important for relatively small, open economies like Scotland. Indeed the recession has focused even more attention on the role of exporting in particular as offering an effective route to economic growth. With a weaker exchange rate and reduced domestic demand, exporting and other international activity present exciting new opportunities for Scottish companies. Scotland also has a strong reputation in attracting inward investors which can bring new jobs, higher levels of productivity and new technologies.

1.3 The Foreword to the Scottish Economic Recovery Plan: Accelerating Recovery, emphasises both the opportunity internationally and Government support:

In rapidly developing global markets, Scotland's competitive exchange rate brings the prospect of developing larger international markets for Scottish goods and services. We will deliver additional support for Scottish businesses to internationalise. Building on the success of Homecoming, we can also capitalise on the current conditions to bring new visitors and new inward investment to Scotland.

1.4 As the Scottish Government's international economic development arm, SDI is the main body responsible for encouraging inward investors to come to Scotland and encouraging Scottish companies to internationalise.

1.5 This evaluation looks at the activities in both areas. It builds on previous work undertaken in 2009 by Professor Richard Harris¹² of the Department of Political Economy at Glasgow University and DTZ¹³ which reviewed the rationale for internationalisation and inward investment and the market failures that were being addressed. It aims primarily to assess the effectiveness of the support delivered by SDI and to consider, in the light of the findings, how this might be improved.

Research Objectives

1.6 The key objectives of the research were set out in the brief and were primarily to gather evidence to allow assessments to be made of the following:

¹² Internationalisation evidence Review, 2009, Professor Richard Harris & Dr. Cher Li

¹³ Inward investment evidence Review, 2009, DTZ

- **Impact of SDI support** – assess and estimate through quantitative and qualitative research the impact of SDI support (internationalisation and inward investment support). The key focus of this should be an estimation of productivity improvements and GVA impacts, but consideration should also be given to “softer” outcomes such as enhancement of firms’ capabilities which may lead to future “harder” impacts.
- **What works** – assess what works best in terms of SDI support and how we can reconfigure our activities to improve our impact.

1.7 The brief also highlighted a number of research areas to be covered:

- strategic rationale and market failures
- benefits achieved
- economic impact
- management and delivery processes
- management information and monitoring
- customer satisfaction
- linkages and dependencies
- contribution to the equity and equality agenda.

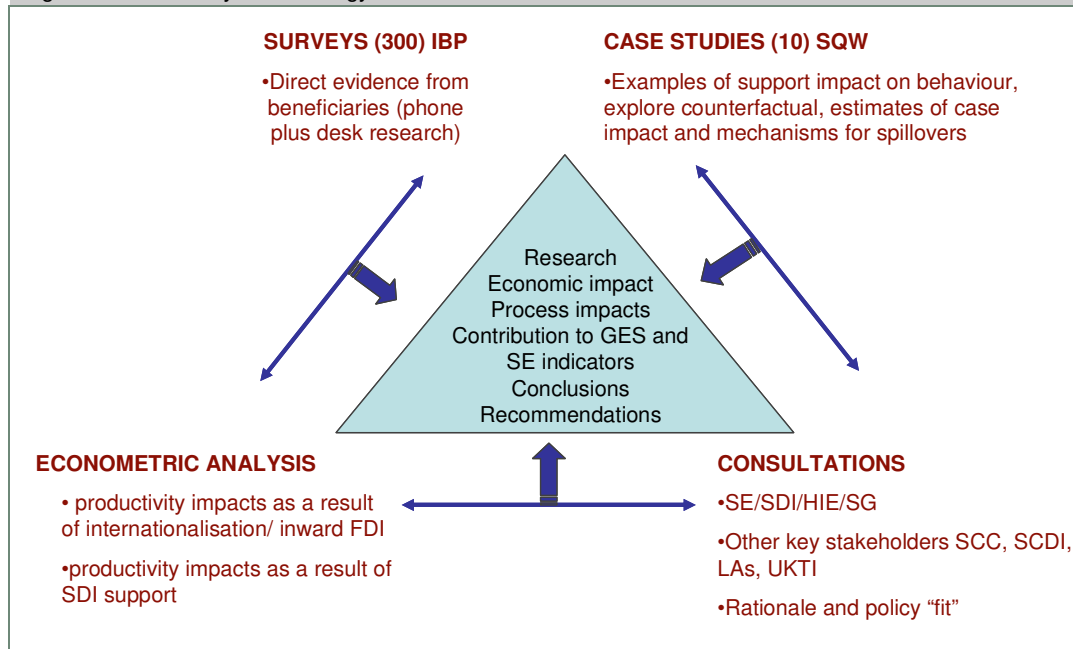
Methodology

1.8 The methodology has been developed in conjunction with Scottish Enterprise (SE) and SDI; the majority of the survey work took place between late 2009 and early 2010, a period when the UK was approaching the end of the recession. This section summarises the main strands of the research describing their aims, the numbers involved, broad topics covered and the timescale. The main elements, described in Figure 2.1 were:

- interviews with 300 companies that had benefited from inward investment or internationalisation support¹⁴
- econometric analysis of inward investment and internationalisation activity carried out by Professor Richard Harris
- ten case studies
- consultations within SE/ Highlands and Islands Enterprise (HIE) and SDI; with external partner organisations; and with the Scottish Government.

¹⁴ These interviews were carried out by IBP Strategy and Research as a subcontractor to SQW for this assignment.

Figure 1-1: Summary methodology



Source: SQW 2009

Econometric analysis

- 1.9 The part of the work was carried for the study by Professor Richard Harris. This used econometric techniques to estimate the correlation between business performance and SDI support. It is separated into two reports, one on internationalisation and one for inward investment. The internationalisation report addresses two questions:
- do firms that export generally have higher levels of productivity than similar firms that do not export, and
 - do firms *that are assisted by SDI* have higher levels of productivity than similar firms that have not been assisted?
- 1.10 The inward investment analysis asked two similar questions:
- do inward investing firms generally have higher levels of productivity than similar domestic firms
 - do inward investing firms *that are assisted by SDI* have higher levels of productivity than other inward investing firms that have not been assisted?
- 1.11 The analysis uses company information available through linked data in the Government's Inter-Departmental Business Register (IDBR). This means that, at the time our analysis took place, the most recent data available related to 2006. The results therefore cover the period 2001 to 2006. The internationalisation analysis also uses the Scottish Government Global Connections Survey (GCS) to provide data on the exporting activity of specific companies. This is required to ensure that assisted and unassisted companies are accurately matched, but

it also means a more complex process with the assisted companies being identified initially in the GCS and then also in the IDBR.

- 1.12 Total Factor Productivity (TFP) is used as the main indicator of performance. A definition of TFP is set out at the start of the appropriate chapter, although *it is important to note that during the period covered by the econometric analysis, the objectives and targets for SDI related to creating employment and exports rather than productivity.*
- 1.13 Finally, the nature of this approach means that it identifies correlations between performance and the receipt of assistance. This does not necessarily prove that the changes in performance were *caused* by the support. This is discussed later in the report.

Survey work

- 1.14 The survey work with supported companies was a major part of the study. Two surveys were conducted:
- telephone interviews with 250 companies assisted by SDI to develop their international activities
 - telephone interviews with 55 companies that have received SDI support as part of their inward investment into Scotland.
- 1.15 The contact details for both surveys were provided by SDI and were checked by SE's survey control unit. The questionnaires were designed in collaboration with SE's Appraisal and Evaluation Team and included input from the full client Steering Group for this job.
- 1.16 The findings of both surveys are reported later in the report. This tracks the type of support, the effect it has had on the firms' activities and the resultant effects on performance. For the internationalisation survey the cases cover all businesses supported since 2005/06. The inward investment survey covered cases that have been supported since 2001/02.

Consultations

- 1.17 Consultations were conducted with the partners (Scottish Government, SE, Highlands and Islands Enterprise) and within SDI itself. A small number of representatives from other important stakeholders were also consulted - Scottish Chambers International, SCDI, Scottish Local Authorities Economic Development and UKTI. These consultations provided views on the way in which SDI operates and the way forward. A summary of the feedback from these consultations is provided in the later chapter.

Case studies

- 1.18 Case studies were undertaken with ten businesses. These explored in more detail some of the issues that could not be covered in the telephone survey. For the internationalisation cases this considered the way in which the support has impacted on performance, learning from exporting and potential future areas of support. The case studies are used throughout the report to highlight specific parts of the analysis. These case studies covered:

- Support received from SDI
- Innovation and R&D
- Suppliers, customers and competitors
- Networks and training
- Corporate social responsibility
- Additionality of support and impacts
- Effect of the recession

2: Background

Context

- 2.1 There is little disagreement that internationalisation should be a central part of generating economic growth in Scotland. Over the past decade, economic growth has been led by a combination of consumer spending, increased access to credit, rising house prices and higher levels of public spending. Over the next few years these sources of growth will be weaker. This will mean weaker domestic demand in the short term making faster growing overseas markets more important if Scottish companies are to thrive. At the same time, a weaker exchange rate makes Scottish products and services more affordable in other currencies (or provides opportunities for higher margins).
- 2.2 The Scottish Government is already committed to supporting increased internationalisation activity both in terms of the number of businesses that are supported and the intensity of the support.

Scottish Development International (SDI), and its partners, will boost its international activity with a focus on raising the international aspirations of more Scottish businesses to trade globally, a broader engagement with Scottish businesses and a more intense focus on helping Scottish firms to understand international market opportunities in their sector. This is accompanied by a renewed strategy to target inward investment opportunities where Scotland has a strong global position¹⁵.

- 2.3 The conclusions of this evaluation strongly support this and the results will be valuable in shaping how this increased support is delivered and in renewing the inward investment strategy.

SDI background

- 2.4 SDI is the Government's international economic development arm. It is a joint venture between the Scottish Government (SG), Scottish Enterprise (SE) and Highlands and Islands Enterprise (HIE), providing services to support inward investment and internationalisation for the whole of Scotland. SDI sets out its inward investment and internationalisation objectives in its 2009/10 business plan. These are summarised under two headings:
- enabling Scottish companies to increase their internationalisation either through increasing export sales or other international activities (e.g. joint ventures or overseas acquisitions)
 - encouraging overseas-based companies to set up and expand within Scotland.

¹⁵ The Scottish Economic Recovery Plan: Accelerating Recovery, March 2010

2.5 Under the *internationalisation* objective, SDI provides a wide range of bespoke and programme-based support which covers:

- preparing to do international business
- developing international strategy
- international mentoring
- overseas market support
- support to take part in exhibitions, missions and learning journeys
- international accommodation packages.

2.6 For *inward investors*, SDI is able to offer access to a range of financial incentives including Regional Selective Assistance (RSA), R&D grants and tax credits and Training Plus. The financial support is only part of the package that SDI provides. Activities cover marketing and promotion, relationship building, market intelligence gathering, handling referrals, developing propositions, organising visits to Scotland, signposting to other specialist advice - then continuing to work with the company once the investment in Scotland has taken place.

2.7 SDI's sales force is organised as follows:

- international offices are split into three regions:
 - Americas
 - Europe, Middle East and Africa
 - Asia-Pacific
- sector teams, which are located across Scotland
- Scotland Europa, located in Brussels
- Group Services covering Ministerial support, planning and reporting.

Targets then and now

2.8 Over time SDI targets have changed, although they have always been primarily related to the creation of new employment (in the case of inward investment) and exporting (for internationalisation assistance). The most recent business plan outlines the targets for 2009/10 and achievements in the last couple of years.

2.9 Over the past four years SDI has worked with a growing number of companies, although the 2009/10 figure is still to be confirmed.

Table 2-1: Numbers of Scottish based companies working with SDI

	Scottish based companies assisted
2006/07	625
2007/08	733
2008/09	836
2009/10	721 (estimate)

Source: SDI Business Plan 2009/10

- 2.10 For internationalisation the target in 2009/10 is to work intensively with between 600 and 700 companies to support internationalisation efforts. A new target is for 200 – 300 account managed companies to have agreed international revenue goals with support identified from SDI/SE/HIE.
- 2.11 For inward investment the main target measure has been High Value Added (HVA) jobs. These are split between safeguarded and new employment. The figures show that over the past four financial years, the total numbers reported by SDI have been from 1,800 to almost 2,600 in 2007/08. The target for 2009/10 is to secure between 1,600 and 2,400 HVA jobs.

Table 2-2: Number of High Value Added (HVA) jobs supported by SDI supported inward investors

	Safeguarded HVA jobs	New HVA jobs	Total HVA
2006/07	876	898	1774
2007/08	787	1791	2578
2008/09	776	1031	1807
2009/10	1221	945	2166

Source: SDI Business Plan 2009/10

Fit with Scottish Government Economic Strategy (GES)

- 2.12 The principal objective of the GES¹⁶ is:
- To create a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth.*
- 2.13 It has five overarching strategic objectives of which the most relevant to SDI is:
- **Wealthier & Fairer** – Enable business and people to increase their wealth and more people to share fairly in that wealth.
- 2.14 And focuses on seven key sectors:
- Creative Industries (including digital content and technologies)
 - Energy (with a particular focus on renewables)
 - Financial and Business Services
 - Food and Drink (including agriculture & fisheries)

¹⁶ Scottish Government, 2007, The Government Economic Strategy, Crown Copyright, Edinburgh

- Life Sciences (including biotechnology and translational medicine)
 - Tourism
 - Education.
- 2.15 The GES also sets out a number of strategic targets. The four below (Table 2-3) are those that SDI can most obviously contribute to. The evaluation draws conclusions on SDI's contribution in the final chapter.

Table 2-3: Main Government strategic targets that SDI can contribute to

- To raise the GDP growth rate to the UK level by 2011
- To rank in the top quartile for productivity amongst our key trading partners in the OECD by 2017
- To maintain our position on labour market participation as the top performing country in the UK and close the gap with the top 5 OECD economies by 2017
- To narrow the gap in participation between Scotland's best and worst performing regions by 2017

Source: Scottish Government, 2007, *The Government Economic Strategy*

- 2.16 The GES also sets out a specific target in relation to exports: to grow exports at a faster average rate than GDP. The strategy argues:

if we are to deliver improved productivity and sustainable economic growth, we will need to place greater emphasis on exports. The Scottish economy is already open to world markets. However, further integration with the world economy offers Scotland a greater opportunity to tap into new and larger markets around the world, giving increased access to capital flows, new technology, cheaper imports and larger export markets

- 2.17 In 2008, the most recent year that data is available, the gap between GDP growth (3.0%) and export growth (0.6%) was 2.4%. By contrast in 2007, export growth exceeded GDP growth. Scottish exports in 2008 were provisionally estimated to be £20,660 million.

Resources

- 2.18 The two strands of support are evaluated over different periods of time. The Internationalisation survey used cases that had received support between 2005/06 and mid 2009. This was the time period for which full contact details were available from SE's Customer Relationship Management system. The inward investment survey and analysis had to go further back to ensure a sufficient sample size. This therefore included cases from 2001/02 up until 2007/08.
- 2.19 The estimated net *internationalisation* costs provided by SDI were:
- 2006/07: £3 million
 - 2007/08: £5.5 million (the net cost after taking account of income of £0.581 million)
 - 2008/09: £5.7 million (the net cost after taking account of income of £0.962 million).
- 2.20 The figure for 2005/06 was estimated to be the same as reported in the following year, i.e., around £3 million. For 2009/10 we have allocated a third of the total (£6.3 million) to cover

the period up to the time the list of client companies was provided (i.e., £2.1 million). This gives an overall total of £19.3 million.

- 2.21 The following estimates of expenditure on *inward investment* were provided by SDI. These were:
- 2006-07: £7.101 million
 - 2007-08: £11.758 million.
- 2.22 The evaluation survey of beneficiaries covered 2001/02 to 2007/08 so estimates have been made for the previous years. We have assumed that SDI inward investment costs from 2001/02 to 2005/06 averaged £5 million in each year giving total of £44 million.
- 2.23 In addition, over the period covered by the survey from 2001, RSA of £216 million was awarded to the supported companies, R&D grants of £18 million, £4.7 million of training support; and £5.1 million “other” public sector funds. However, the 2008 RSA evaluation (Hart et al) found that on average only 80% of grants approved are actually claimed. Using this would give an RSA figure of £172.8 million and total public support over the evaluation period of £200.6 million.
- 2.24 In total over the seven years covered this gives an average of just under £35 million a year. This compares with an average of around £5 million a year for internationalisation support.

3: Activities overview

- 3.1 This section provides an overview of the main SDI activities and pattern of company assistance. This is based on data provided by SDI and analysed by SQW and Professor Richard Harris.

Internationalisation

SDI products

- 3.2 The range of SDI products is summarised below:

- **Exhibitions, Missions & Learning Journeys.** Encompasses SDI exhibitions, missions and learning journeys. Most of the activities supported are designed to allow firms to attend overseas trade events in order to make contacts, research markets, sell products and look for partners. The main exception is Learning Journeys, which assists senior managers to visit (for usually a week) world leading companies to gain knowledge on best-practice in these companies.
- **Overseas Market Support.** Comprises SDI funding for companies to undertake research, market entry activities and designing new promotional material for overseas markets
- **Readiness to Internationalise.** Targeted at companies inexperienced in international trade (12 modules covering theory and practice in such areas as: market identification & research, production and financing issues, advertising & distribution, sales negotiation, and producing an International Action Plan); and more experienced firms looking for deeper internationalisation (6-8 modules in-depth covering such areas as: finance, distribution, communication/marketing skills, licensing/franchising/joint ventures, acquisitions, presenting an International Market Development Plan). Modules are delivered by a set of approved companies (including Chambers of Commerce).
- **International Business Opportunities.** Provide information to companies on projects available through UN, World Bank, EU, DfID, Regional Development Banks, PERA (covering inward FDI inquiries from firms needing local suppliers, etc.), Enterprise Europe Scotland, and London 2012 Olympic Games. Most of the first set of organisations are involved in overseas development activities.
- **Flexible Financial products.** Available as last resort when no other product fits. Cover such areas as strategic planning for internationalisation, innovation activity which assists with new product & process development. Generally companies can get assistance in hiring consultants, temporary specialist staff, training costs, or obtaining innovation advice. Note, this is a joint product covering all DRM products.

- **International Strategy Workshop.** Workshop delivered by an approved consultant to senior management to help develop a coherent international strategy and associated action plan; there are three elements comprising: pre-workshop ‘brainstorming’ to agree key issues and objectives; one-day interactive workshop; **and** post-workshop to commit to action plan.
- **International Mentoring.** Two key components (1. international business manager for hire; 2. access to Scottish Networks International - SNI). Aims to address knowledge, skills and funding gaps to overcome barriers to growth. The first product sees the hiring of a highly qualified international business professional from within or outwith Scotland to help with ‘trouble-shooting’ activities, market research, product customisation, etc. The SNI product links high calibre, overseas-based, young business people to the firm, which can then utilise their experience.
- **Global Companies Development Programme¹⁷.** Purpose is to increase number of global companies in Scotland (defined as company >£5 million turnover, operating on at least 2 continents, 5 years turnover growth, controlled from Scotland) through employing an external consultant for up to 20 days to delivery in-depth programme over 6-9 month period covering: individual management team interviews (to cover strategy & planning, international operations, marketing & service, operations & technology, R&D, organisation & HR management, governance & responsibility, and finance) leading to Action Plan and Implementation Plan.
- **International Market Presence.** Temporary office facilities available in SDI key locations in three US cities, and access to office space consultants Regus covering 950 worldwide centres (including virtual offices).

3.3 There are three other elements of internationalisation support delivered by SDI but not covered in the evaluation; TalentScotland, GlobalScot and Scotland Europa.

Take-up of Internationalisation support

3.4 A breakdown of the types of assistance provided is shown in Table 3-1. The table is dominated by two categories; overseas exhibitions and missions and other market support which includes Graduates for Business, International Business Opportunities, Learning Journeys, Overseas Market Support other market-focused SDI support. The analysis is based on our own allocation of support under these headings as Programme names have changed over time.

3.5 **In total the SDI data indicate that there were around 9,000 assists between 2006 and mid 2009. On average each company has been assisted four times in this period although in some cases it has been 10 or 11 times.**

3.6 Around 53% of companies receiving assistance have been supported to attend exhibitions or missions. Fifty percent were supported to travel on learning journeys or received the other forms of market support described above. In fact 80% of companies supported over this period have received either one or both of these categories of support. The remaining 20%

¹⁷ This is now the International Strategy Development Programme

received other forms of support. **This suggests that the emphasis has been very much on encouraging travel to visit markets rather than broader planning for international activities in general. This pattern is reflected in the internationalisation survey reported later.**

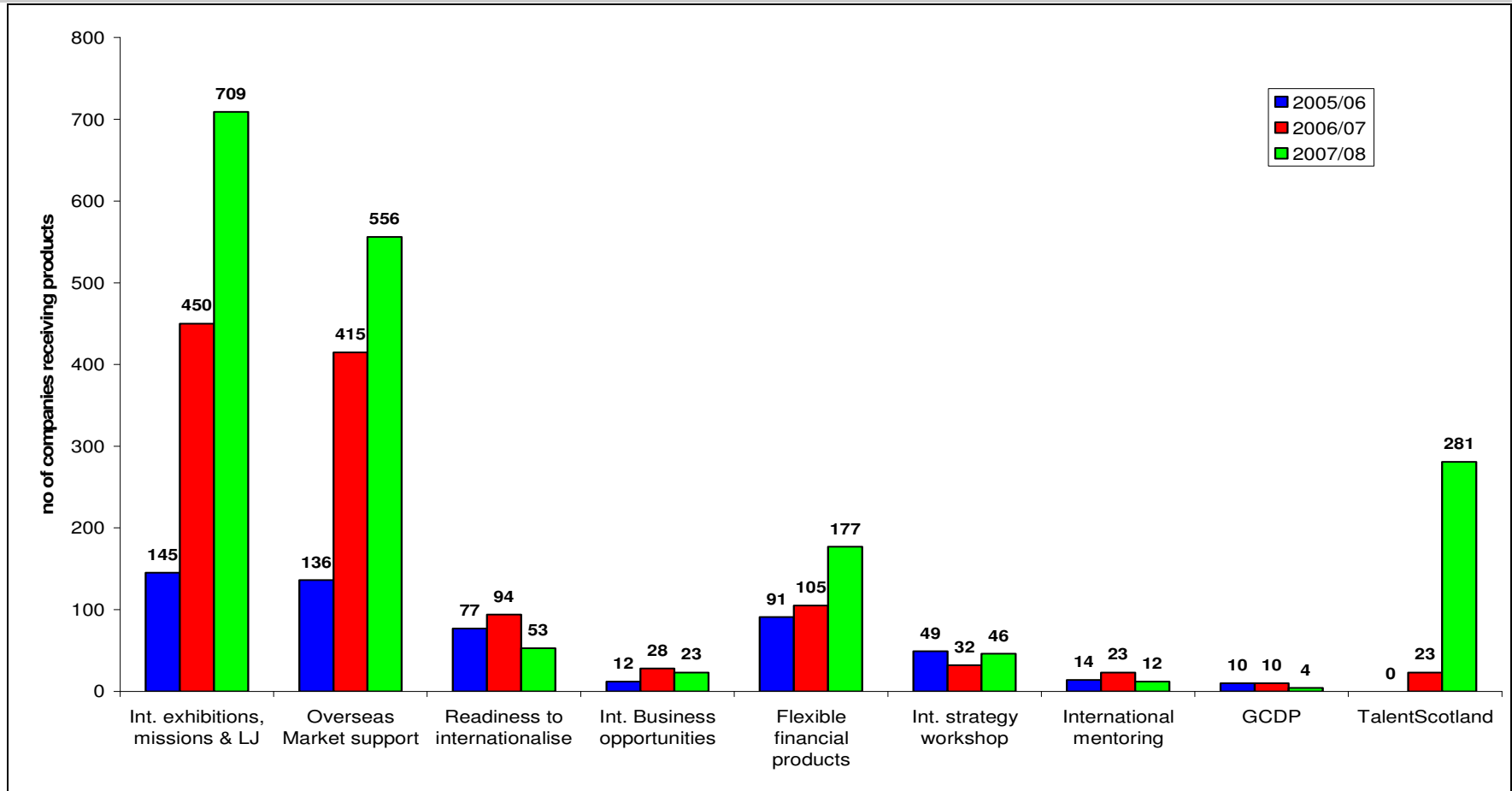
Table 3-1: SQW analysis of SDI data – types of support received by assisted companies (2006 – 2009)

	total
International strategy workshop	6%
Readiness to internationalise	4%
International preparedness programme	1%
Global Companies	2%
Developing Strategy – Other	1%
International business mentoring service	2%
Flexible financial product	6%
Market support – Other	50%
Overseas Exhibitions / missions	53%
Overseas accommodation	1%

Source: SQW analysis of SDI data 2006 -2009

3.7 A similar breakdown by broad product and year was assembled in the Internationalisation Evidence Review produced by Professor Richard Harris et al (2009) for SE. This was carried out separate to the evaluation currently being undertaken, but the overall pattern is clear. This shows how the number of assists delivered has grown year on year, but most noticeably in relation to exhibitions, missions and learning journeys and in overseas market support Figure 3-1:.

Figure 3-1: Pattern of assists 2005 - 2008



Source: Internationalisation Evidence Review, Richard Harris, 2009

Inward investment

Types of SDI support

- 3.8 SDI provide both financial aid and non-monetary assistance to those non-Scottish firms they support when they set-up, expand or maintain their operations in Scotland.

Regional Selective Assistance (RSA)

- 3.9 RSA is used much more extensively than any other form of help to secure inward investment projects. It is generally the largest business support scheme operating in Scotland, with £87.4 million of expenditure in 2007/08 (RSA, 2009). It provides grants to plants undertaking capital investment projects in economically lagging EU designated 'Assisted Areas' and it is principally designed to safeguard and generate employment, especially through supporting inward (mostly foreign) direct investment; RSA is now also required to improve productivity. To see the extent to which RSA is used to support inward investment, of the £87.4 million allocated to new projects in 2007/08, some £46.1 million (just over half) went to 48 inward investment projects. The remaining £41.3 million went to 116 indigenous companies.¹⁸ This pattern of a small number of large inward investment projects receiving a significant proportion of all RSA assistance is typical both historically in Scotland, and in the rest of the UK (see Wren, 2005).
- 3.10 RSA is likely to be available to most inward investment projects at the lower rate of a maximum of 15% of their investment costs, since such projects tend to be larger in scale. Medium- and smaller-sized firms can receive up to a maximum of 25% and 35% of costs respectively, depending on location (lower amounts are available in 'Tier 3' assisted areas). To be eligible, recipient firms must be able to demonstrate that the project is financially viable but would not have proceeded without assistance (although there is scope for flexibility here, as grants can be awarded in cases where the grant increases the size of the project, improves the project in some way or accelerates the project; RSA cannot be awarded if the project would go ahead in the same form regardless of whether a grant is provided). Thus, it can be surmised that provision of RSA is at least in part designed to offset some of the (sunk) costs of the investment that is associated with the greater risk and uncertainty of undertaking capital investment in Scotland.

R&D Grants

- 3.11 The next most popular form of assistance to inward investors is R&D grants under the R&D+ scheme. Generally R&D grants are available to firms of all sizes, unlike innovation grants (e.g., SMART). Clearly the main rationale for such assistance is to increase R&D expenditure, which is subject to significant (sunk) costs that have to be overcome and met when firms invest in such riskier intangible assets.

¹⁸ Note the RSA Annual Report (Scottish Government, 2009) states that 59 non-Scottish owned companies received RSA grants, amounting to £63.3 million. The figures reported in the main text on RSA assistance are taken from the SDI database provided for this project. Presumably the difference between the two sets of figures is related to SDI's role in supporting *new* inward investment.

Training Plus

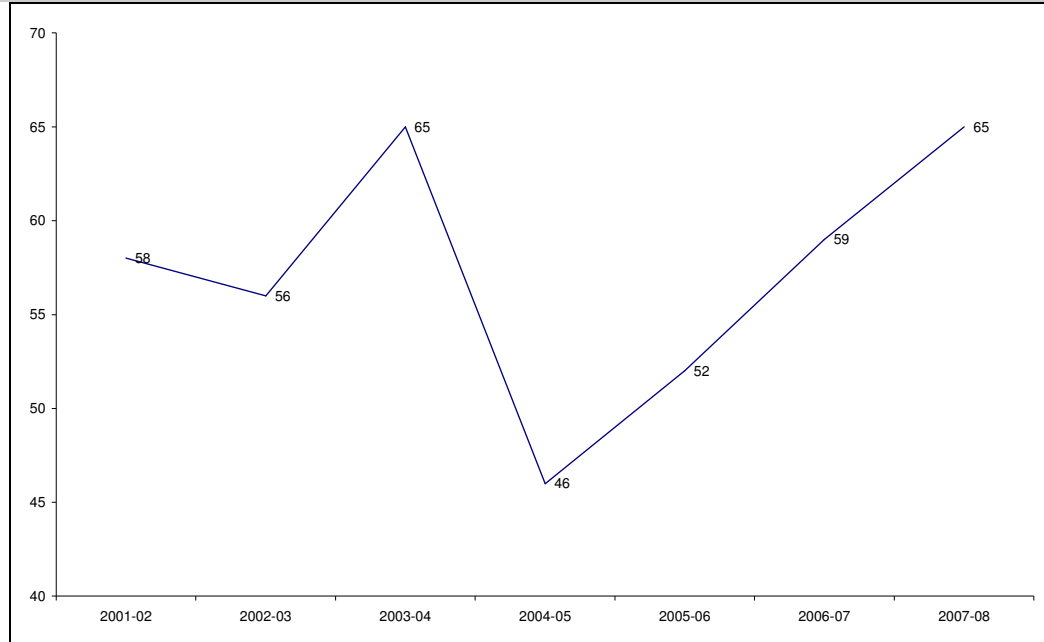
- 3.12 The other major scheme available is Training Plus. This is an initiative that provides funding to help with the cost of staff development and training. Grants can be awarded for up to 50% of expenditure on training for generic skills, or up to 25% if the training is company- specific. DTZ (2009) provide more information, stating that Training Plus is available to businesses that are considered mobile and contestable (i.e. involving competition from outside Scotland), and which therefore may be susceptible to relocating outwith Scotland.

Volume of inward investment activity

- 3.13 The analysis is based on information provided by SDI for the period 2001 to 2008 on those companies that received assistance in support of their investment in Scotland. The pattern in Figure 3-2 shows that
- 3.14 Between 46 and 65 companies were assisted each year, with an average level of grant offered of £738,000; however, with a standard deviation of £1.6 million, it can be seen that the range of assistance was considerable. The average grant attached to the 234 RSA, 26 R&D, and 30 Training products provided was £1.1 million, £1.3 million, and £264,700 respectively. Of the companies assisted, 123 (or 31%) received only information products; 241 companies (around 60%) received either an RSA, R&D, Training or Other financial grant; 35 companies (nearly 9%) received more than one type of grant; and two companies received **three** different types of grant-aid as part of the SDI inward investment project.
- 3.15 The following charts provide more detail on the number of inward investment companies assisted, where they were located, their country of origin and which industries benefited. Note in what follows that for each SDI project we distinguish between companies assisted and the products (i.e. types of assistance) received; a number of companies received more than one type of assistance as part of the project (comprising RSA, R&D, Training, other financial products, and information products involving no monetary assistance).¹⁹

¹⁹ There were at least 440 products because information is provided each time a company received RSA, R&D, Training and Other grants; some companies received none of these monetary grants and yet are included in the SDI database which means they received only 'information-based' products. However, companies that received financial assistance may also have been receiving information similar to those that just received 'information-based' products (we have no separate data on when this occurred); hence the reason for noting that there were at least 440 products provided to firms.

Figure 3-2: Number of assisted inward investment plants by year, 2001-02 to 2007-08



Source: SDI

3.16 Figure 3-3 shows the distribution of plants by their destination region. The analysis uses the postcode data in the SDI file on inward investors and converts these into NUTS3 districts. So for example, all those with postcodes MLx.x are referred to as Motherwell and KYx.x as Kirkcaldy (which would cover all businesses in Glenrothes, Dunfermline, Rosyth) etc. The place names used are summarised in Table 3-2.

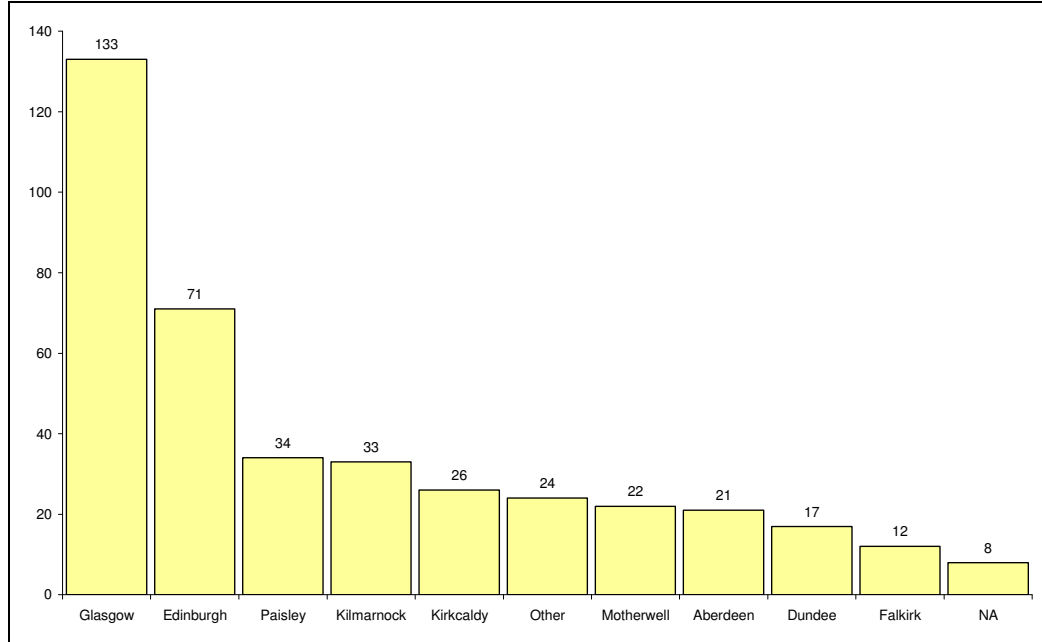
Table 3-2: Place names used and postcodes covered in analysis

Postal area	Coverage
Glasgow	All G postcodes
Edinburgh	All EH postcodes
Paisley	All PA postcodes
Kilmarnock	All KA postcodes
Kirkcaldy	All KY postcodes
Motherwell	All ML postcodes
Aberdeen	All AB postcodes
Dundee	All DD postcodes
Falkirk	All FK postcodes

Source: SQW

3.17 The data indicates that Glasgow received 133 projects (around one-third of the total), with Edinburgh receiving 71 (or nearly 18%). The composition of products for the two cities was different, with some 60% of the 133 products in Glasgow being RSA grants, while the comparable figure for Edinburgh was around 40%. In contrast, Edinburgh received 12.5% of all its products as R&D grants (the comparable figure in Glasgow was 2%).

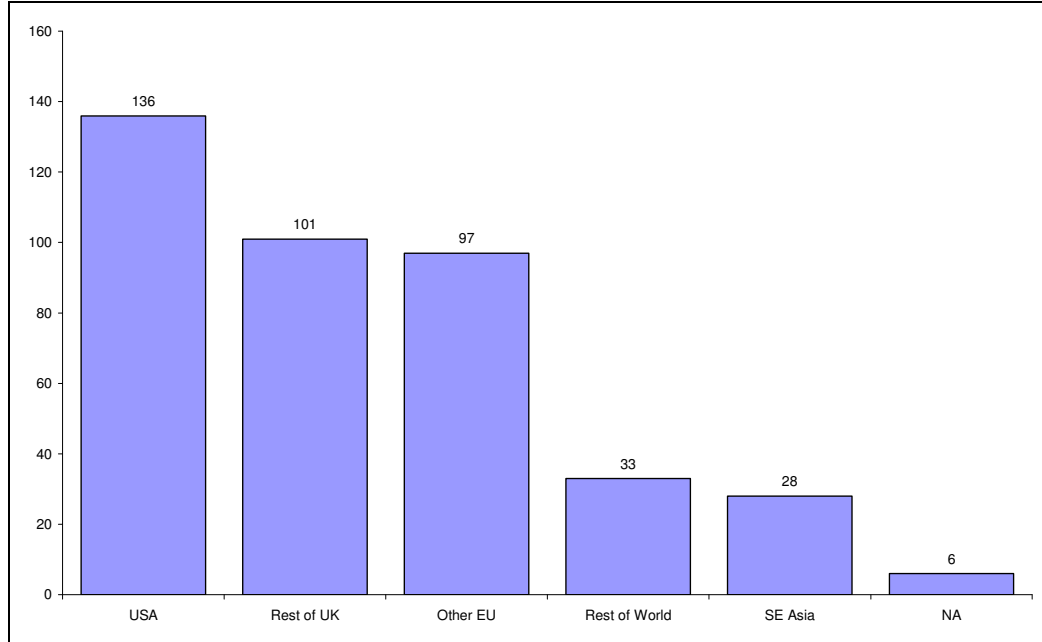
Figure 3-3: Number of assisted inward investment plants by destination region, 2001-02 to 2007-08:



Source: SDI

- 3.18 As to where the projects originated from, Figure 3-4 shows that just over one-third originated from USA-owned companies; 25% from the rest of the UK; 24% from other EU countries; 8% from the rest of the world; and 7% from SE Asia. When comparing destination region by country of origin, the SDI database shows that a relatively high proportion of US projects went to Motherwell, followed by Kilmarnock, Paisley, Edinburgh and then Glasgow; in contrast Kirkcaldy and then Falkirk received relatively higher proportion of projects originating from the rest of the UK; Aberdeen was a 'favoured' location of Other EU projects (although projects from this source were much more likely to be distributed throughout the rest of Scotland – the 'Other' category in Figure 3-3); Falkirk and Kirkcaldy received relatively higher proportions of projects from the rest of the world; and lastly Glasgow and Paisley were relatively more likely to received projects from SE Asia.

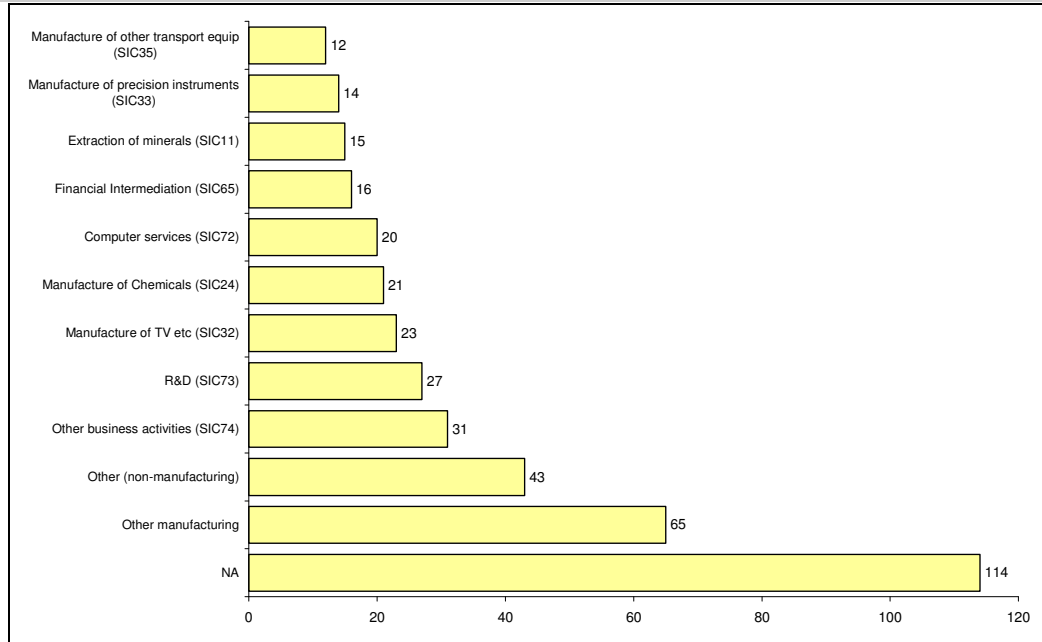
Figure 3-4: Number of assisted inward investment plants by country of origin, 2001-02 to 2007-08



Source: SDI

- 3.19 Figure 3-5 shows the distribution of companies assisted by industry classification. Unfortunately, SIC data was not available for 2001-02 and 2002-03 (hence some 28% of the companies are included in the 'NA' sub-group), but if the spread across industries was similar in those missing years to 2003-04 to 2007-08, then the information available in the diagram should still be applicable. Thus, those industries with at least double-digit numbers of assisted companies comprise a relatively small sub-group, led by Other Business activities (nearly 11% of companies), the R&D sector (9.4%), manufacturing of TV's, etc. (8%), chemicals ((7.3%), computer services (7%), financial intermediation (5.6%), extraction of minerals (5.2%), precision instruments (4.9%) and other transport equipment (4.2%). Other manufacturing industries (covering another 15 industry sub-groups at the 2-digit SIC92 level) covered nearly 23% of all assisted companies, while other non-manufacturing sectors (covering 17 other sectors) accounted for 15% of the assisted companies.

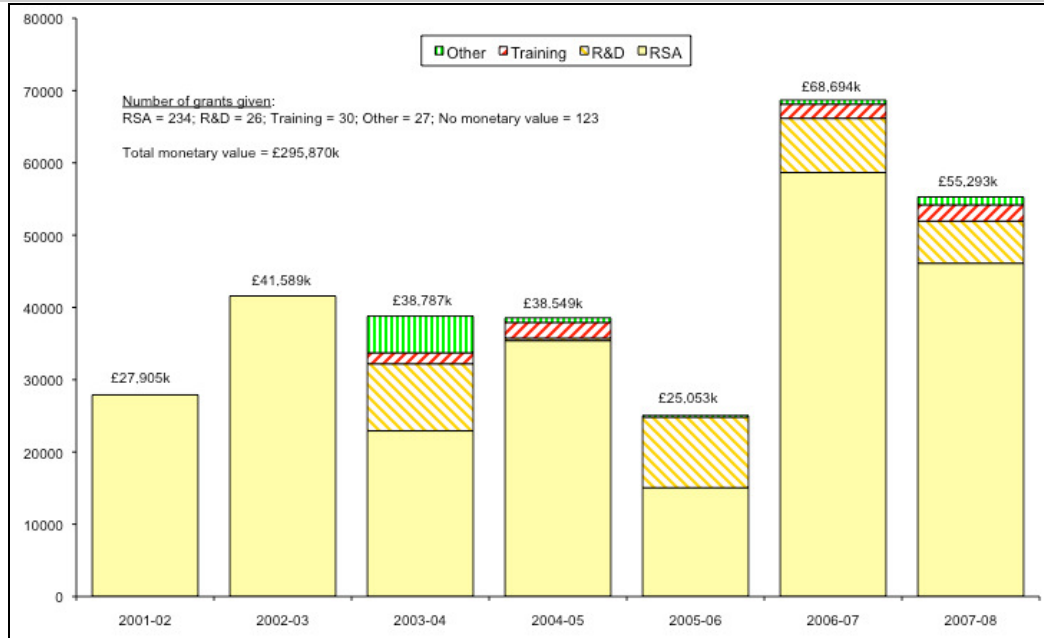
Figure 3-5: Number of assisted inward investment plants by industry, 2001-02 to 2007-08



Source: SDI

- 3.20 Lastly, Figure 3-6 shows the distribution of the 440 products by value across the financial years available. As stated in Section 2, RSA dominated both in terms of numbers of grants and overall value (accounting for some 83.7% of the £295.9 million awarded during this period); R&D grants accounted for 26 products and £32.7 million (or 11.1% of the total); Training grants amounted to £7.9 million (2.7%); while the 27 Other financial assistance products amounted to £7.5 million (or 2.5% of the total).
- 3.21 Non-RSA grants were particularly important in 2003-04 and 2005-06, accounting for around 40% of all financial assistance in both years. But the dominance of RSA re-emerges in later years, showing that SDI still concentrates on helping inward investment companies through providing employment-related capital grants to defray the (sunk) costs of new investment. Glasgow received nearly 39% of total RSA spending, with Kilmarnock and Paisley both receiving around 13.8% of the total, and Edinburgh receiving 8.8%. In contrast, Edinburgh received 56.2% of all R&D grant-aid allocated, Paisley 15%, and Glasgow nearly 9%. In terms of Training expenditure, Glasgow companies received 47.3% of all training grants (by value), followed by Motherwell (15%), Edinburgh (13.3%), and Kilmarnock (12.8%). The Other financial grants went mostly to the ‘other’ regions of Scotland (accounting for nearly 45% of all expenditure), with companies in Motherwell receiving some 23% of the total.

Figure 3-6: Assistance given to inward investment plants by type, 2001-02 to 2007-08



Source: SDI

4: Rationale for intervention

4.1 The report builds on two earlier pieces of research commissioned in 2009 by SE to analyse the rationale for investment in internationalisation and inward investment support. The two studies were:

- Internationalisation Evidence Review (Professor Richard Harris and Dr Cher Li)
- Inward Investment Evidence Review (DTZ)

4.2 Both concluded that there were potentially significant economic benefits from both forms of international activity and a strong case for using public intervention to overcome specific market failures. The conclusions from these reports on the rationale for supporting both activities is summarised below. This is important as it relates directly to the analysis in later chapters which use some of the theory developed here and in drawing conclusions around SDI strategy development.

Internationalisation

4.3 The following are key points from the Internationalisation Evidence Review produced by Professor Richard Harris and Dr Cher Li. The bold text is our emphasis.

4.4 Engagement in *exporting and/or outward FDI* is generally perceived as being beneficial to individual firms and the economy as a whole. The benefits brought about by ‘going international’ are varied, as pointed out by Bernard and Jensen (1999), including faster growth of shipments and productivity, diversification of risk, increased innovation, better investment opportunities leading to improved survival prospects and gains for workers in terms of higher pay and better future employment opportunities.

4.5 Moreover, outward FDI may be associated with additional advantages normally unattainable when merely serving a domestic market, such as a relocation of production to lower cost countries, agglomeration economies associated with international locations (for example, enabling links with key businesses, research organisations and other services within their sector) and scale/scope economies associated with an expanded foreign market size (especially in light of the recent trend towards offshoring in the service sector). Recent evidence documented in a BERR (2009) report indicates that the UK has particularly benefited from increased international competitiveness and openness to international trade and investment.

4.6 **A strong theme running through all the literature is that firms need to possess productivity advantages so as to serve global markets via exporting; moreover, to engage in foreign production through outward FDI requires an even higher productivity threshold.**

4.7 While there is almost universal evidence substantiating the self-selection proposition – i.e. higher productivity leads to export-market entry – evidence for ‘learning-by-exporting’ is less

well established in the literature. In order to achieve post-entry productivity gains, exporters need to invest in more R&D and human capital to successfully acquire foreign technologies and enhance their absorptive capacity.

- 4.8 The House of Commons report “Exporting out of Recession” comments:

For companies, investing and selling overseas tends to improve productivity, innovation and financial performance. Selling overseas helps businesses achieve economies of scale and levels of growth and revenue not otherwise possible; reduce their dependence on a single or small number of markets; and increase the commercial life span of their products or services, with raised returns on investment. These companies are more likely to have capital to invest in innovation and product development in the UK, and to maintain or create jobs.²⁰

- 4.9 The literature also stresses the link between exports and innovation, but there is less certainty about the direction of causation. Empirical studies have emphasised the role of technology and innovation as major factors contributing to facilitating entry into global markets, and thereafter maintaining competitiveness and boosting export performance. However, counterarguments on causality, from exporting to innovation, also exist: primarily, being exposed to a richer source of knowledge/technology that is often unavailable in the home market, exporting firms could well take advantage of these diverse knowledge inputs and enhance their competency base, and hence such learning from global markets can foster increased innovation.

Case for intervention

- 4.10 This is mostly predicated on the basis that more internationalisation results in greater productivity improvements (linked to innovation activities and improvements in efficiency), and that there are ‘market failures’ that prevent the realisation of these gains. The main ‘market failure’ usually cited is that there is imperfect information in product markets which impedes internationalisation since potential buyers and sellers need access to the identity and location of potential suppliers and customers, and information about the prices and quality of the goods and services that may be traded. Thus there is a rationale for government intervention, assuming that this leads to a direct increase in economic benefits from more firms gaining information and thus acting on that information (e.g., by internationalising.).
- 4.11 Searching for information is costly, and when firms do not engage (fully) they only have a partial knowledge about the market, and thus may underestimate the potential benefits of internationalisation (both private benefits to themselves and the social benefits that greater trade may bring to the wider economy). The government helps to ‘complete’ the market through the provision of relevant information.
- 4.12 Indeed it would be costly and wasteful of resources for individual firms to undertake sub-optimal, high cost information gathering, when government has a particularly well-placed role to provide such information as a public good. **There is therefore a role for government to facilitate access to networks of business contacts in overseas markets (especially for**

²⁰ House of Commons Business, Innovation and Skills Committee 2010

SMEs); while publicly financed expenditure on knowledge-generating export promotion activities is further justified if networks act as an informal barrier to market entry (if they limit the extent to which information is made available to outsiders).

4.13 **Overall, it would seem that there is a clear case for government intervention to help firms overcome barriers to internationalisation that are mostly linked to information costs that individual firms would (or could) not meet without government assistance.**

4.14 As to the government response to such market failures, a recent review of how governments' intervene in this area stated that the basic role is:

“... to help (potential) exporters find markets for their products, as well as provide them with a better understanding of products demanded in different export markets”²¹

4.15 Others have provided a wider description of government intervention (which includes a more general view of internationalisation extending beyond just increasing the volume of exports); there is a recognised need for firms:

- to learn about exporting (which markets, finding customers, advice on business plans, logistics and finance)
- to grow their international business (those with some experience require assistance to plan entry into new markets, obtain growth finance, networking with new customers, and finding new partners)
- to become globally competitive (more experienced firms requiring high-level market and strategic insights and assistance to access partners and use more sophisticated business models involving outward FDI-type activities).

4.16 **Thus in relation to government responses to ‘market failures’, it would seem that current thinking has moved beyond just considering such ‘failures’ as mostly information needs, and thus potentially indicative of resource-gaps faced by (especially smaller) firms; rather, there are potential capability-gaps that need to be addressed.**

4.17 This is considered as part of the internationalisation survey which specifically looks at the capability of firms to operate internationally and the role that SDI has played in strengthening a number of capability areas.

SDI interventions

4.18 SDI offers a wide range of products to help firms internationalise, broader than that offered by most export promotion agencies across the globe. These range from products to help firms increase export volumes to those that also have a stronger element linked to improving productivity. It is recognised that SDI operates within the wider SE account or Designated Relationship Management (DRM) framework designed to improve productivity.

²¹ Lederman, D. et. al. (2006) Export Promotion Agencies: What Works and What Doesn't. CEPR Discussion Paper No. 5810

- 4.19 Nearly two-thirds of SDI products between 2005 and 2008 went to help firms attend exhibitions, go on missions, and obtain market intelligence on overseas locations. Delivery of other products related to preparedness and strategy was significantly lower.

Inward investment

- 4.20 Support to inward investors (particularly but not exclusively *inward FDI*) is mostly predicated on the basis that such firms will result in productivity improvements for the economy (linked to innovation activities and improvements in efficiency)²², and that there are ‘market failures’ that prevent the realisation of these gains from greater inward investment. Such productivity improvements can occur because it is assumed that inward investment is undertaken by firms that have innate advantages (resulting in them having higher productivity which, *ceteris paribus*, will result in a higher ‘batting average effect’ if nothing else²³); however, there may also be spillovers from these better plants to other indigenous plants who can benefit from the externalities that become available (e.g., through supply chains and knowledge transfer²⁴). Of course, if inward investors have lower productivity there are unlikely to be either significant spillover effects or improvements in aggregate performance for the host economy.
- 4.21 The case for using public money to support this intervention is also based on market failure.²⁵ The evidence is described in detail in DTI Economics Paper no 18. The latter (and the evidence reviews undertaken for internationalisation and inward FDI – see DTZ, 2009, and Harris and Li, 2009) provide strong cases for government intervention in these areas.
- 4.22 The main ‘market failure’ usually cited is that there is imperfect information in product markets which impedes internationalisation (including inward investment) since potential buyers and sellers need access to the identity and location of potential suppliers and customers, and information about the prices and quality of the goods and services that may be traded. Thus there is a rationale for government intervention, assuming that this leads to a direct increase in economic benefits from more firms gaining information and thus acting on that information (e.g. through investing overseas). Casson (1999) argues that in this situation the government has a comparative advantage in information, and it is on this basis (not any narrow interpretation of market failure) that it can justify intervention.

²² The Scottish Government’s GES focuses on productivity, population growth and increased labour market participation, as the key drivers of growth. It has been argued that it is the first that ‘matters most’ (see CPPR, 2008), and as such the case for supporting internationalisation is overwhelmingly linked to productivity improvements.

²³ Higher productivity, leading to higher growth, is not the only benefit from inward investment (although it can be argued that ultimately productivity is the key factor determining long-run success – e.g., an oft quoted line from Krugman’s (1997) book is “productivity isn’t everything, but in the long run, it is almost everything” (p.11).

²⁴ DTZ in their Inward Investment Evidence Review (2009) for Scottish Enterprise summarise the types of spillovers that can arise; for example see their Table 4.1 (which is based on Harris and Robinson, 2004). They also set out some of the wider direct (as opposed to indirect spillover) benefits of inward investment, including additional employment and associated wage income (including premiums on these variables if inward investors employ relatively more people and pay relatively higher wages).

²⁵ Strictly speaking market failures are usually justified on the basis of a very restrictive view of the way the economy works (the neoclassical approach) and this is set out – along with its limitations – in Harris and Li (2009, Chapter 3). Rather than take a narrow theoretical of market failure, there is a more general policy orientated usage, which refers simply to circumstances in which there are significant potential economic benefits which the private sector unaided would be unable, or unlikely, to achieve.

- 4.23 Searching for information is costly, and when firms do not engage (fully) they only have a partial knowledge about the potential host market, and thus may underestimate the potential benefits of investing in that market (both private benefits to themselves and the social benefits that spillovers may bring to the wider economy). It is a moot point whether this is a market failure *per se*, but anyway there would appear to be a robust case for government intervention because it has a potential advantage in the provision of information that can boost transactions in the market resulting in a net gain to all those involved (i.e., the government helps to ‘complete’ the market through the provision of relevant information).
- 4.24 Indeed it would be costly and wasteful of resources for individual SMEs to undertake sub-optimal, high cost information gathering, when government has a particularly well-placed role to provide such information as a public good. There is therefore a role for government to facilitate access to potential industrial sites or buildings, and networks of business contacts in the host economy; however governments and their agents (SDI in Scotland) usually go further and provide financial assistance to inward investors presumably in part to offset any perceived greater risk and uncertainty associated with investment outside the firm’s home economy.
- 4.25 Overall, it would seem that there is a clear case for government intervention to help potential inward investors to overcome barriers to setting up capacity in a location such as Scotland, with such barriers mostly linked to information costs that individual firms would (or could) not meet without government assistance.

5: Internationalisation econometric analysis

Introduction

- 5.1 This section and the next present the results of a detailed econometric analysis carried out to investigate the productivity, employment and wage impacts associated with internationalisation and inward investment activity and then to look specifically at whether there was a difference between the performance of companies assisted by SDI and comparable companies that were not.
- 5.2 Before presenting the results it is important to understand the main measure of productivity used in both this and the next section. **Total Factor Productivity (TFP)** has been used to measure productivity in both the internationalisation and inward investment reports. TFP is measured as the level of output that is not attributable to factor inputs (employment, intermediate inputs and capital). Rather TFP measures the contribution to output of all other influences, capturing such determinants as technological progress and/or changes in efficiency. This therefore measures the *productivity* of all factors of production (not just labour).
- 5.3 This section looks at the results from the internationalisation analysis and addresses the following questions:
- whether those plants that exported and/or engaged in outward foreign direct investment (FDI) achieved better performance in terms of total factor productivity (TFP) and employment during 2002-2006 than those that did not
 - whether those plants that received assistance from SDI to help with internationalisation achieved better performance in terms of total factor productivity (TFP), and/or employment during 2003-2006 than those that did not
 - based on ‘matched’ samples of exporters/non-exporters and assisted/non-assisted plants, whether those plants that exported and/or received assistance from SDI achieved better performance in terms of total factor productivity (TFP) and employment during 2003-2006 than those that did not export/receive support from SDI.

Approach

- 5.4 This section considers the impact of SDI support through assistance to firms to internationalise (either through exporting and/or outward FDI), using quantitative (econometric) methods. It uses data on those which received help between 2003-2006 merged into the Global Connections Survey (GCS) for Scotland (2002-2006) and the Annual Business Respondents Database (ARD), the latter comprising the returns to the Annual Business Inquiry carried out annually by the Office for National Statistics (ONS). As such, it is based on an analysis of financial returns made by firms to the Scottish Government and the ONS as part of the data collected for National Accounts statistics; therefore this study

comprises an independent review (using appropriate econometric methods) of whether productivity and employment in assisted firms were influenced by policy instruments designed to impact on firm growth and employment

- 5.5 The analysis considers whether those plants that exported and/or engaged in outward FDI achieved better performance in terms of TFP and employment during 2002-2006. Following these baseline estimations, a variable representing whether the plant received assistance from SDI (and in which year this occurred) is introduced, to test if plants engaged in internationalisation experienced any change in their TFP and employment performance once they are assisted. However, a problem with this approach is that performance is likely to be (causally) linked to the characteristics of the plant before it received assistance. It might be expected that performance would be better in plants that export and/or receive assistance irrespective of whether they receive help from SDI – i.e., there is the econometric issue of self-selection that needs to be taken into account, whereby internationalising businesses are likely to have productivity advantages in the first place that provide the motivation for ‘overseas’ investment. Thus, even in the absence of government help, these plants are likely to achieve performance paths that are not the norm, and so comparing them to plants that have very different characteristics would lead to biased outcomes in terms of whether exporting and/or SDI assistance impacted on performance.
- 5.6 It is therefore necessary to use the technique known as ‘*matching*’ whereby exporters and/or policy-assisted plants are only compared to other plants that have (where possible) exactly the same set of characteristics as the exporters and/or assisted plants (e.g., in terms of size, ownership, sector, and all other factors that effect performance). Using such ‘matched’ data means that in the absence of assistance the average performance of exporters and non-exporters, or assisted and non-assisted plants, should be the same, so if any statistical difference is detected for the exporters and/or assisted plants then we can confidently link this to a ‘treatment’ effect, brought about because of exporting/receiving assistance rather than because of ‘self-selectivity’. Hence, a third set of results are produced based on the model estimated using only the ‘matched’ data. If these show that assisted plants experienced different levels of performance, then we can be more confident that this is an unbiased estimate of a ‘learning-by-exporting’ effect or the policy-induced impact of assistance (given that matching is intended to neutralise the impact of selection bias).

Overview of data

- 5.7 A list of 2,678 companies that had received help during 2003-2006 was merged into the ONS ARD by finding their (company) inter-departmental business register (IDBR) code, since the latter is the basis for identifying enterprises in the ARD and therefore can be used to identify which companies were assisted by SDI. IDBR codes were not initially available in the list provided regarding which firms were assisted, and thus these had to be obtained. Once the SDI data is merged into the ARD, and the latter is linked to the Global Connections Survey (GCS), some of the characteristics of those that exported and/or received assistance could be compared to non-exporters and non-assisted plants operating in Scotland.
- 5.8 Table 5-1 shows the success achieved in merging the SDI data into the ARD. Note that from the initial list of companies supplied by SDI, 855 could not be found. This could be because

of changes in name over time or alternative versions of company names being recorded by SE or within the ARD. For this type of work this is a reasonably good match.

Table 5-1: Merging of SDI assisted companies into ARD 2003-2006^a

	Number
Outward investment assisted products in SDI database supplied 2003-2006	2678
<i>Cannot be found in IDBR</i>	-855
Linked by ONS statisticians to IDBR	1823
<i>Assistance provided more than once to same company in any given year^b</i>	-160
Uniquely linked on a year basis to IDBR	1663
<i>Cannot be found in ARD^c</i>	-183
Linked to ARD	1480

^a Data supplied by SDI gave the actual date when first assisted. This was converted into the annual equivalent year.

^b None of the information on the 160 assists was lost, but amalgamated with other assistance provided to the same company in the same year.

^c Cannot be found because company belonged to an industry outside the scope of the ARD data used.

- 5.9 Therefore in total, 1,480 companies were successfully merged into the ARD and form the basis of the merged SDI-ARD database used in this study. This gives an overall success rate of 69% of eligible companies being merged. While all non-merged companies presumably existed and are wrongly located in the ‘non-assisted’ part of the ARD, we do not believe (given the high level of success in merging and the small numbers of non-merged compared to non-assisted) that this will result in any significant bias to the econometric results obtained.
- 5.10 The SDI-ARD database is not sufficient for the needs of this project, as information is required on the internationalisation activities of enterprises in order to assess the impact of SDI assistance. That is, since it is expected (given previous studies) that exporters and outward FDI companies have higher productivity, it is necessary to control for the impact of internationalisation on productivity; otherwise, SDI assistance (given its link to exporting and outward FDI) is likely to be spuriously associated with higher productivity, unless the link between exporting and productivity is controlled for. So to account for internationalisation activities, panel data for Scotland, covering 2002-2006, from the Scottish GCS has been merged into the ARD.

Analysis of firms’ characteristics

- 5.11 The results for exporting show that:
- plants were nearly 68% more likely to sell overseas if they had previously engaged in exporting
 - over 29% more likely to export if they had engaged in outward FDI in the past
- 5.12 Exporters were significantly larger than non-exporters; although they were less intermediate goods intensive (i.e. intermediate goods make up a smaller proportion of the overall output value of the plant). Plants that were US-owned (especially through ‘brownfield’ acquisition)

were much more likely to export, whereas ‘brownfield’ plants owned by other foreign countries were less likely to engage in exporting. Those located in assisted areas were 3.4% less likely to export, while **those operating in districts with significant industrial clusters and/or in more competitive industries were more likely to export**. Plants located in the City of Dundee were 8.8% more likely to export; and certain industry sectors had a stronger link to exporting (e.g., other transport equipment, chemical products, water transport and radio & communications equipment).

- 5.13 In all the results the plants that export overcome the barriers to exporting through increasing their productivity (which is positively associated with such factors as previous export activity, engaging in outward FDI, undertaking R&D, larger size, being US-owned and benefiting from agglomerations – all ‘learning’ activities associated in the literature with higher TFP).
- 5.14 As to which plants received SDI assistance, plants that export were 3.3% more likely to be assisted, while those with a positive R&D stock were 2.5% more likely to receive SDI help. The impact of being engaged in outward FDI on being assisted was lower given the small number of plants engaged in such international activities.
- 5.15 Larger plants were more likely to receive assistance. This effect is linked to higher TFP, suggesting that assisted plants are not a random sub-group of the population of all plants in terms of productivity.
- 5.16 Surprisingly, assistance to internationalise was lower in assisted areas, and higher in areas where clustering/agglomeration and greater diversity existed (e.g., more urbanised areas). Firms belonging to less competitive industries, single-plant firms, and older plants were less likely to receive SDI help for internationalisation. Certain industries were more likely to receive help (e.g., hotels & restaurants, post & telecoms, food products & beverages, and radio, TV & communications equipment manufacturers), while plants located in Edinburgh were less likely to benefit from SDI internationalisation products.

Econometric analysis

- 5.17 Econometric models were developed that tested:
- whether those plants that exported and/or engaged in outward FDI achieved better performance in terms of TFP and employment during 2003-2006
 - whether those plants that received assistance from SDI to help with internationalisation achieved better performance in terms of TFP, and/or employment during 2003-2006
 - based on ‘matched’ samples of exporters/non-exporters and assisted/non-assisted plants, whether those plants that exported and/or received assistance from SDI achieved better performance in terms of total factor productivity (TFP) and employment during 2003-2006.
- 5.18 Given the successful merger of a significant majority of the SDI-assisted plants into the ARD, we are confident that the models estimated will not be subject to any problems associated with the misclassification of assisted plants to the non-assisted sub-group.

- 5.19 **The productivity results obtained establish that as well as needing to become more productive pre-entry, plants that enter international markets gain from significant post-entry ‘learning-by-exporting’ and outward FDI effects. The former results in a boost to TFP of around 16-18%, while plants engaged in outward FDI have an additional productivity advantage of around 7-8%. Plants that invest in R&D have higher TFP of around 38%.**
- 5.20 Other important results include the importance of foreign-ownership in determining TFP, with **‘brownfield’ US-owned plants having 29-36% higher productivity (while ‘greenfield’ plants owned by the other foreign-owned sub-group have around 19% lower TFP).**
- 5.21 Plants located in districts with higher levels of diversification, and those operating in assisted areas, also had a productivity advantage while those that operated in less competitive industries were also able to exploit higher levels of TFP (presumably because there are links between higher levels of concentration and firm innovativeness). Lastly, TFP was higher for plants located in Aberdeen, Stirling, Edinburgh and Dundee (but not Glasgow).
- 5.22 **When matched data is used (based on matching a ‘treatment’ group of plants that received assistance with a ‘control’ group of plants with similar characteristics except that they did not receive help), SDI-assistance has a strong and significant impact with such plants being nearly 19% more productive.**
- 5.23 **As to employment impacts, overall SDI-assisted plants had lower employment of somewhere between 13-19% when compared to non-assisted plants (based on using the full data set and ‘matched’ data).**
- 5.24 Unfortunately, there were too few observations on plants that were assisted by means other than export promotion, and therefore it has not been possible to establish if more intensive assistance (such as belonging to the Global Companies Development Programme) had a larger productivity impact vis-à-vis less intensive export promotion. Given the importance of building absorptive capacity and knowledge assets (in order to benefit from longer-term operations in overseas markets), there is an expectation that SDI products that are linked to these more intensive activities would have a larger (and more long-term) benefit. Hopefully with more data becoming available over time, this hypothesis can be tested in future econometric analyses.

Summary and conclusions

- 5.25 The econometric analysis provides evidence along two lines; the links between performance and exporting and also the characteristics of the companies where the effect is strongest. The key results are:
- Those located in assisted areas were less likely to export, while those operating in areas with significant industrial clusters and/or in more competitive industries were more likely to export

- Firms belonging to more competitive industries, larger and newer plants and those in non-assisted areas were more likely to receive SDI help for internationalisation. These are also firms with stronger TFP.
 - Plants that enter international markets gain from significant post-entry ‘learning-by-exporting’ and outward FDI effects. The former results in a boost to TFP of around 16-18%
 - **SDI-assistance has a strong and significant impact with such plants being nearly 19% more productive**
 - SDI-assisted plants had lower employment of somewhere between 13-19% when compared to non-assisted plants (based on using the full data set and ‘matched’ data)
- 5.26 The results demonstrate the link between stronger productivity, the likelihood of exporting and that this “learning” then further boosts productivity, generating a virtuous spiral. SDI support also has a significant effect associated with 20% higher TFP.
- 5.27 The analysis also finds SDI assistance more likely among companies that tend to have higher productivity already and among businesses that are already likely to be exporters. This fits with the later survey evidence that suggests that the assistance helps businesses that are already exporters to *make more* of the opportunities rather than by encouraging businesses to internationalise. It highlights the current role that SDI plays and the contrast with the role of the proposed Smart Exporter programme - mostly awareness raising. This finding helps shape our conclusions on SDI products later in the report.
- 5.28 The results also emphasise that the ultimate objective of the support is *productivity* and that exporting is a critical part of this. It supports the view that support for companies to strengthen productivity is a necessary precursor to international activity.
- 5.29 The provision of support should be seen in this light. Where productivity is already strong, provision of information, help to find management time, and access to finance can help companies exploit international opportunities, and has been doing. For other companies with less international experience there should be support to overcome a slightly different set of barriers around perceptions of the complexities of exporting. SDI can do this, but this is where links with Business Gateway, Scottish Chambers International and others could help to extend their influence.

6: Inward investment econometric analysis

- 6.1 This is the second section of two that summarise the econometric work and results. This section covers the analysis of the inward investment data. The introduction to the previous section set out a description of TFP which is used here as the main measure of productivity.
- 6.2 This section looks at the results from the inward investment analysis and addresses the following questions:
- Whether those plants that are owned by foreign-owned multinational corporations, or whether those that belong to UK enterprises operating in more than just Scotland, achieved better performance in terms of TFP, employment and/or wages during 1997-2006
 - Whether those plants that received assistance from SDI achieved better performance in terms of TFP, employment and/or wages during 2001-2006
 - Based on a ‘matched’ sample of assisted and non-assisted plants, whether those plants that received assistance from SDI achieved better performance in terms of TFP, employment and/or wages during 2001-2006.

Approach

- 6.3 Using 1997-2006 annual (panel) data from the Scottish sub-set of the ARD, this study first estimates whether those plants that are owned by foreign-owned multinational corporations, or whether those that belong to UK enterprises operating in more than just Scotland, exhibit better performance in terms of total factor productivity (TFP),²⁶ employment and/or wages. As will be shown later, the econometric results generally show that this is indeed the case (although it can depend on where the headquarters company is based, a result also found in Harris and Robinson, 2003).
- 6.4 Following such baseline estimations, we then introduce variables into our model that represent whether the plant received assistance from SDI (and in which year this occurred), including separate tests of the different types of assistance made available (e.g., RSA or R&D grants, or indeed assistance with no monetary value attached). Given that we only have data on assistance covering 2001-2006, it is useful to compare the results based on the shorter period (but which include variables measuring whether assistance was provided) with those obtained for the full 1997-2006 period.
- 6.5 Introducing such policy variables allows us to determine if plants engaged in inward investment experience any change in their performance once they are assisted. Since a significant number of assisted plants are ‘greenfield’ enterprises (i.e., assistance coincides with the plant opening), the results show not so much if the plants changed direction in terms

²⁶ TFP is measured as the level of output that is *not* attributable to factor inputs (employment, intermediate inputs and physical capital).

of their performance, but whether SDI were supporting plants with different levels of performance. This is an important point, because given the short time period over which the analysis is conducted – at most 6 years for plants operating throughout 2001-2006 – there is a need to be careful in attributing different levels of performance to the post-assistance period. Of course, with longer time series of (panel) data it would be possible to make a greater distinction between pre- and post- assistance performance levels.

Analysis of characteristics of all foreign-owned plants

- 6.6 The initial analysis covers 401 assisted companies between 2001/02 and 2007/08. By identifying these companies in the Annual Business Respondents Database (ARD), which comprises the returns to the ABI carried out annually by ONS, the analysis is able to use the financial returns collected for National Accounts statistics. Once the assisted firms have been flagged in the dataset, it is possible to carry out direct comparisons of performance with similar, unassisted firms.
- 6.7 Using the ABI data we can show that employment in the plants that received assistance from SDI amounted to some **68,000** in total over 2001-2006. These jobs cannot be linked solely to the level of assistance provided but it does give an indication of the absolute size of the SDI-assisted sector.
- 6.8 Compared with the full population of unassisted businesses, the SDI-assisted plants:
- **pay higher wages than non-SDI plants**
 - **employ more people than others**
 - **have higher *labour* productivity**
- 6.9 The analysis also identifies other characteristics of both manufacturing and non-manufacturing SDI-assisted plants. These plants are:
- significantly larger than non-assisted plants (especially in manufacturing)
 - more intermediate intensive (i.e. intermediate goods make up a larger proportion of the overall output value of the plant).
 - less likely to be located in Aberdeen or Glasgow, and more likely to be in Edinburgh (if they are manufacturing) and they are more likely to be in Dundee (if non-manufacturing)
 - more likely to be in an Assisted Area, and/or a single-plant enterprise, and/or belonging to a multi-region enterprise is associated with SDI-assistance in manufacturing
 - certain industry sectors have a stronger link to SDI-assistance (e.g., radio & communications equipment in manufacturing, and computer & related services in non-manufacturing) while only food and beverages actually has a lower probability of SDI-assistance.

Econometric analysis

- 6.10 The analysis uses a sophisticated model to measure the output, employment and wages that can be attributed specifically to SDI support. The technique known as ‘matching’, described in the Internationalisation section, was used again. Using such ‘matched’ data means that in the absence of assistance the average performance of assisted and non-assisted plants should be the same. Any statistical difference would then reflect the ‘treatment’ effect. Details of the methodology are contained in the full appended report.

Results

- 6.11 The analysis found that among both manufacturing and non-manufacturing plants, **SDI-assisted businesses had higher employment (than comparable unassisted plants) of somewhere between 10-11%. SDI-assisted plants paid higher real wages (around 15%) when compared to non-assisted plants.** Manufacturing businesses that received Training Plus grants had the highest wage levels (somewhere between 32-44% higher) than similar plants that did not.
- 6.12 TFP has again been used to measure productivity. ‘Greenfield’ EU-owned manufacturing plants had the highest levels of TFP (13.8% higher than UK-owned plants); followed by ‘brownfield’ US-owned plants (10.3% higher). However, **SDI-assisted manufacturing plants had lower TFP of somewhere between 13-19% when compared to non-assisted plants and for non-manufacturing, SDI-assisted plants had lower TFP of around 13%.** This was true for plants receiving RSA and R&D grants, but, by contrast, plants that received Training grants had higher productivity.

Summary and conclusions

- 6.13 The main findings are:
- **SDI-assisted companies had employment of around 10% higher than matched unassisted companies and paid higher wages, but**
 - **SDI-assisted companies had lower TFP of between 13% and 19%.**
- 6.14 One reason for this lower productivity is likely to be that SDI support is restricted to working with firms that would not be investing as much (or at all) in Scotland otherwise. The plants in receipt of government grants and other forms of assistance must demonstrate ex-ante that the investment would not go ahead without assistance, and therefore to some extent these are likely to be riskier projects (or perhaps weaker companies). It could be argued that projects that are expected to generate high productivity would not require assistance. A significant part of SDI support has been in safeguarding jobs where, without it the plant would have to reduce the scale of its operations. These plants, at least at the time of the intervention, are unlikely to have very high productivity. It could be that the result is a combination of these weaker productivity cases together with some high productivity greenfield projects.
- 6.15 The analysis is clear that these cases have supported employment, provided higher wage jobs and raised the average of Scotland’s labour productivity. These were SDI’s objectives over that period. In moving forward, the TFP analysis provides a fresh look at the nature of these

past investments and raises questions about how we attract higher productivity businesses in future.

- 6.16 It also raises issues about the nature of supporting employment and productivity – or short term employment impact versus longer term competitiveness. This is not entirely straightforward as maintaining or attracting jobs to areas with high unemployment can have significant positive wider effects. Even where it is clear where the emphasis should lie, it is difficult, in advance, to determine the potential TFP of a project.

7: Internationalisation survey

Introduction

- 7.1 The next two sections set out the results of the direct surveys of samples of businesses that had been supported by SDI, based on telephone interviews carried out specifically for the purposes of this evaluation.
- 7.2 The survey was structured to cover:
- business characteristics
 - exporting patterns and experience
 - finance and the recession
 - motivation and barriers to internationalisation
 - support received from SDI and satisfaction
 - the benefits and impact on performance.
- 7.3 An initial database of 10,700 records of *business assists* was initially provided by SDI. This was restructured to form a new database of 2,370 *companies*. The analysis covers all companies recorded as receiving SDI assistance on Scottish Enterprise's CRM database, which in effect means that it includes all cases from 2005 through to September 2009 when the data was provided.
- 7.4 This was used as the basis for the company survey and for weighting the overall results. From this database 430 companies were removed from the sample by SE survey control, because they had been interviewed for other work within the past six months.
- 7.5 A sample of 1,195 companies was selected to be representative of the population on the basis of geography and sector. These companies were sent a letter from SE and then contacted to arrange a telephone interview.
- 7.6 In carrying out the telephone interviews, we found:
- 31 that had ceased trading
 - 13 that were duplicates
 - 61 had incorrect contact details and could not be traced
 - 26 went straight to answer phones
 - 28 cases the main contact had left
 - 80 straight refusals to participate.

Survey sampling error

- 7.7 The survey interviewed 250 businesses from a population of around 2,370. **For the straightforward questions, the margin of error is +/- 6%**²⁷. In interpreting the results we should put less weight on smaller differences between results. Where the results are disaggregated for different groups, the margin of error increases as the effective sample size is reduced and more care needs to be taken with interpretation.

Sample

- 7.8 This section sets out the structure of the sample of responses on the basis of geography, Designated Relationship Managed (DRM) status, and sector. By geography, the sample is well balanced with a slightly higher proportion of Highlands and Islands businesses, but slightly under representing the East and South of Scotland (Table 7-1).

Geography

Table 7-1: Location of survey responses and full assisted population

	Survey responses	all
Aberdeen City & Shire	18%	18%
East of Scotland	22%	27%
H&I	9%	6%
South of Scotland	3%	5%
Tayside	7%	8%
West of Scotland	40%	36%
Grand Total	100%	100%

Source: SQW internationalisation survey 2009

DRM status

- 7.9 SDI works with both DRM companies and non-DRM companies. In the population of assisted companies 38% were DRM companies compared with 50% within the sample, which indicates an oversampling of these companies. This is important because we would expect DRM companies, who tend to have received more substantial support, to report a more positive impact than non-DRM companies. While the sample is representative of the population in relation to turnover figures (the average is just under £14 million), DRM companies have an average turnover twice the size of non DRM companies. There is a broadly similar pattern with median values.

²⁷ This margin of error is based on a 95% confidence level and for responses that are split 50:50. The margin of error falls where responses are less evenly divided e.g. 75:25.

Table 7-2: DRM status in sample responses and population

status	DRM	Non-DRM	All
Number in sample	124	126	250
% of sample	50%	50%	-
% of population	38%	62%	-
Average turnover in sample	£18.5 million	£8.6 million	£13.7 million
Average turnover in pop	£19.9 million	£9.5 million	£16.7 million
Median population	£2.6 million	£993,000	£2.0 million
Median sample	£2.4 million	£875,000	£1.6 million

Source: SQW internationalisation survey 2009

Sector

- 7.10 Table 7-3 shows the structure of the sample and the population by sector. This uses the SE key sectors and the Government Economic Strategy Growth Industries. There was a good match between the sample and population in relation to industry sector.

Table 7-3: Responses and population by sector

Sectors	sample	population ²⁸
Energy	14%	16%
Financial services	1%	1%
Food and drink	13%	13%
Life sciences	6%	8%
Tourism	2%	5%
Digital markets and enabling technology (DMET)	18%	22%
Education	8%	4%
Creative industries	2%	0%
Other manufacture	9%	6%
Textiles	2%	4%
Aerospace, defence and marine	4%	3%
Agriculture	2%	1%
Chemical sciences	2%	2%
Construction	2%	2%
Other business services	14%	12%
Total	100%	100%

Source: SQW internationalisation survey 2009

²⁸ Only includes records where data was available

- 7.11 It is also useful to consider whether some sectors are more likely to be DRM companies. Generally the pattern follows the overall sample with 50% of the companies in each sector managed through SE's DRM process and 50% not. The only exceptions are in energy where DRM companies are more strongly represented and business services where there are fewer (Table 7-4).

Table 7-4: Sector and DRM representation

Sector analysis	DRM	Non-DRM	Sample size
Business services	36%	64%	36
DMET	47%	53%	45
Education	53%	47%	19
Energy	61%	39%	36
Food and drink	52%	48%	33
Life science	50%	50%	14
manufacturing	59%	41%	22
other	47%	53%	45
Grand Total	50%	50%	250

Source: SQW internationalisation survey 2009

- 7.12 Half of the sample started up their business within the last ten years. There was no significant difference between DRM and non-DRM companies, but companies supported in the Highlands and Islands tended to be older than in the SE area.

Exporting patterns

- 7.13 Nearly all respondents are now active in international markets as regular exporters (Table 7-5). Ninety percent of respondents had undertaken some international activity in the past three years and for 60% of cases international activity had started in the past 10 years. This trade is most frequently described as "regular" rather than one-off. Slightly more ad-hoc sales are reported by the non-DRM cases rather than the DRM ones.

Table 7-5: Pattern of international trading

Pattern of international trading	DRM	Non-DRM	All
Regular exporting	79%	75%	77%
Value varies from year to year	11%	10%	10%
Ad hoc - none in some years	6%	14%	10%
One off to date	2%	1%	1%
No international revenue yet	3%	1%	2%

Source: SQW internationalisation survey 2009

- 7.14 The destination of sales made by the companies in the sample is shown in Table 7-6. Overall, nearly 40% of sales by the companies were made outside the UK, with nearly 30% in the rest

of the UK. DRM firms were more active in the rest of the UK than non-DRM firms. Firms in the manufacturing and energy sectors were the most active outside the UK.

Table 7-6: Destination of sales

Sector	% in Scotland	% in rest of UK	% outside the UK
Business services	27	28	39
DMET	16	35	41
Education	38	21	31
Energy	31	21	44
Food and drink	39	26	29
Life science	18	32	36
Manufacturing	17	38	45
Other	31	29	36
Grand Total	27	29	38
HIE	23	31	42
SE	28	29	37
DRM	25	33	38
Non-DRM	30	24	38

Source: SQW internationalisation survey 2009

- 7.15 Exports represent around 60% - 70% of sales across all the sectors with relatively little variation between DRM and non-DRM companies.
- 7.16 The main reasons for engaging in international activity at all were “that it had always been relevant” (55%) and to help achieve growth aims (54%). Just over a third did so to reduce dependency on a small number of markets and just under a third to generate higher profit margins from markets outside the UK. Overall the results reinforce a later finding that SDI is working with companies that already have international experience.

Table 7-7: Motivation for engaging in international activity (250 cases)

Motivation	% of sample
International markets have always been relevant	55%
To achieve our growth aims	54%
Reduces dependency on small number of markets	35%
Higher profit margins outside UK	29%
Utilise existing capacity	19%
Opportunity to keep abreast of developments	19%
Other	17%
Part of an international group set up to trade outside the UK	7%

Source: SQW internationalisation survey

- 7.17 Across the sample 35% reported that SDI had some influence on their decision whether or not to trade internationally at all. This impact was stronger among DRM companies where this rose to 44% (Table 7-8).

Table 7-8: Did SDI play any role in motivating your decision to consider trading internationally?

	DRM	Non-DRM	Grand Total
Yes, strong influence	11%	6%	8%
Yes, some influence	33%	21%	27%
No influence	57%	73%	65%

Source: SQW internationalisation survey

- 7.18 The single most cited market was the EU from where 63% of the companies interviewed generate international revenue. The rest of the UK is second and North America third. Within the sample 21% of companies generated income from China and a similar number from Africa. The single biggest markets by value are even clearer with the EU, rest of the UK and North America considerably ahead of other regions.

Table 7-9: Current international markets and single biggest one

	Percentage that indicated they currently generate international income from...	And single biggest international market by value?
European Union, outside UK	63%	32%
England / Wales / Northern Ireland	55%	22%
North America	47%	22%
Europe outside the European Union	36%	2%
Middle East	32%	6%
Japan and South East Asia (including Taiwan & Hong Kong)	27%	3%
Australia and the Pacific	24%	1%
China	21%	3%
Africa	21%	2%
Russia or Central Asia (including Turkey)	19%	1%
South America	18%	2%
Indian subcontinent (including India, Pakistan & Sri Lanka)	16%	2%
Don't know	5%	
Other (specify)	3%	1%
None	2%	

Source: SQW internationalisation survey

- 7.19 Most international activity involves selling *existing* products into *new* markets (81%). More than a third was selling *new* products into *new* international markets. Ten percent had acquired a foreign business and 14% had engaged in a joint venture Table 7-10.

Table 7-10: Type of international activity

Type	% of sample
New markets for existing products	81%
New products for international markets	36%
Joint venture/partnership	14%
Acquisition of foreign business	8%
Don't have any international activity	3%
Other	4%

Source: SQW internationalisation survey

Access to finance

- 7.20 This section was designed to help understand any difficulties that businesses were having in accessing finance during the recession and the effect that this might be having on international activity.
- 7.21 Thirty four percent had found it more difficult to get or maintain borrowing from their bank over the past year Table 7-11. There was a slightly greater proportion among DRM companies.

Table 7-11: Over the last year, have you found it more difficult to get or maintain borrowing from your bank?

short sectors	No	Yes	Don't know
HIE	59%	32%	9%
SE	58%	34%	8%
DRM	56%	38%	6%
Non-DRM	60%	29%	11%
Grand Total	58%	34%	8%

Source: SQW internationalisation survey 2009

- 7.22 The numbers by sector are fairly small, but manufacturing businesses were more likely to report difficulties than other sectors (Table 7-12).

Table 7-12: Over the last year, have you found it more difficult to get or maintain borrowing from your bank?

	Grand Total	Energy	Food and drink	Life science	Other business services	Digital and enabling technology	Education	manufacturing	Other
Total cases	250	36	33	14	36	45	19	22	45
Don't know	8%	3%	15%	7%	11%	2%	11%	14%	9%
No	58%	61%	61%	71%	50%	58%	79%	45%	53%
Yes	34%	36%	24%	21%	39%	40%	11%	41%	38%

Source: SQW internationalisation survey 2009

- 7.23 For the third of the sample that has had difficulties accessing or maintaining finance, 33% reported that it had caused them to *delay internationalisation plans*. A further 27% have reduced the scale of their plans, but only 4% have abandoned plans altogether. Taken as part of the full 250 sample, this represents **around 20% in total that has had to limit their internationalisation activities because of difficulties accessing finance** (Table 7-13:).

Table 7-13: If YES, has this affected your plans for international development?

	Of those that have had difficulty	Of full sample
Abandoned international plans	4%	1%
Has delayed internationalisation plans	33%	11%
Reduced scale of our international plans	27%	9%
No effect on international plans	21%	7%
Not answered	10%	3%
Other	5%	2%
Cases	84	250

Source: SQW internationalisation survey 2009

- 7.24 The following additional questions were also added at the request of the Scottish Government, to consider more specifically the types of finance that companies were seeking and in what form. The questions were added during the survey and were used in 164 interviews.
- 7.25 The first asked whether the business had applied for a various forms of finance in the past six months and been turned down. In total 13% reported that they had. Of these, overdrafts were the largest (7%) of the sample, with smaller numbers reporting other forms of finance (Table 7-14).

Table 7-14: During the past 6 months have you applied for any of the following types of finance and been turned down?

	Grand Total	Energy	Food and drink	Life science	Other business services	Digital/enabling technology	Education	Manufacturing	other
Cases	164	21	22	11	25	31	12	14	28
Overdraft	7%	5%	0%	9%	4%	10%	8%	7%	14%
Secured loan	1%	5%	0%	0%	0%	0%	0%	0%	4%
Unsecured loan	1%	5%	0%	0%	0%	0%	0%	0%	4%
Asset finance	1%	0%	5%	0%	0%	0%	0%	0%	0%
Credit cards	1%	0%	0%	0%	0%	3%	0%	0%	0%
Don't know / none of these	87%	86%	91%	91%	96%	84%	83%	93%	79%
Other	2%	0%	5%	0%	0%	3%	8%	0%	0%

Source: SQW internationalisation survey 2009

7.26 Businesses were then asked to specify the amount they were turned down for. In the sample there were nine cases between £10,000 - £49,999 and a further four of between £100,000 and £499,999 (Table 7-15).

Table 7-15: Which of the following bands best describes the total amount of new finance you have sought and been rejected for in the past 6 months? (Number of cases in sample of 164)

Amount (band)	Asset finance	Credit cards	Overdraft	Secured loan	Unsecured loan	Grand Total
£100,000 - £499,999	0	0	1	2	1	4
£10,000 - £49,999	0	1	7	0	1	9
£5,000 - £9,999	0	0	1	0	0	1
Less than £5,000	0	0	1	0	0	1
Don't know	1	0	2	0	0	3
Grand Total	1	1	12	2	2	18

Source: SQW internationalisation survey 2009

7.27 A further question asked businesses how they planned to finance growth over the next three years. The majority (65%) planned to use funds generated by the business and a further 16% planned to find investors, while 14% planned to use loans or overdrafts (Table 7-16).

Table 7-16: If you are planning to grow your business over the next 6 months to 3 years, how are you planning to finance that growth? Are you planning to...

	number	% of respondents
Use funds generated by the business	107	65%
Look for investors in the business	26	16%
Extend or obtain a loan	14	9%
Obtain or extend an overdraft facility	9	5%
Use asset finance	6	4%
Sell assets to raise cash	3	2%
Use invoice discounting	1	1%
Something else	13	8%

Source: SQW internationalisation survey 2009

Impact of the recession

- 7.28 This section considers the impact of the recession on international activity. The survey found that for just over one third of businesses it had no effect. For another third it had reduced the scale of their plans and for the remainder (29%) it had delayed implementation (Table 7-17).
- 7.29 By sector, the pattern indicates that internationalisation plans in food and drink, manufacturing and education businesses have been less affected by the recession, although the numbers in each sector are small.

Table 7-17: How has the recession affected your plans to develop international activities?

	Grand Total	Energy	Food and drink	Life science	Other business services	Digital and enabling technology	Education	Manufacturing	Other
Cases	250	36	33	14	36	45	19	22	45
No impact	35%	22%	58%	36%	22%	29%	47%	50%	33%
Reduced the scale of our plans	34%	42%	30%	21%	44%	33%	32%	14%	36%
Increased the scale of our plans	5%	3%	0%	21%	8%	7%	5%	5%	2%
Changed focus to different markets	8%	8%	3%	29%	6%	7%	5%	5%	9%
Delayed implementation of plans	29%	36%	12%	14%	39%	40%	16%	14%	33%
Accelerated implementation of plans	6%	3%	9%	21%	8%	7%	5%	0%	2%
Decided not to go ahead with international plans	2%	3%	0%	7%	3%	4%	0%	0%	0%

Source: SQW internationalisation survey 2009

Barriers to international trade

- 7.30 The most significant barrier to internationalising the business was finance (32%), followed by management time and establishing dialogue with prospective customers or partners. The top three barriers are all areas that SDI/SE can and does influence, unlike a number of the other areas such as language and culture or exchange rates. Support to access finance and direct financial help is available, support to help plan and develop strategies is also available and SDI can help set up meetings with prospective customers and partners. The case studies also demonstrate the role that SDI can play in providing an incentive for managers to invest time in taking forward internationalisation plans. Companies will usually have ideas about internationalisation, but may require an incentive or support to act on them.
- 7.31 A recent report by EU experts (EU, 2007) cites the main barriers to greater internationalisation for SMEs; as: (1) insufficient managerial time and/or skills required for internationalisation; (2) lack of financial resources; and (3) lack of knowledge of foreign markets, mostly due to points (1) and (2). A very similar finding to this survey.
- 7.32 The range of SDI products broadly addresses these barriers. A lack of management time, for example, is about prioritising international activity. Helping businesses to understand the importance of international activity is part of much of the preparatory work that SDI supports. Experts for hire, preparing information on markets, identifying contacts, organising learning journeys and missions, mentoring and business development reviews are all intended to help businesses prioritise internationalisation and make it easier for management to take action.
- 7.33 However, the support products may need to focus more on strategic and preparation elements and, in tandem with the Smart Exporter Programme, offer more specialised help to establish dialogue with potential customers and partners. Further analysis of this is made later on in relation to the elements of support that lead to higher levels of impact.

Table 7-18: Barriers to undertaking international trade

Barrier	% of responses
Finance	33%
Pressure on management time	28%
Difficulty in establishing a dialogue with prospective customers or partners	27%
Language/cultural differences	26%
Currency/exchange rates	26%
Preference by overseas customers to work with firms in their own country	24%
Other (specify)	23%
Legislation / standards	22%
Obtaining information on an export market	17%
Transport costs	16%
Payment difficulties	14%
Setting competitive prices	12%
Export documentation	10%
Import tariffs	8%
Staff not trained for this	8%
No spare production capacity	6%
Warranty or service support	6%
Products unsuitable for export	5%
No response	4%

Source: SQW internationalisation survey 2009

- 7.34 Given that many of the companies already engage in some form of international activity, much of the SDI support relates to assisting companies in working in new markets. This has important implications for the fit with the Smart Exporter programme which will focus more on new exporters and requires different forms of support.
- 7.35 To address these barriers the companies had taken advice from a number of professional services, including SDI. The numbers using other services for advice was fairly modest. Just 8% had taken advice on overcoming these barriers from their bank while a third had not used any other services to help overcome the barriers.

Table 7-19: To help in overcoming barriers, did you take advice from? (unprompted)

Support	Responses
Lawyers	18%
Accountants	14%
Consultants	13%
Expert staff that you hired	12%
Peer group	11%
Banks	8%
Other	15%
None	33%

Source: SQW internationalisation survey 2009

Working with SDI

- 7.36 At what stages do companies typically receive support from SDI? The majority started working with SDI when they saw the opportunity to internationalise but needed help to research or enter the market (Table 7-20). Only 15% of the businesses suggested that they had no international strategy at the time they started with SDI, but a reasonable proportion wanted help to *refine* a strategy. Importantly, only 10% wanted the financial assistance alone. The picture is of most businesses having thought through the internationalisation process or having experience, but then looking for help in researching and tackling specific markets.

Table 7-20: Stage at which businesses first started working with SDI

Stage	DRM	Non-DRM	All
Had no international strategy	13%	17%	15%
Had a strategy but wanted to refine it	28%	24%	26%
Saw opportunities but needed help to <u>research</u> the market	43%	29%	36%
Saw opportunities but needed help to <u>enter</u> the market (distributors, agents, help with different legal system etc)	40%	41%	40%
Only wanted financial assistance to support international activity	10%	9%	9%
Other	4%	7%	6%

Source: SQW internationalisation survey 2009

- 7.37 Most of the businesses had experience of international activities prior to SDI support. Three quarters had made sales outside Scotland and 64% had made sales outside the UK. A quarter had also secured agents or partners overseas (Table 7-21). This reinforces the profile of experience among the companies being supported. Only nine percent had done no form of international related activity prior to support from SDI.

Table 7-21: Activities undertaken prior to SDI support

Activities undertaken prior to SDI support	% of responses
Made sales in UK outside Scotland	76%
Made sales outside UK	64%
Secured agents / partners outside UK	26%
Set up international partnership	11%
None of these	9%
Joint venture outside UK	7%
Acquired a business outside UK	1%

Source: SQW internationalisation survey 2009

- 7.38 The majority of businesses had received some form of support from SE in the past (75%). Almost half the sample (47%) had received business development support and 28% had received support for innovation or R&D. **There is a strong link between SE's support activities (business development, innovation, skills) and the SDI support.**
- 7.39 Just over half (59%) of the businesses interviewed had received financial support with an average value of £5,300 (although the median value is £2,000). Financial support was more likely to be received by DRM companies than non-DRM ones. In the majority of these cases (64%) this was for travel and in a quarter for marketing and promotion (Table 7-22).

Table 7-22: Have you received financial assistance from SDI?

	DRM	Non-DRM	Total
No	36%	46%	41%
Yes	64%	54%	59%

Source: SQW internationalisation survey 2009

Support received

- 7.40 The survey gathered information on the types of assistance, the number of times a company has been assisted and when. This provides a useful base when explaining the reported impacts of support later in the analysis. The results are grouped under six headings. **Two thirds of the businesses had support for some form of overseas mission or learning journey**, while a third had received other market support including standard and customised reports; 10% had received support to prepare for internationalisation and 17% strategic support. The majority of companies have been assisted to make overseas trips of some kind.
- 7.41 DRM companies were more likely to receive preparatory, strategic and market support such as reports, contacts, advice and guidance, while non-DRM companies were more likely just to participate in learning journeys and missions.

Table 7-23: Types of support delivered by SDI

Type of support	Categories covered	DRM	non-DRM	All
Preparing	• Health check on readiness for international business			
	• Business development review	13%	7%	10%
	• International Preparedness Programme			
Strategy	• Strategy advice through one-to-one meetings			
	• International strategy one-day workshop	18%	15%	17%
	• Global Companies Development Programme			
Mentoring	• International business manager for hire			
	• International graduate placement	3%	2%	3%
Market support	• Standard market reports			
	• Customised overseas market support	38%	27%	32%
	• Other market support (contacts, advice, guidance)			
Overseas missions	• Support to attend exhibition			
	• Support to attend learning journey			
	• Support to attend overseas mission			
	• Pre-mission in-country briefings	66%	72%	69%
	• Identification of business contacts/partners			
	• In-market promotion publicity			
Accommodation	• Virtual offices			
	• Incubator offices	6%	2%	4%
	• Meeting/training rooms			

Source: SQW internationalisation survey 2009

7.42 **There is overlap between the types of assistance but the data indicates that there are around 112 cases (44%) that received only support to attend an exhibition or travel on a mission without any other strategic or market support.** This is reasonable where the business has strong international experience already but may be less effective where this is not the case. Of these, 70% had already made sales outside the UK prior to assistance (compared with 59% of those that had received other forms of assistance). Thirty percent of these (44 cases) were inexperienced in international trade. Companies that are receiving support only for learning journey, mission and exhibitions are slightly more likely to be experienced in international trade than those that receive other combinations of support.

7.43 The main target markets are the US and the EU. A fifth of cases were targeting Japan and South East Asia, the Middle East and China respectively (Table 7-24). Most of these cases reported targeting more than one of these areas. There are also some differences by sector. Support for education-related businesses and organisations was more likely to be related to the Chinese and Indian markets, while energy-related business focused on the USA and Middle East. Across most sectors a large proportion of the support was targeted at the USA and EU.

Table 7-24: Target markets related to the support provided, by sector

	China	India	USA	EU	Middle East	Indian subcontinent (including India, Pakistan and Sri Lanka)	Japan and South East Asia (including Taiwan and Hong Kong)
Grand Total	17%	12%	40%	33%	20%	12%	24%
Business services	22%	17%	31%	28%	28%	17%	25%
DMET	18%	0%	51%	36%	13%	0%	22%
Education	47%	32%	11%	5%	32%	32%	26%
Energy	8%	19%	42%	17%	28%	19%	25%
Food and drink	9%	9%	52%	42%	9%	9%	24%
Life science	21%	7%	43%	43%	7%	7%	36%
Manufacturing	23%	5%	27%	41%	18%	5%	27%
Other	9%	11%	42%	44%	20%	11%	20%

Source: SQW internationalisation survey 2009

- 7.44 However, these patterns have changed slightly over time. Table 7-25 uses the year in which *the most recent* SDI support was provided and the markets that were being targeted by the assisted business. The analysis compares two time periods (2005 - 2007 and 2008 – 2009). It shows the proportion of companies assisted in these time periods and the geographic markets they were targeting. For example, among the companies that were most recently assisted in 2005 – 2007 (134 cases) 11% reported that their support was related to the Chinese market. Among those that were assisted most recently in 2008 or 2009 (90 cases), 23% reported that the support was related to China.
- 7.45 Overall, the analysis indicates that **where the most recent support was in 2008 or 2009, the companies were more likely to be considering international activity in China, India, the Middle East and South East Asia.** Those whose most recent support was older (2005 – 2007) were more likely to be targeting more traditional markets in the rest of the UK and the EU. Because of the combination of multiple geographic markets and participation in a number of SDI supported activities over different years, the analysis can only provide a general indication of the shifts in focus of the support. However, the results do suggest that the more recent support has been more focused on emerging markets. This is probably a combination of demand for support to help engage in these markets and SDI's own shift in focus.

Table 7-25: Changes in pattern of target markets and support over time

	2005-2007	2008-2009	Difference
Number of cases most recently assisted in this time period	134	90	-
China	11%	23%	12%
Indian subcontinent (including India, Pakistan and Sri Lanka)	8%	17%	10%
Middle East	16%	23%	8%
Japan and South East Asia (including Taiwan and Hong Kong)	21%	27%	6%
USA	34%	39%	4%
Africa	10%	13%	3%
Canada	10%	12%	2%
Australia and the Pacific	9%	10%	1%
Russia or Central Asia (including Turkey)	9%	9%	0%
England / Wales / Northern Ireland	12%	11%	-2%
Rest of European Union (other than UK)	37%	31%	-6%
Other European	24%	18%	-6%
South America	14%	9%	-6%

Source: SQW internationalisation survey 2009

Satisfaction

7.46 Table 7-26 shows the proportion of companies that were satisfied or very satisfied with various aspects of the support. The figures are the proportion of those that responded. There is relatively little difference between the categories although possibly the usefulness of contacts may be slightly lower than the provision of information and advice generally.

Table 7-26: Proportion reporting that they are **satisfied or very satisfied** with support

Element of support	% Satisfied or very satisfied	% unsatisfied or very unsatisfied
Overall efficiency	73%	9%
Quality and relevance of information	72%	8%
Usefulness of advice	72%	10%
Understanding of your business needs	71%	10%
Practical support	69%	8%
Experience / skills of advisors	68%	10%
Usefulness of contacts it allowed you to make	66%	13%

Source: SQW internationalisation survey 2009

Benefits from working with SDI

- 7.47 Before considering the impact of the support, the survey asked businesses to report the *ways* in which SDI had helped the business to internationalise.
- 7.48 Almost half of the businesses interviewed reported that because of the support received from SDI, they had met customers/partners they otherwise would not have been able to meet (48%) and half also reported that they had improved the company's profile overseas as a direct result of the support (Table 7-27). Less than 20% perceived no benefit.

Table 7-27: As a direct result of working with SDI, which of the following benefits have you experienced?

Benefits	% of the sample
Improved the company's profile overseas	52%
Met customers / partners otherwise have been unable to meet	48%
Confidence to explore a new market	47%
Improved understanding of how to do business in an overseas market	43%
Improved knowledge of the competitive environment in an overseas market	40%
Improved overseas marketing strategy	37%
Improved market research skills	31%
None	18%
Improved prospects of raising international funding	16%
Resolved a problem with a foreign contract	3%
Other	3%

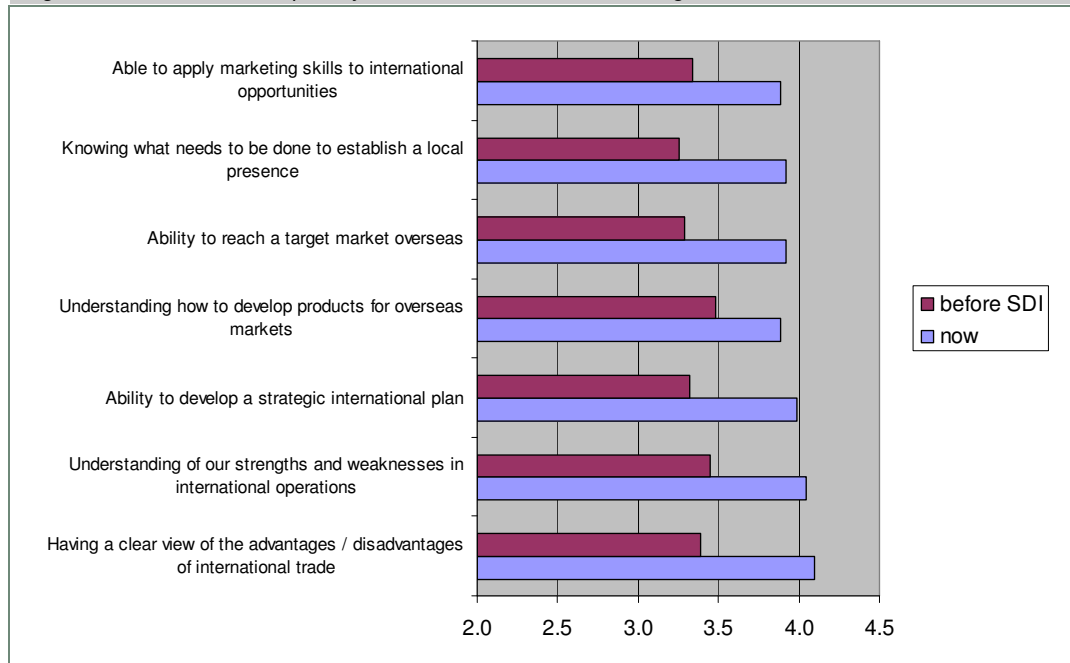
Source: SQW internationalisation survey 2009

Impact on businesses international capability

- 7.49 These questions considered how the support had impacted on the business and how it operates. Sixty per cent of those interviewed had made or planned to make changes of some kind to their business as a result of working with SDI:
- 26% had or planned to undertake collaborations, partnerships or acquisitions
 - 23% had made or planned organisational changes such as hiring specialist staff, training and strategy development
 - 18% had made or planned changes to their products or processes including the development of new products for international markets
 - 35% had made or planned changes to their marketing activities including undertaking new research.
- 7.50 The support had also helped 11% of the sample to temporarily or permanently decide *not* to enter a market.

- 7.51 Figure 7-1 shows the ratings that business gave themselves against a number of measures of international capability, before and after working with SDI. It shows a fairly consistent pattern of improvement in terms of skills, knowledge and capability.
- 7.52 Not all of this change can be attributed to SDI. Companies were asked how influential SDI support had been on achieving these changes. Sixty three percent considered SDI support to have been very or fairly important compared with 11% who considered it unimportant, while 25% did not know.

Figure 7-1: International capability scores before and after working with SDI:



Source: SQW internationalisation survey 2009

Outputs

Businesses were asked to report the “achieved” and “expected” effects resulting from working with SDI. Expected effects are defined as being over the next three years.

- forty one percent interviewed have achieved sales in *new* overseas markets and 80% expect to achieve this as a result of the internationalisation activities
- more than half expect the value of the company to increase (27% believe that this has already happened)
- sixteen percent have invested more in R&D and this rises to 30% when those that expect greater investment are included.

- 7.53 There are also impacts on output per employee (labour productivity) which reflects increased sales but a proportionately lower increase in employment (Table 7-28). To date 40% noted no impact on their business, but this fell to 11% that expected there to be no effect at all either to date or in the future.

Table 7-28: Percentage of businesses reporting actual and expected outputs as a result of working with SDI

Outputs	Actual	Actual and expected within 3 years
Sales in new overseas market	41%	80%
Increase in the overall value of the company	27%	56%
Increased sales in existing overseas markets	27%	54%
Increased domestic sales	14%	31%
Increased investment in R&D	16%	30%
Improved ability to attract skilled staff	15%	28%
Improved output per employee	14%	26%
Increased income from intellectual property	11%	25%
Cost savings	16%	25%
Achievement of new quality standards (ISO, industry standards)	12%	24%
Raised new investment funds	6%	23%
No answer/no effect	40%	11%

Source: SQW internationalisation survey 2009

- 7.54 Again, some of these outputs *may have been achieved without SDI*. Around half the sample indicated that they could have achieved “some” of the outputs without assistance, and 16% indicated that they would have achieved “all” the outputs otherwise. There is very little difference between DRM and non-DRM companies (Table 7-29).

Table 7-29: Would you have achieved these benefits without SDI?

	DRM	non-DRM	All
No, none of them	3%	8%	6%
Yes, some of them	51%	43%	47%
Yes, most of them	23%	20%	22%
Yes, all of them	16%	17%	16%
Not answered	6%	13%	10%

Source: SQW internationalisation survey 2009

Learning from exporting

- 7.55 As a result of the *international experience* supported by SDI, 49% considered that they had been exposed to new ideas. Among these 91% indicated that these ideas had been adopted by the firm and of these 81% believed that this had made the firm more competitive. This equates to 36% of the sample as a whole learning and adopting new ideas *and* it leading, in their view, to improved competitiveness (Table 7-30).

- 7.56 Just over half of those that had become more competitive as a result attributed this to improvements in how they approach their sales and marketing activities. Almost 30% had developed ideas for new products. Across the full sample this represents around 13% of all cases.

Table 7-30: Learning from exporting

As a result of the international experience supported by SDI, has the firm been exposed to any new ideas?	DRM	Non-DRM	Grand Total
No	46%	56%	51%
Yes	54%	44%	49%
If yes, has this knowledge or have these ideas been adopted by the firm?			
No	10%	7%	9%
Yes	90%	93%	91%
As a result of new ideas and learning has the firm become more competitive?			
Don't know	8%	10%	9%
No	12%	8%	10%
Yes	80%	83%	81%
Can you explain how?			
Sales and marketing			60%
Management			35%
New ideas for products			29%
Better use of capacity			21%
New processes			18%
New and more knowledgeable staff			12%

Source: SQW internationalisation survey 2009

Use of SDI in-market accommodation

- 7.57 The survey included eleven companies which used a virtual office service, incubator offices or meeting and training rooms overseas. Among the three that used the incubator facilities two had moved on to other premises in that country or region and one was still there. Of the five that used the virtual office service, three no longer operate in the market and one has moved into an incubator facility. Of the remainder that just used training facilities or meeting rooms two had since left the market and one was still active but without premises.
- 7.58 Where businesses have taken incubator space, the impacts are strong and from a relatively small sample, the firms indicate that they still have a presence in the market. The virtual office requires less commitment, however, and a relatively high proportion of those using it have left the market.

Deadweight

- 7.59 The results of the survey are fairly clear about the pattern of deadweight associated with the support. While only a small proportion would not have undertaken any internationalisation project at all without SDI support (3%) the majority consider the SDI support to have helped bring projects forward (45%), made them larger (12%) or made them more effective (15%). Twenty three percent of the businesses consider that the support made no difference to their international activity (Table 7-31).
- 7.60 **Additionality does not seem to be achieved through making non-international firms international, but in helping improve the scale, timing and effectiveness of what firms planned to do.** This is important in relation to the “ladder” of internationalisation support that will be complemented by the proposed *Smart Exporter* programme which focuses more on raising the awareness of internationalisation opportunities within the broader business base²⁹.

Table 7-31: Deadweight of international projects: responses

Category	% of responses
Not developed international trade at all	4%
Paid someone else for the services we got from SDI	6%
Been LESS LIKELY to undertake an international project	6%
Undertaken a DIFFERENT internationalisation project	6%
Undertaken an internationalisation project, but ON A SMALLER SCALE	14%
Undertaken an internationalisation project, but LESS EFFECTIVELY	15%
Undertaken an internationalisation project but it would have taken LONGER	43%
Undertaken the SAME ACTIVITY AT THE SAME TIME	24%

Source: SQW internationalisation survey 2009

- 7.61 The effect of deadweight is captured within the business estimates of SDI’s impact, but SE are also interested in a single deadweight figure. To calculate this we have applied a series of assumptions to each case based on their response to this question in the survey. The assumptions about deadweight are set out in Table 7-32.

²⁹ Smart Exporter has the objective of broadening business engagement in internationalisation. It will offer more light touch support to the broader base of businesses to contribute to Scotland’s export performance

Table 7-32: Deadweight assumptions for international projects

Category	Deadweight	Comment
Not developed international trade at all	0%	All additional
Paid someone else for the services we got from SDI	75%	A reasonable chance that they would not find similar services or would not have taken any action as a result
Been LESS LIKELY to undertake an international project	50%	Based on case studies, there is often a good chance that without the support action would not have been taken – assume 50%
Undertaken a DIFFERENT internationalisation project	75%	A reasonable chance that they would not have taken any action
Undertaken an internationalisation project, but ON A SMALLER SCALE	50%	Assumed that without support projects would have been around half the size
Undertaken an internationalisation project, but LESS EFFECTIVELY	75%	Usually combined with other responses, but assume that these would be a quarter less effective
Undertaken an internationalisation project but it would have taken LONGER	50%	From case studies, indication is that if delayed there would have been risks of it happening at all
Undertaken the SAME ACTIVITY AT THE SAME TIME	100%	All deadweight

Source: SQW internationalisation survey 2009

- 7.62 Applying these assumptions to each case gives an overall, average deadweight of 60% (40% is assumed to be additional).

Impact of internationalisation support

- 7.63 Table 7-33 summarises the scale of impact that businesses reported against a series of performance criteria. There is a significant difference between the “to date” impacts and the “expected” impacts which reflects the view that some of the support has yet to take effect. **The survey also found that 60% of businesses expect the benefits to last for more than three years and 35% expected them to last longer than 10 years.**
- 7.64 The second point is that the impacts reported are much stronger on exports and turnover than employment, likely to increase labour productivity. Even so the employment effects still appear to be significant.
- 7.65 **The support has, or is expected to, impact on the export sales of 74% of the businesses interviewed (in 43% of cases this impact is considered to be “major”).**

Table 7-33: Summary of achieved and expected impacts as a result of working with SDI

	Major impact		Minor impact		No impact / insignificant	
	To date	Including expected	To date	Including expected	To date	Including expected
Export sales	12%	36%	31%	38%	54%	26%
Turnover	8%	34%	34%	41%	55%	26%
Employment	2%	23%	16%	41%	76%	36%
Other international income	5%	-	9%	-	74%	-
Profit	6%	-	28%	-	63%	-
Productivity	4%	-	16%	-	75%	-

Source: SQW internationalisation survey 2009

- 7.66 Analysis of the impacts by type of assistance provides some evidence that it is the *preparation* work that is more likely to deliver impacts (Table 7-34).
- 7.67 **Fifty eight percent of those engaged in some form of preparation support reported an actual, or expected, major impact on exports compared with 32% of those receiving support to attend exhibitions or travelling on missions.** Generally, the more strategic work appears to offer stronger impacts, although the sample sizes are much smaller.
- 7.68 **As important is the correlation between DRM companies and stronger impacts** and these companies were also more likely to participate in the more strategic elements of support.
- 7.69 Finally, Table 7-34 also shows the proportion of companies that reported actual or expected major impacts by sector. Although sample sizes are again small it shows some interesting differences. Energy, food and drink and DMET sectors were more likely to report stronger impacts while manufacturing, education and life sciences were less likely.

Table 7-34: percent reporting a major impact on export sales to date or in future by types of support

Category	% reporting major effect to date or in future	Sample size
Preparing	58%	26
Accommodation	45%	11
Strategy	45%	42
Mentoring	43%	7
Market support	43%	81
Overseas missions	32%	172
All DRM companies	42%	124
Non-DRM companies	23%	126
Energy	50%	36
Food and drink	42%	33
DMET	40%	45
Business services	33%	36
Other	24%	45
Education	16%	19
Life science	14%	14
Manufacturing	14%	22
All	32%	250

Source: SQW internationalisation survey 2009

- 7.70 There is a pattern that indicates that the profile of the companies that report the strongest impacts are those that have received more strategic support, are in the energy or food and drink sector and are working with SE as DRM companies. It raises an important question as to why these DRM companies appear to benefit more significantly than non-DRM ones.
- 7.71 A further analysis of the results also demonstrates how the different types of assistance build on each other. **Of the businesses that had received only one type of support, 23% reported a major impact (to date or in the future) compared with 44% for those businesses that had received more than one type of support.**
- 7.72 Target markets and the strength of impact are shown in Table 7-35. This relates those that have achieved, or expect to achieve a major impact, with the markets that the SDI support was intended to help them enter. North America and Africa are strongest, with the emerging economies Russia, China and non-EU Europe all appearing weaker.

Table 7-35: Target markets and proportion of cases reporting actual or expected major impact

	% reporting major effect to date or in future	Sample size
Canada	48%	29
Africa	45%	29
USA	40%	99
England / Wales / Northern Ireland	38%	29
Indian subcontinent (including India, Pakistan & Sri Lanka)	38%	29
Japan and South East Asia (including Taiwan & Hong Kong)	38%	61
Australia and the Pacific	38%	26
Rest of European Union (other than UK)	37%	82
Middle East	37%	49
South America	33%	27
China	26%	43
Other European	22%	60
Russia or Central Asia (including Turkey)	22%	27

Source: SQW internationalisation survey 2009

Internationalisation conclusions

- 7.73 **Overall, 89% of the businesses supported considered the engagement with SDI to have been worthwhile.** Thirty five percent considered working with SDI to have had a positive impact on international revenue *to date*. If those that expect a positive effect in the future are included this rises to 77% of those assisted.
- 7.74 The survey also provides evidence on the number of cases where new ideas have been developed as a result of gaining international experience. **Thirty six percent of cases had become more competitive as a result of new ideas developed through international activities.**
- 7.75 **Sixty per cent of those interviewed had made or planned to make changes of some kind to their business as a result of working with SDI.** As a result the survey shows they are in a demonstrably better position to develop their international activities than before the interventions.
- 7.76 The analysis of those reporting major impacts shows that they are more likely to have been engaged in preparation or internationalisation strategy activities with SDI, more likely to be DRM companies, more likely to be in the energy or food and drink sectors and more likely to be targeting North America.

8: Inward investor survey

- 8.1 This section sets out the results of the direct survey of a sample of inward investor businesses that have been supported by SDI. These are based on telephone interviews carried out specifically for the purposes of this evaluation.
- 8.2 The initial database contained 353 cases supported by SDI. After excluding duplicates this was reduced to 328 cases. The interviewers attempted to call each of these companies. Based on the responses we estimate that:
- 210 are still trading
 - 58 are no longer trading
 - 60 could not be contacted.
- 8.3 The number of assisted cases assumed to make up the population is therefore 265. The 58 that are no longer trading in Scotland were identified through attempts to contact them directly, internet searches and subsequently checked by SDI. There were 60 companies that the interviewers were unable to contact. Our conservative estimate, for the purposes of constructing a population of assisted companies and based on discussions with SDI, is that perhaps half of those that cannot be found are no longer trading.
- 8.4 As a guide to whether this level of market exit is typical we can look at analysis carried out by Wren³⁰ which found that of 265 plants commencing in foreign ownership in the North East of England in 1985-98, 50 had exited by the year 2000 (19%) and 118 had exited by 2007 (45%). Wren also notes the acceleration in the loss of businesses post 2000 – the period covered by the SDI analysis. The figures indicate that in the North East 32% of these foreign-owned businesses trading in 2000 were no longer trading in 2007. This equates to 5% of the companies exiting the market each year.
- 8.5 Half the companies that SDI has worked with were already operating in Scotland prior to 2001/02 with the start dates of the others distributed fairly evenly across the following six years. Using an exit rate of 5% a year indicates that from the population of 328 cases we would expect to see around 20% or around 60 companies exiting over this period. This suggests that the level of known exits identified here is not unusual.
- 8.6 The list of the 60 companies that could not be contacted has been passed to SDI to follow up. We recommend that work is undertaken to find out what has happened to these companies and that future monitoring should be done to ensure that SDI is able to report on and learn from these projects.

³⁰ Foreign Direct Investment and Prospects for the Northern Region, Jonathan Jones (Newcastle University Business School) & Colin Wren (SERC, Newcastle University Business School), August 2008

Sample

Survey sampling error

- 8.7 The inward investment survey has a much smaller sample than the internationalisation survey, which means that the margin of error is larger. **The sample of 55 from a population of 265 gives a margin of error of +/- 12%**³¹. In interpreting the results we should put less weight on smaller differences between results. Where the results are disaggregated for different groups, the margin of error increases as the effective sample size is reduced and more care needs to be taken with these.
- 8.8 The population is shown in Table 8-1 based on summary SIC codes. Although this shows a good spread of cases within the sample, it is difficult to compare with the population; there were SIC codes for 215 from the database. With a relatively small sample it is more difficult to ensure it is fully representative. However with the exception of oil and gas extraction, where our sample classified more businesses as engineering, the coverage is good. Overall, within the sample of 55, 26 are manufacturing businesses and 28 in the service sector with one construction company (Table 8-1).

Table 8-1: SIC-based classification (number of cases)

	Sample		Population	
Business services	5	9%	26	12%
Chemicals	7	13%	14	7%
Other manufacture	7	13%	34	16%
Food and drink	1	2%	7	3%
Oil and gas	1	2%	14	7%
Engineering	10	18%	35	16%
Construction	2	4%	2	1%
Transport	2	4%	13	6%
Computing	8	15%	18	8%
Retail/wholesale	1	2%	7	3%
Finance	5	9%	20	9%
R&D	4	7%	17	8%
Education	1	2%	2	1%
Other services	1	2%	6	3%
Grand Total	55	100%	215³²	100%

Source: SQW inward investment survey 2009 -328 cases

³¹ This margin of error is based on a 95% confidence level and for responses that are split 50:50. The margin of error falls where responses are less evenly divided e.g. 75:25.

³² Some companies in the population are not categorised by SIC

- 8.9 The sample is also reasonably representative by geography with most cases split between the West and East of Scotland. There are smaller numbers in Aberdeen, Highlands and Islands and Tayside although none were from the South of Scotland (Table 8-2).

Table 8-2: Geographies based on SDI inward data

Region	Population	Sample
Aberdeen City & Shire	7%	4%
East of Scotland	28%	24%
Highlands and Islands	5%	11%
South of Scotland	2%	0%
Tayside	6%	15%
West of Scotland	52%	47%
Cases	286³³	55

Source: SQW inward investment survey 2009

- 8.10 Almost half of the sample was engaged in manufacturing or production from the site and 27% were engaged in R&D (Table 8-3). There were few examples of distribution or sales and marketing operations. The proportion of businesses in the manufacturing sector was particularly marked.

Table 8-3: Operations undertaken at this site

	% of sample
Production or manufacturing	44%
Research and development (including software and IT)	27%
Service delivery	20%
Distribution	7%
Sales and marketing	5%
Training and product support	2%

Source: SQW inward investment survey 2009

- 8.11 Most inward investment in the sample is made by companies from the USA, followed by the rest of the UK and the EU, with roughly 20% in each. The sample reflects the population fairly accurately although with a few more examples from Japan and South East Asia, Canada and others (Table 8-4).

³³ Some companies in the population are not categorised by geography

Table 8-4: Country/region where company is headquartered

Country region of HQ	% of sample	% of population
USA	27%	29%
England / Wales / Northern Ireland	25%	28%
European Union (other than UK)	24%	28%
Japan and South East Asia (including Taiwan and Hong Kong)	13%	7%
Canada	5%	4%
Other	6%	4%

Source: SQW inward investment survey 2009

Motivation for investing in Scotland

- 8.12 The reasons for investment in Scotland were divided evenly between serving European markets, being close to customers who have also invested in Scotland and being close to centres of research. The strengths of Scotland are well known and the survey identified the main ones as the quality of the workforce, work ethic and cultural affinity (presumably with England and the US where most investment is from see Table 7.5). The importance of the location is interesting and was the most important reason for several of the businesses investing in Tayside (games and stem cell research), Aberdeen for oil and gas investment and in other cases it related to golf or transport where the business would serve existing customers.

Table 8-5: Factors that were “very important” in investing in Scotland

Factors that were “very important” in investing in Scotland	% in sample
Knowledgeable and skilled workforce	56%
Workforce with strong work ethic	38%
Cultural affinity	31%
Important location for businesses in your sector	29%
Reputation for research and innovation	29%
International transportation and logistics	27%
Political and regulatory environment	27%
Sites and premises	25%
Environment for protection of intellectual property	22%
Ethical approach to business	20%
Stable economic environment	20%
Gateway to markets in Europe	18%
English spoken	16%
Communications infrastructure	13%
Grants	13%

Source: SQW inward investment survey 2009

- 8.13 One quarter of the businesses interviewed work largely independently of their parent company (Table 7-6). In 5% of businesses “most” decisions were made outside Scotland.

Table 8-6: Level of autonomy

Scale	% of responses
5 - business in Scotland works largely independently	25%
4	31%
3	25%
2	9%
1 - most decisions are made outside Scotland	5%
Not answered	4%

Source: SQW inward investment survey 2009

- 8.14 Finally, 23 of the 55 cases were already present in Scotland prior to the SDI support covered within the time frame of the evaluation.

Barriers to investing in Scotland

- 8.15 The barriers reported by inward investors are analysed in Table 8-5. The most commonly identified barrier was recruitment of staff. The second, identifying local suppliers, indicates that there is an important role for SDI in embedding these investments in the local economy. It is surprising, given the additional trade that this could generate locally, that this should be

seen as a barrier. It is possible that this could also include some concern about quality of local supplies. Identifying local suppliers was more likely to be a barrier for firms arriving in Scotland during the period of the evaluation (from 2001) rather than for investors who were already in Scotland.

Table 8-5: Barriers encountered investing in Scotland

Factor indicated as a barrier	Firms arriving in Scotland 2001 onwards	Firms in Scotland prior to 2001	All
Recruiting suitable staff	24%	32%	27%
Identifying local suppliers	31%	16%	24%
Finding suitable sites and premises	17%	12%	15%
Understanding and implementing legal requirements such as company registration or tax	14%	12%	13%
Retaining staff	14%	8%	11%
Protecting your intellectual property	10%	12%	11%
Obtaining visas	14%	0%	7%

Source: SQW inward investment survey 2009

- 8.16 Over time the responsibility of the Scottish sites has clearly changed (Table 8-6). Half of the businesses have grown since arriving in Scotland and only 7% have contracted. The range of products they offer has grown in 65% of cases and in half of the cases the amount of R&D being done has increased from the original plan at the time of investment. Although the autonomy of these plants has typically remained constant since their initial investment, almost half have developed in scale and scope since investing in Scotland. A majority have increased product ranges, increased R&D investment and broadened their responsibility for geographical markets.
- 8.17 This provides a more dynamic view of inward investment than is usually available through snapshot surveys. Most of these businesses are employing more people than planned, doing more R&D and have broadened their product range. It seems likely that the scale of any benefits based on original plans would have been exceeded. However, if it would be helpful to know more about the investment cases that are most successful, then they would require to be monitored over time.

Table 8-6: Has the role of this site changed from the original plan at the time of the investment

Development of site over Site	Grown	No change	Reduced
Size	52%	43%	7%
Level of autonomy	19%	69%	13%
Range of products services offered	65%	30%	6%
R&D	50%	44%	6%
Markets	56%	33%	9%
Geographic responsibility	48%	48%	4%

Source: SQW inward investment survey 2009

SDI support

- 8.18 Around half of all the cases supported related to the location of new operations in Scotland with others relating to safeguarding activity (40%) and expanding sites (38%). In many cases the support was intended to provide a combination of these (Table 8-7).

Table 8-7: What was the support for? (this can include more than one element)

Purpose	% of cases
Locating new operations in Scotland	55%
Safeguarding activity at an existing Scottish site	40%
Expanding an existing Scottish site	38%
Setting up a research agreement	9%
Setting up a business partnership	15%
Other (specify)	15%

Source: SQW inward investment survey 2009

Types of assistance

- 8.19 Table 8-8 shows the types of support received that were considered important and the percentage of the sample reporting each as the single most important part of SDI's package of support. The majority (58%) identified direction to public sector financial assistance as being important and 40% indicated this as the single most important element. Information provision was generally considered important but rarely the most important. Help to find sites and premises and developing business cases were also important parts of the support provided. The links to contacts at Universities and research centres were also valuable for a relatively high proportion of companies.

Table 8-8: All support considered to be important and the single most important

Support provided	% considered important or very important	% reporting it as single most important
Directed you towards public sector financial assistance	58%	40%
Providing information that you would otherwise have been unable to find	36%	6%
Help to find sites and premises	33%	15%
Help in preparing a business case to secure investment	29%	10%
Help to identify contacts at universities or research centres	20%	10%
Help with recruitment	18%	4%
Help to access political support	16%	2%
Help to identify customers, suppliers, business partners	15%	8%
Help with planning applications or other permits	15%	2%
Help with understanding local legal or tax requirements	13%	0%
Regional tour	11%	0%
Tailored presentation or report	9%	0%
Presentation to your company in a group with other companies	9%	0%
Brochures, booklets or other 'off-the-shelf' publications	7%	0%
Help with material or presentation for you to give to your management	7%	0%
Other (specify)	4%	4%

Source: SQW inward investment survey 2009

Satisfaction

8.20 Table 8-9 shows the proportion of companies that were satisfied or very satisfied with various aspects of the support. There are three where the percentage falls below 70%: the usefulness of the contacts made, practical support on sites, premises recruitment etc. and aftercare service. Some attention should be paid to these, specifically around practical support and aftercare. Given the importance of maintaining these investments aftercare is extremely important, while the practical help (which includes recruitment) was reported earlier as being one of the most significant barriers that companies faced. It could be that in these more practical cases, scores are more neutral because SDI may not provide this advice directly.

Table 8-9: Proportion reporting that they are **satisfied or very satisfied** with support

Element of support	% Satisfied or very satisfied	% unsatisfied or very unsatisfied
Quality and relevance of information	80%	5%
Usefulness of advice	80%	4%
Usefulness of contacts made	69%	11%
Experience / skills of advisors	76%	7%
Understanding of your business needs	71%	9%
Practical support on sites, premises, recruitment etc	53%	25%
Quality of aftercare service	56%	15%

Source: SQW inward investment survey 2009

Results

- 8.21 As a result of SDI support just over half of the cases reported that they have safeguarded activity, but SDI support was also reported to have supported new premises, employment, training and new R&D activity. Table 8-10 shows the breakdown of activity related to the support. The second column shows the proportion of businesses indicating that SDI support has been “important” or “very important” in the achievement of the results. This closely follows the first column. The influence of the support is far higher in relation to actually securing the investment than in encouraging the use of suppliers where this has occurred. A much higher proportion considered SDI to be important in increasing collaborative R&D in Scotland.

Table 8-10: Results of SDI supported projects

Actions	% of sample achieving	% of firms that considered SDI support to be important or very important in achieving this
Employment/activity safeguarded	56%	84%
Set up new premises or plant in Scotland	55%	87%
Increased the investment at an existing site	53%	79%
Increased the training at this site	44%	67%
Improved access to Scottish universities or research organisations	38%	52%
Increased the R&D activity at this site	33%	67%
Increased the firm’s use of Scottish-based suppliers	25%	36%
Increased the firm’s involvement in collaborative R&D in Scotland	25%	57%
No further activity	9%	0%
Acquired or merged with an existing firm in Scotland	4%	0%

Source: SQW inward investment survey 2009

Innovation

- 8.22 The proportion of companies conducting R&D internally is high (64%) with a fifth undertaking no R&D at all. A quarter of the sample reported that SDI has had an effect on increasing the amount of R&D that they do.

Table 8-11: R&D activity

Type of R&D	% of sample
Conduct R&D internally	64%
Product development internally	51%
Commissioning external R&D	18%
Commissioning external product development	5%
No R&D and product development activities	20%

Source: SQW inward investment survey 2009

- 8.23 A series of questions were aimed at identifying the potential wider impacts of attracting and retaining these businesses. There is a high level of innovation; 35% of these inward investors are producing “new products described as new to the world” (Table 8-12). The survey does not allow more detail to be captured, but case studies could usefully provide examples of these and how they have been adopted.

Table 8-12: Does this Scottish site deal with any significantly new products that have been introduced in the last three years?

Response	%
Yes, completely new to the world	35%
Yes, new to your industry or sector	13%
Yes, new to the UK	7%
Yes, new to your business	7%
No	31%
Don't know	7%

Source: SQW inward investment survey 2009

- 8.24 In addition 50% are using business models, ways of working or technical processes at their site that are considered new to Scotland. Generally, higher levels of innovation and R&D are considered more likely to generate spillover effects.

Suppliers

- 8.25 The survey asked businesses to report the proportion of supplies, by value, from different countries. The average values show that Scotland remains the main source of supplies for most businesses, followed by the rest of the UK. On average the businesses interviewed reported 38% of their inputs purchased from outside the UK. This will vary significantly by sector and by size of operation.

Table 8-13: What proportion of your supplies, by value, comes from the following geographical areas?

Origin of suppliers	Average values
Scotland	37%
Rest of the UK	26%
Rest of Europe	14%
Rest of the world	22%

Source: SQW inward investment survey 2009

- 8.26 There was some evidence from the survey that these inward investments were having some “spillover” effect on suppliers. They believe that they have contributed to raising standards among their suppliers, introducing new technologies and improving their productivity. These results are subjective but they point toward positive spillover effects that would be interesting to understand more fully.

Table 8-14: Has your presence in Scotland influenced the behaviour of your suppliers in Scotland in any of the following ways

Effect on suppliers	% of sample
Raised quality standards	27%
Introduced them to new technologies	29%
Improve their productivity	25%
No substantive effects	44%

Source: SQW inward investment survey 2009

- 8.27 SDI has also played some role in encouraging greater use of suppliers. Twenty percent of the sample considered that SDI had encouraged them to use Scottish suppliers more than they would have otherwise. For new investors, rather than those expanding operations this will be more effective, particularly given the early finding that identifying suppliers has been a barrier.

Table 8-15: SDI effect on use of suppliers

	% of sample
Don't know	9%
No impact	62%
No, but we gave Scottish-based suppliers greater consideration	9%
Yes, we use more than we would have otherwise	20%

Source: SQW inward investment survey 2009

Exporting

- 8.28 Seventy per cent of the sales of these companies went outside Scotland, with over 40% made outside the UK (Table 8-16).

Table 8-16: Sales destination

	Average % of sales
Scotland	31%
Rest of the UK	21%
Overseas	43%
Average proportion of sales made to affiliates	16%

Source: SQW inward investment survey 2009

Customers

- 8.29 Seventy three percent considered that their site produced goods or services that could be described as 'hi-tech' or 'highly innovative' to Scottish customers, business or otherwise. There is the potential for inward investors to help improve productivity within Scottish businesses through access to improved intermediate products, higher quality goods and services or better value good than would be available otherwise. Table 8-17 indicates that the businesses surveyed believe that their presence in the market is having an impact on customers through a number of routes.
- 8.30 Thirty per cent believed that their presence in the market had encouraged Scottish customers to introduce new technologies. These potential spillover effects through suppliers, competitors, customers and networks are difficult to measure within a telephone survey but the survey is suggesting significant percentages. The case studies would provide a better method of understanding how these effects take place.

Table 8-17: Impact on customers

Impact on customers	% of sample
Encouraged them to introduce higher quality standards	33%
Encouraged them to introduce new technologies	31%
Reduced their costs	27%
Increased their costs	5%
No substantive effects	20%
No Scottish customers	16%
Other (specify)	2%

Source: SQW inward investment survey 2009

Suppliers

- 8.31 Around 25% of inward investors reported that their use of Scottish suppliers has had a positive effect on the supplier's own use of technology, raising quality standards and had also raised productivity. **As a result of working with SDI, 17% of these businesses were using more Scottish suppliers than they would have otherwise.** The fact that this was also given as a significant barrier for investors suggests that there is scope for this influence to be increased.

Deadweight

- 8.32 The survey collected on the views of businesses on what would have happened without SDI support. This includes both financial support and non-financial advice and assistance. A third of the businesses considered the SDI support to have made no difference to their decision to locate in Scotland (Table 8-18), while 16% would not have been in Scotland at all. The other cases considered SDI support to have helped accelerate their investment or increased its scale. Smaller proportions reported increases in R&D activity and skills.

Table 8-18: What would have happened without SDI support?

	%
The firm would not be operating in Scotland at all without SDI support	16%
The activities of the firm in Scotland would have taken longer to start	20%
This activity would be less likely to be taking place in Scotland	9%
Activities would have been on a smaller scale in Scotland	35%
Activity in Scotland would have involved less R&D activity	5%
Activity in Scotland would have involved lower skills	4%
The support made no major difference to our decision to locate operations in Scotland	33%

Source: SQW inward investment survey 2009

- 8.33 The companies in the sample currently employ just over 19,000. From the survey these companies estimate that without SDI support there would be 3,438 fewer jobs (18%).
- 8.34 It is only possible to produce an estimate of deadweight for the inward investment cases that have set up new plants (30 cases). In each case the level of deadweight was probed by asking questions about how much faster the plant was able to set up as a result of the support, the increased scale etc. These responses have been used case by case to calculate the averages. The assumptions in Table 8-19 were applied.

Table 8-19: Inward investment deadweight assumptions

	Deadweight
The firm would not be operating in Scotland at all without SDI support	0%
The activities of the firm in Scotland would have taken longer to start	Business responses have been used and assume 80% deadweight for one year advance and 60% for two years
This activity would be less likely to be taking place in Scotland	Business responses have been used – 25% deadweight for very influential, 50% for some influence and 100% for negligible/no influence
Activities would have been on a smaller scale in Scotland	Business responses have been applied directly depending on percentage reported by interviewee
The support made no major difference to our decision to locate operations in Scotland	100% deadweight

Source: SQW inward investment survey 2009

- 8.35 Using these assumptions gives average deadweight of 56%. This is the average for each case. To relate this to the sample, deadweight values were applied to the gross employment at the

plant. This gives a deadweight figure of 48% (or 52% of employment was attributed to SDI support).

- 8.36 **Overall, 73% of the businesses considered SDI to have been fairly or very important in ensuring the business's *continuing presence* in Scotland.** This includes 39% who said it had been very important.

9: Economic impact

Introduction

- 9.1 This section is based on the results of the two business surveys and uses responses to gauge the contribution that SDI assistance has made to company performance. The methodology to estimate economic impact is based on businesses' own views of the *difference* that SDI support has made to their performance.
- 9.2 The approach follows Scottish Enterprise guidance and is widely used as part of the Impact Evaluation Framework (IEF) which forms the basis for assessing the effectiveness of business development support for the Regional Development Agencies. Throughout the project the questions used, the data collected and analysis have been discussed in depth with the SE research and evaluation team.
- 9.3 This approach asks businesses to quantify the effect of SDI support in terms of the additional sales and/or employment. It assumes that the businesses are in the best position to judge what would have happened without the support (the counterfactual). By aggregating these estimates across the sample provides an estimate of the changes in output that can be attributed to the support. Further adjustment is made where this additional activity is considered to displace sales or employment that would have accrued to other Scottish businesses. These estimates are therefore based on the judgement of businesses and individual cases may well over or under estimate the effects, although collectively it provides a guide to the scale of impact achieved. Importantly using a similar approach to other SE evaluations means that the results can be compared with other forms of business development intervention.
- 9.4 The analysis is intended to supplement the econometric analysis which provides a more robust counterfactual by "matching" assisted and unassisted companies and also uses the ONS financial data which cannot be captured as accurately within a telephone interview.

Reliability of data

- 9.5 The reliability of these impact estimates is greater where the support is more recent, where the interviewee has a good knowledge of the support and where the effects are simpler and more direct (e.g. directly leads to new sales). The internationalisation support has been fairly recent, the interviewees are likely to have been directly involved in the support and the impacts can be measured directly in relation to additional exports. This means that while the impact estimates rely on businesses' own estimates, the results are likely to be more reliable.
- 9.6 The estimates for the inward investment survey use a similar approach, basing the assessment of impact on the additional employment that the businesses attribute to SDI support. In this case, however, the conditions mean that this is likely to be more difficult estimate. The support was made up to nine years ago making it harder for interviewees to recall accurately and there will be fewer people employed who will recall it. Over time the effects and the

perceptions of the effects of the support will change as will other factors such as subsequent investments and market conditions, and employment will have changed over the period.

- 9.7 While the analysis of the survey questions provides a good indication of the businesses' views of the support and its effects, *quantifying* the impacts over such a long period is more difficult. Figures have been constructed for SE (with appropriate caveats). However, for the reasons above these figures are considered to be less reliable than those for internationalisation.
- 9.8 If more robustness is required, it would be necessary to carry out a detailed review of individual inward investment businesses over the period. The scale of these investments in a lot of cases would merit individual impact studies.

Internationalisation economic impact

- 9.9 Where businesses reported that the support had a positive impact they were asked to quantify this. Specifically, they were asked for export figures in the last three years, the level of change and how much higher or lower this would have been *without SDI's support*. We know that the majority of companies would be exporting anyway and this provides a measure of the *marginal effect* of the support on the total value of exports. **Unlike the econometric analysis reported earlier these estimates are based on the businesses' judgement of how much additional activity can be attributed to the support.**
- 9.10 Care has been taken that where businesses have previously reported no significant impact, the effect of the support is assumed to be zero. Where there is an impact, but it cannot be quantified, we have effectively used the average value of those that have provided an estimate. Among businesses that were able to provide an estimate, half responded that between 1% and 10% of their increase in exports could be attributed to SDI support.
- 9.11 The analysis found that the DRM companies in the sample were more likely to report major and minor impacts and more likely to attribute increases in exports to SDI support. Because the sample slightly over represents the proportion of DRM companies, the data has been weighted to represent the population. Separate estimates for the average DRM and non-DRM companies have been calculated and then applied to the population.
- 9.12 On average (across all cases) the *annual* value of additional exports attributed to SDI support was:
- £54,000 for DRM companies
 - £14,000 for non-DRM companies.
- 9.13 Within the sample, businesses estimate that the impact on exports, attributed to the SDI support, was £20.9 million or £101,000 per business assisted. This is the aggregate effect over three years, reported to date.
- 9.14 Businesses found it much harder to quantify the effect on turnover separately from international trade. The data that was provided gives an average value per business slightly higher than the export figure. However, given the more limited number of observations it is

more prudent to assume that the increases in export sales represent a direct increase in turnover.

- 9.15 Although there are a number of cases which involved international joint ventures or acquisition which may not generate exports, there were only two cases that reported an impact on international income but no export impact. Neither of these cases was able to quantify the effect. The impact to date of this is likely to be relatively modest compared with the impact on exports and is not included in the analysis.

Displacement

- 9.16 The survey focuses on product market displacement. Using SE's standard approach, businesses were asked to indicate where their competitors are based. Although this provides some sense of displacement for *all* sales, we are more interested in displacement for the marginal exports that are stimulated through assistance. Businesses trading mainly outside Scotland report that around a quarter of their competitors are based in Scotland. Where higher values (for all sales) were reported these have been reduced to 25% to reflect the fact that we are concerned only with the marginal exports. The displacement factors have been subtracted from the sales impact case by case.
- 9.17 Applying this case by case reduces the average value of additional exports per business by £90,300 (cumulative over three years), a reduction of 11%.

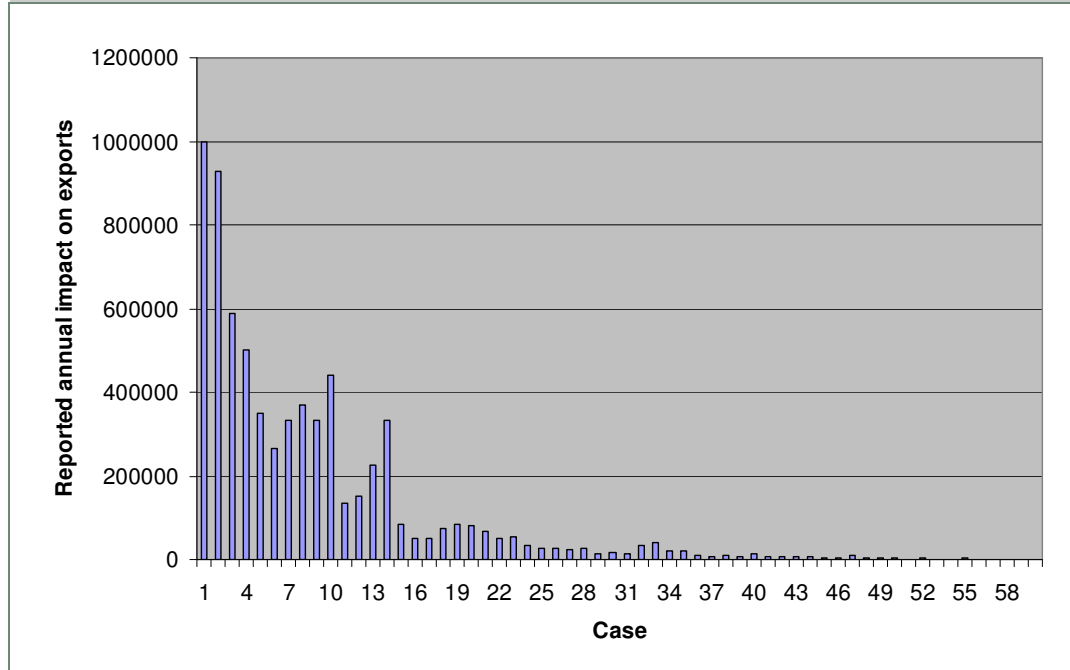
Leakage and substitution

- 9.18 The analysis should also include consideration of leakage and substitution. Leakage occurs where the benefits accrue to businesses outside the interventions target area. We have assumed that all additional sales are secured by companies in Scotland. It could be argued that a proportion of the profit would subsequently be distributed more widely, but this would require a more detailed analysis of ownership. Substitution occurs where the intervention causes the business to replace an unsupported activity with a supported one. In this analysis we have assumed that the additional export sales add directly to turnover rather than being generated at the expense of domestic sales. This approach was borne out by the case studies and agreed with SDI and SE.

Distribution of benefits

- 9.19 The distribution of the reported impact that SDI has made to individual company annual export values is shown in Table 9-1. The average value is just over £100,000.

Figure 9-1: Distribution of reported benefits



Source: SQW internationalisation survey 2009

Extrapolating for the population

- 9.20 Between 2005/06 and 2008/09 there have been 2,370 companies assisted. Over this time a number will have ceased trading and could not have been interviewed. Based on an analysis of the telephone calls made in setting up the interviews around 6% were found to have closed. If this is true of the population, the number of live cases would be 2,228.
- 9.21 The biggest determinant of the scale of impact reported is whether or not businesses have DRM status. To allow for this, separate estimates of the average net impact for DRM and non-DRM businesses have been used and applied to the appropriate groups in the population. This gives a net estimate of cumulative additional sales of £174 million for all supported businesses.
- 9.22 SE also requires estimates of the net contribution made to GVA. Within the context of the telephone interview it is not possible to capture reliable data on the components of GVA. This is best done using the Annual Business Inquiry financial data which allows ratios of turnover to GVA to be calculated, by sector. For each case we have used the appropriate ratio for its sector. From this an average GVA per business has been calculated and used to produce an estimate for the population. This gives a net additional GVA estimate over the three years of £75 million.

Anticipated future impacts

- 9.23 Businesses were asked to *forecast* the effect of SDI support on the level of exports in three years time using percentages of the current level of export sales. The results have again been weighted to reflect the balance of DRM and non-DRM businesses in the population.

- 9.24 Quantifying the value of these effects is difficult for businesses and the results can only provide a broad indication of the pattern of longer term effects. Whether or not these are realised will depend heavily on global markets and future terms of trade.
- 9.25 Although it has been argued that the outturn could be even stronger than anticipated, we feel it is more appropriate to assume that these figures include a positive optimism bias. There is though a difference between the expectation of *sustaining* some of the new business that has been achieved and generating *entirely new* activity in the future. These two groups can be analysed separately:
- **Sustaining sales generated from past support** - Most of the businesses that had reported an impact expected the effect of the SDI support to continue for at least three more years. Applying the estimates of these existing sales over the next three years gives a further £47 million of GVA (as a result of past support). Given that many of these businesses expect exports to increase over the next three years this is a relatively conservative estimate.
 - **Cases with no impact to date but expect future impacts** - in three years' time this group estimate additional GVA (as a result of past SDI assistance) to be around £27 million. Assuming that this growth is linear to the third year, this would represent a cumulative GVA, over three years, of £54 million.
- 9.26 While the first figure for the sustained impact of achieved sales provides a reasonable balance between some of the ambitious expectations of future growth and sustaining export sales, the figure for those that have had no impact to date but expect future benefits is more uncertain. We have assumed in the latter case that optimism bias is 50%, reducing the figure to £27 million. Taken together these figures give a total expected future GVA impact of £78 million.
- 9.27 Bringing together the impacts achieved to date and the expected future impact of past support delivered between 2005/06 and 2008/09 gives an overall estimate of an additional £150 million of additional GVA.

Multiplier effects

- 9.28 The Scottish Enterprise Additionality & Economic Impact Assessment Guidance Note states that economic benefits of an intervention are multiplied because of knock-on effects within the economy. The multiplier effects for different Scottish industries are provided by the Scottish Government. The Type II multipliers give a composite or combined value combining direct, supply linkage and income effects. For this analysis we have applied the relevant Type II GVA multiplier to the additional GVA estimated by each company in the sample. In the evaluation of SE's account management support, EkosGen provided an analysis of multiplier effects generated through DRM companies. They concluded that for this group a multiplier of 1.7 was appropriate. For consistency we have used a similar figure here.

Sensitivity

- 9.29 As is typical of most evaluations of this type the distribution of impacts shows a small number of high impact cases with a long tail of cases with lower impacts. The two highest impact cases report that annual exports were increased by between £900,000 and £1 million. Although high, this is not unrealistic given that this was between 5% and 10% of their annual sales. To demonstrate the sensitivity of the results we have also run the analysis excluding these two cases as well as with them.
- 9.30 Without the two highest cases, the results show that estimated total GVA impact to date falls from £75 million to £58 million and the ratio of expenditure to GVA falls from 4:1 to 3:1 without multiplier effects and from 7:1 to 6:1 with multipliers. The cost per job also rises slightly to £20,000 without multipliers and £11,000 with.

Resources

- 9.31 The estimated net investment in *internationalisation* provided by SDI was:
- 2006/07: £3 million
 - 2007/08: £5.5 million (the net cost after taking account of income of £0.581 million)
 - 2008/09: £5.7 million (the net cost after taking account of income of £0.962 million).
- 9.32 The figure for 2005/06 was estimated to be the same as reported in the following year, i.e., around £3 million. For 2009/10 we have allocated a third of the total (£6.3 million) to cover the period up to the time the list of client companies was provided (i.e., £2.1 million). This gives an overall total of £19.3 million.

Summary

- 9.33 The results relate to support provided from 2005/06 to 2008/09:
- an additional *cumulative* value of exports of £174 million (an average of £58 million a year to date – taking full account of displacement and deadweight)
 - net additional GVA of £75 million to date
 - the number of additional jobs (net) is estimated to be 1,100 to date
 - GVA per £ invested (excluding multipliers) to date is 4:1 and including multipliers 7:1
 - cost per job without multipliers to date is £18,000 and with multipliers is £11,000
- 9.34 Estimates of future impacts as a result of the support 2005/06 to 2008/09 are more uncertain but potentially add to the economic impact
- from the sample we estimate a further £72 million over the next three years (just under £150 million including GVA to date)

- including future estimates the GVA per £ invested doubles to become 8:1 without multipliers and 13:1 with multipliers
- there would be a further 380 jobs created on the basis of expected future effects³⁴
- including future estimates cost per job figures become £13,000 and £8,000.

³⁴ This is based only on the cases that reported no impact on exports to date but expected an impact in the future. These results are reduced by 50% to allow for optimism bias. The associated employment is calculated using the same ratio of export value to jobs found in the survey.

Table 9-1: Summary economic impacts - Internationalisation

Steps	Number	Comment
Sample size	250	DRM (50%) Non DRM (50%)
Population of cases	2,228	DRM – 847 (38%) Non DRM – 1381 (62%)
Impact to date		
Impact on sales attributed to SDI to date (after deadweight)	£195 million	Grossed up results are based on profile of DRM/non-DRM profile
Displacement	11%	Used to date and in future estimates
Substitution and leakage assumed to be 0	0%	Assumed that sales are generated by companies in Scotland and are additional to the firm
Net additional sales	£174 million	After allowing for additionality factors above
Net GVA over three years	£75 million	Ratio of sales to GVA for relevant sector for each case is used to produce GVA results
Additional jobs (net)	1,100	Based on survey responses
After multiplier	1,700	Assumed 1.7
SDI investment	£19 million	Based on net expenditure 2005/6 – mid 2009
Cost per job without multipliers	£18,000	Based on impact to date
Cost per job with multiplier to date	£11,000	Based on impact to date
GVA per £ invested (excluding multipliers) to date	4:1	Based on impact to date
GVA per £ invested (including multipliers) to date	7:1	Based on impact to date
Future impacts		
Expected GVA benefits in next three years from support already delivered	£72 million	Expected impact on GVA from businesses <i>already reporting additional sales</i> , over next three years (continuing benefits) is estimated to be £47 million.
Optimism bias (50%) applied to new sales in future (not sustained sales)		Expected impact on GVA from businesses that have not yet reported additional sales is £50 million adjusted for 50% optimism bias gives £25 million
Total GVA impact	£147 million	To date plus future
GVA per £ invested (including future but excluding multipliers)	8:1	Including both to date and future estimates
GVA per £ invested (including future and including multipliers)	13:1	Including both to date and future estimates
Cost per job without multipliers	£13,000	Assumes that future impacts create similar levels of employment as the “to date” estimates
Cost per job with multiplier to date	£8,000	Assumes that future impacts create similar levels of employment as the “to date” estimates

Source: SQW internationalisation survey 2009

Economic impact of inward investment

- 9.35 From the inward investment survey, the pattern of impact is strongest in employment where 57% considered the SDI support to have had an impact. The effects on profit and exports were considered to be weaker by the businesses (Table 9-2).
- 9.36 This includes several cases where it has made a significant difference. Interviewees found it much harder to provide estimates of the effect of SDI support on turnover. This is more difficult in part because of the global nature of these businesses and some will not report turnover for individual sites.

Table 9-2: Economic impact estimates for inward investment businesses

	Turnover	Employment	Profit	Exports	Productivity
Major impact	18%	33%	15%	15%	20%
Minor impact	27%	24%	29%	11%	31%
No impact / insignificant	51%	42%	51%	65%	47%
Not answered	4%	2%	5%	9%	2%

Source: SQW inward investment survey 2009

Quantifying the inward investment economic impact

- 9.37 Generating estimates for the inward investment support has been done to provide comparative figures for Scottish Enterprise, but for the reasons outlined earlier these have a number of significant caveats:
- each of these cases is likely to be very complex, involving large businesses and their activities over a long period of time. These complexities cannot easily be reviewed within the scope of a telephone interview and are more suited to case study analysis
 - assistance in some cases was provided up to eight or nine years ago. It is unlikely that interviewees will be able to recall accurately its impact now and in some cases may not have been in the same role that long ago.
 - the impacts are further complicated by changing performance and market conditions over the past eight years. For example, employment in several of these cases has changed significantly over this time, but the impact has to be based on existing activity.
 - finally, partly because of some of these complexities, businesses found it far easier to assess the impact of SDI assistance in terms of additional employment, rather than financial measures such as sales or productivity, which may be measured for the group or division rather than by site.
- 9.38 We have used the businesses own estimates of SDI's impact on employment as the best measure of additionality. Of the 55 cases interviewed, 31 (57%) reported that SDI's interventions had impacted on employment.

- 9.39 Within the sample these businesses estimated that 1,978 new jobs and 1,460 safeguarded jobs could be attributed to SDI currently, a total of 3,438. Allowing for the cases that reported a major or minor impact but could not quantify it, gives an average of 71 jobs per case.

Displacement

- 9.40 Displacement has been estimated using questions about the location of competitors and market conditions over the past three years. The reported additional employment is then adjusted in each case to reflect the amount of employment that has been at the expense of other businesses based on in Scotland. This is applied case by case and reduces the average jobs per business in the sample to 56, an overall displacement figure of 20%.
- 9.41 The jobs that are attributed to SDI support have lasted for a number of years given the period that has passed as many first received assistance. Although the survey could not cover changes in the pattern of employment over time, we understand that the associated employment is usually created shortly after funding has been awarded. From SDI records of the date when these cases were first assisted and assuming that the new and safeguarded employment has remained fairly steady since then which allows the calculation of the number of job years that have been supported. This has been done for each case. Within the sample this gives an estimate of 4,789 job years generated by the support in the eight years from 2001/02 (or 168 per case).

Labour market displacement

- 9.42 The estimates also do not include an allowance for labour market displacement. It is worth noting here that the large differential in labour productivity between foreign and Scottish-owned business means that the effect of labour market displacement is lower than if, for example, one Scottish job in a Scottish-owned firm displaced another.
- 9.43 Labour market displacement is not usually applied as part of SE evaluations and is not part of their guidance, or indeed guidance used for the regional development agencies in England.
- 9.44 To provide estimates of GVA that are based on full labour market displacement (assuming that the additional employment claimed is directly displaced from Scottish-based companies) we have used the difference in GVA per employee for Scottish owned companies and UK/overseas owned businesses.
- 9.45 On average, over the past five years the Scottish-owned manufacturing businesses have reported GVA of around 53% of the non-Scottish-owned values. For the service sector the equivalent value is 79%. We have used these percentages to recalculate the estimates of additional GVA.
- 9.46 The effect is to reduce the values to about a third of those where no labour market displacement is assumed. The estimate of additional GVA per £ invested falls from 8:1 to 3:1 without multipliers and from 11:1 to 4:1 with multipliers. With full labour market displacement there are no additional jobs assumed and so there is no cost per job figure.
- 9.47 This is clearly an extreme case (effectively this assumption is saying that these investments do not generate any new employment). In practice there will be some labour market

displacement associated with many inward investment cases, but this will vary depending on the state of local labour markets and the type jobs created. Estimating this requires more sophisticated modelling than could be undertaken within this assignment³⁵.

Extrapolating for the population

- 9.48 Extrapolating the results to the population of 265 supported cases that are still trading requires the sample to be representative. In practice, the sample slightly overestimates cases that received larger amounts of financial assistance. In the population the average total public grant is £0.88 million and in the sample, £1.03 million. There is a close correlation between the value of grants awarded and the number of jobs attributed to SDI by the businesses. The estimates have been adjusted to reflect the difference in average grant in the sample and population.

GVA

- 9.49 Because of the difficulties of gathering financial data directly on GVA from the businesses themselves we have used data from the ABI to construct employment/GVA ratios. It is important to differentiate between manufacturing and service sector jobs. Sixty percent of the net job years are in foreign-owned manufacturing which generates a significantly higher level of GVA per employee (£85,000 in 2007) than Scottish-owned manufacturers (£44,000)³⁶.
- 9.50 In the service sector, foreign-owned GVA per employee is £35,000 compared with £26,000 for Scottish-owned service businesses. The analysis applies the appropriate GVA ratio for each case and for each year.
- 9.51 This gives a cumulative total GVA associated with the additional employment of around £2,100 million between 2001/02 and 2008/09, an average of just over £300 million a year.
- 9.52 The figures exclude any valuation of potential “spillover” benefits that may occur as a result of the inward FDI or any estimate for the value of this additional employment in the future.

Multipliers

- 9.53 The Scottish Enterprise Additionality & Economic Impact Assessment Guidance Note states that economic benefits of an intervention are multiplied because of knock-on effects within the economy. Compared with the profile of internationalisation businesses, the inward investors are much more likely to purchase supplies from outside Scotland. This is partly because of their links to other global companies and also less autonomy over their use of suppliers. It may also be partly because of the scale of these businesses, which can make purchasing from overseas more cost effective. The survey suggested that inward investors purchase on average 37% of their bought in goods and services from Scotland compared to an average of 50% for internationalisation businesses.

³⁵ Gillespie G et al, *The Displacement and Multiplier Effects of RSA: A computable General Equilibrium Analysis*, (2001). The paper estimated that taking labour market displacement, capacity and migration effects into account produced values that were around 50% - 60% of corresponding input-output based analysis.

³⁶ Based on Scottish ABI data 2007 - <http://www.scotland.gov.uk/Topics/Statistics/16170/OwnershipbySector>

9.54 As a result the multiplier effects are likely to be smaller. Our own analysis based on the survey responses relating to the proportion of bought in goods and services suggested a multiplier of around 1.3, but this may underestimate the value of bought in goods in services which according to the ABI data is around 70% of turnover (compared with an average of 42% in our survey). For the purposes of this analysis we have used a multiplier of 1.4.

Resources

9.55 The following estimates of expenditure on *inward investment* were provided by SDI. These were:

- 2006-07: £7.101 million
- 2007-08: £11.758 million.

9.56 The survey of beneficiaries covered 2001/02 to 2007/08 so estimates have been made for the earlier years. We have assumed that SDI inward investment costs from 2001/02 to 2005/06 averaged £5 million in each year giving total of £44 million.

9.57 In addition, over the period from 2001, RSA of £216 million was awarded to the supported companies, R&D grants of £18 million, £4.7 million of training support; and £5.1 million “other” public sector funds. In the 2008 RSA evaluation (Hart et al) found that on average only 80% of grants approved are actually claimed. Using this figure gives an RSA investment figure of £172.8 million and total public support over the evaluation period of £200.6 million. Over the seven years this gives an average of just under £35 million a year

Summary

9.58 The results relate to the support and benefits generated in the period 2001-2009:

- Net additional employment created 13,000
- After multiplier effects 18,000
- Estimate of annual GVA generated by employment over the period is £300 million
- Cost per job without multipliers £19,000 and with multiplier £14,000
- Ratio of GVA to investment excluding multiplier is 8:1 and including multiplier 11:1
- Even assuming 100% labour market displacement (i.e. all the jobs would have existed anyway in Scotland) the higher GVA per employee would mean that the ratio of investment to GVA would still be a third of this (3:1 without multipliers and 4:1 with).

Table 9-3: Summary economic impacts – Inward investment

Sample size	55	
Population of cases	353 assisted (265 still trading)	Businesses assisted 2001/02 – 2007/08
Impact to date		
Estimated impact on employment at time of interview (after deadweight)	19,000 jobs	In the sample: <ul style="list-style-type: none"> • 37 new jobs per assisted case • 33 safeguarded jobs per case • 70 in total across 265 cases in population
Displacement	20%	Based on displacement analysis for each case in sample – product market displacement
Substitution and leakage	0%	All activity in Scotland and considered additional within the firms
Net additional employment	13,000	Current additional employment adjusted for sampling profile
After multiplier effect	18,000	Assumed around 1.4
Estimate of annual GVA generated by employment over period	£300 million	Based on GVA/employment ratios for foreign-owned manufacturing, services and construction categories and applied to each case. Cumulative figure is calculated and then annualised for the 7 years of the programme
Annualised cost of investment	£35 million	Based on SDI reported public grant support over period 2001 – 2008 (estimate grants of £200 million and SDI expenditure of £44 million 2001/02 – 2007/8)
Cost per job without multipliers	£19,000	Note that this does not include jobs that may have existed but subsequently lost over the past eight years or any estimate of the continuing benefits that there will be
Cost per job with multipliers	£14,000	
Ratio of GVA to investment (excluding multiplier)	8:1	
Ratio with multiplier	11:1	

10: Consultations

Introduction

- 10.1 This section sets out a short report on the conclusions from the consultations undertaken for this review. Consultations only represent the opinions and impressions of those consulted; they are not direct empirical evidence of the form taken by the surveys or the econometric analysis (itself based on prior direct contact with businesses through ABI). However, they do reflect the experience and knowledge of the individuals spoken to and consequently can add to the overall conclusions. They also reflect how SDI is perceived as relating to other organisations (including the Scottish Government) and since support for internationalisation and inward investment essentially constitutes a partnership activity, the views of consultees on the shape of working relationships, as well as their impressions of SDI, are worth listening to.
- 10.2 As part of this review we spoke to *eleven senior managers* within SE and SDI and the following organisations external to SE/SDI:
- Scottish Government (three separate individual consultations)
 - Highlands and Islands Enterprise (two individuals consulted)
 - Scottish Council for Development and Industry (SCDI)
 - UKTI (two individuals consulted)
 - Scottish Local Authorities Economic Development (SLAED)
 - Scottish Chambers of Commerce.
- 10.3 The information which follows represents a distillation of the views of those consulted (with no individual comments attributed). It reflects common themes of agreement as well as areas of differing views.

General impressions

- 10.4 Both inside and outside SDI, the consultations give an impression of a developing and improving situation in several important respects. The main areas where this is the case are as follows:
- **Development of a more explicit strategic background.** It is clear that within SE and SDI, the Industry Demand Statements are seen as providing more of a direction for activity (for example in identifying key target businesses or business types or those that might fill supply chain gaps in Scotland) than has been the case in the past.
 - **More joined up activity between the inward and outward facing work of SDI.** It was the general impression that bringing together what had been two separate activities (though this took place some time ago) had promoted more effective

working and that the offices overseas had taken well to the joint role. Our consultation with the SDI office in the Far East confirmed this.

- **More joined up and effective joint working between SE, SDI and HIE.** Joint working between the three - and especially between SE and SDI - is now more prevalent, and explicitly expected, than has previously been the case. For example, in terms of relations with individual DRM companies, it is now clear that the single main point of contact for all SE/SDI matters is the account manager, supported by an account team which will include SDI staff as appropriate. While the approach may not be 'seamless' yet, it is moving in that direction. There are other questions to do with DRM companies which are covered later in this section.
- **Good relationships with external partners.** All of the external partner organisations reported a generally good working relationship with SDI; a few issues remain, covered later.
- **Changing performance indicators.** Performance indicators are very powerful influencers of behaviour. In recent years, inward targets in particular have developed from being purely job related to reflect performance in attracting 'high value' jobs. The main issue now is whether performance indicators need to be further refined.

10.5 In addition SDI has now produced an internationalisation strategy document, *Internationalisation: Strategic Direction, Priorities and Approach*. This was considered a useful document which sets out in more detail than before SDI's plans for delivery and the evidence which guides it. It has been developed following consultation with partners. The document describes the overarching objectives, the global landscape and implications for Scotland, SDI's contribution, how it will be delivered and how SDI will work with others. The strategy provides an overview of Scotland's strengths and weaknesses, global trends and globally competitive sectors.

10.6 This paper was regarded positively by those that had seen it at the time of our interviews, although there were still a number of areas where consultees considered the document could in future be developed further. These questions are all covered in more detail in the reflections of consultees' view under the following headings.

Market failure

10.7 There was no debate at all amongst consultees about the existence of market failure both in relation to inward investment activity and internationalisation. The competition from other nations (inward) and the limited resources and knowledge available to SMEs (outward) were the two most significant reasons.

Strategic direction

10.8 Inside SE and SDI, the Industry Demand Statements for the SE key sectors and the Scottish Government Economic Strategy are now seen to be the main strategic driving forces. If this is the case, two questions emerge:

- how far they are a suitable means of making decisions about priorities (both for inward and outward activity) *between* industry sectors as well as *within* industry sectors
 - how far they have effectively permeated the whole organisation; for such documents to be effective, they have to influence the behaviour of those at the front line of company contact; the consultations suggested that this is not yet always the case
- 10.9 While those within SDI/SE can see a strategic background that drives forward activity, this is not always apparent to outsiders. It is important that SDI is able to demonstrate that it is ‘fleet of foot’ and responsive to good opportunities as they arise, but also that its broader activities are based on evidence and analysis. It may be that SDI needs to communicate further with partner organisations what its strategic thinking is and the assumptions that it is based on. Few external organisations were, for example, able to say how far SDI may have changed direction (or may have felt that it was *not* necessary to change direction) to accommodate the needs of the Scottish economy through the current recession.
- 10.10 One common theme articulated within SE/SDI, by Scottish Government and by external consultees was the possibility that in the current and expected economic circumstances facing Scotland, the balance of resources might be marginally shifted towards internationalisation (especially company preparedness for international activity) as being a potentially productive route. Up until now, inward investment has taken the lion's share of resources and a minor shift in direction might be appropriate. We note that a significant part of the resources allocated to inward investment projects is in the form of RSA, over which SDI has little control. It also depends on being able at the margin to make increasingly effective interventions on the internationalisation side.

How SDI relates to partner organisations

- 10.11 Relationships with partner organisations are generally very good. HIE in particular noted how far relationships with SDI had been transformed in recent years to the extent that they now formed a ‘single team’. Joint funding of staff between HIE and SDI had clearly been of great assistance in this. HIE suggested that as an organisation, they themselves possibly needed to articulate better to SDI the specific needs of the Highlands and Islands both in respect of inward and outward activity, and that this was something being worked on.
- 10.12 It was mentioned above that few external organisations appear to be aware of the strategic thinking lying behind SDI activity although this exists. More generally, partner organisations pointed to two areas where they believed SDI might benefit by better communicating its aims and activities, namely:
- letting others know more about SDI activities, what they entail and what is proposed
 - agreeing protocols or clarifications about what SDI expects from others in relation to:
 - handling inward enquiries
 - clearing lines in relation to the support provided by others to internationalising companies.

- 10.13 Most consultees were very happy with the regular information provided by SE and the contact with SE; they were not sure, however, how far the specific SDI perspective always came through, given that SDI now works within a ‘one organisation’ approach with SE. An important issue for SDI is therefore *communicating* more about its activities to external organisations. With smaller amounts of resources likely to be available in future, the need for effective partnership working will become even more pressing. This was generally recognised.
- 10.14 The joint arrangements for coordination and working with UKTI appear to be working well.

The businesses that are worked with and what is done with them

SDI Products

- 10.15 The main products available to SDI to work with inward and outward companies were seen as more than adequate to do the job. Generally, however, there was support for the view (which has also emerged from the survey of businesses) that the balance of support had been too much towards the ‘tactical’ – venturing into export markets through exhibitions and missions etc – rather than the ‘strategic’ – for example, preparedness and the International Strategy Development Programme. We would support this as it is a significant finding from the survey. There was one comment (reflected in a case study) that the one-day workshops devoted to international strategy might not be of sufficient depth for some businesses and that more intensive forms of preparation should also be considered.

Inward companies

- 10.16 There was little comment about who actually should be targeted in relation to inward investment other than that the more sophisticated approach that is emerging with key target companies and sectors identified is the correct approach. This appears to be working well.
- 10.17 In relation to what is done when businesses are here, most consultees were keen to emphasise the need to embed inward companies in Scotland. This is already happening through the **investor support teams**, followed by the now-established **account teams**. The explicit process of embedding clearly needs to be supported and encouraged. That said, the survey analysis suggested that the forms of support in place several years ago were reasonably effective in the embedding and spinoff process, so there is good practice to build on.

Internationalisation companies – DRM

- 10.18 The key targets for SDI internationalisation activity are the 2,000 or so Designated Relationship Management (DRM) companies. In the new arrangements now in place, the account manager is the focal point for all SDI and SE activity with DRM companies. It is accepted within SE that the process where the lead account manager brings in others, including SDI wherever appropriate, is still bedding down, though all account managers should know that this is now the expectation.
- 10.19 This presents huge opportunities and challenges. Within SE it is now expected that account managers should challenge companies and encourage them to raise their horizons, rather than

being passive respondents to company-determined demands. We would support this. Furthermore, a strong undercurrent in the consultations was that with limited domestic demand, international markets were the best hope for many Scottish companies. That being the case, it should follow that account managers, in the right circumstances, *should be encouraging companies to consider internationalisation* – it should be high on the agenda in many cases. The evidence from the surveys for this review suggested that many companies are open to influence.

10.20 The consultations suggested that this is not yet present in enough instances and that some account managers might be uncomfortable with this subject or unaware of its importance. The Workbook that now guides account managers in their relationship with companies mentions internationalisation but does not provide it with any emphasis. Internationalisation is related very much to leadership within companies and this too might be an area deserving more emphasis.

10.21 The main conclusion is that more might need to be done to:

- make account managers aware of the importance of internationalisation among DRM companies and encourage them to promote it in the right circumstances
- provide account managers with the knowledge and skills to assist SDI to engage effectively with appropriate companies.

10.22 This is not to say that every DRM company should be nudged or prodded to consider internationalisation but that the effort should be reorientated in that direction among suitable businesses. Consultees suggested that there may be many companies where this might be the right thing to do. There is other evidence³⁷ to suggest that inexperienced companies overestimate the difficulties associated with international trade and underestimate the benefits.

Internationalisation companies – non DRM

10.23 All consultees were aware that the DRM companies represent only a very small proportion of Scotland's company base; there was no questioning of SE's and SDI's overall approach in this respect. However, it was pointed out that it was not only consultees that felt that support to internationalise should go beyond the DRM companies; many non-DRM companies themselves are unhappy about perceived neglect in this area (through the evidence from our survey suggests that many non-DRM companies are indeed supported already by SDI). Fortunately, the emerging ESF-funded initiative between SDI, SE and Scottish Chambers International, *Smart Exporter* should go a long way towards allaying these concerns. It is timely and deserves a high profile.

10.24 Many of the above points are taken forward in the conclusions and recommendations section which follows and which draws on all the sources of evidence used for this evaluation.

³⁷ HSBC "Going International", August 2009

11: Conclusions and recommendations

- 11.1 This chapter brings together the findings in the report to offer a summary and conclusions on the past performance of SDI's business support and to identify elements which could be developed. The findings of the evaluation are generally very positive and consistent across the strands of analysis. This chapter summarises the findings first before bringing together the various sources and developing conclusions in the final section.
- 11.2 Internationalisation and inward investment are two very important contributors to Scotland's economy and SDI's role is central to both. Significant amounts of public money are invested in these areas and it is important to demonstrate that this is generating benefits and to ensure that SDI is continually learning and improving the way in which it delivers these services.
- 11.3 The evaluation finds that SDI's support for internationalisation activity is having a significant and positive effect on business productivity and positive employment effects from activity to attract inward investment. As a result of SDI assistance, businesses themselves reported significant impacts on their international sales and employment as well as contributing to their capability to internationalise. The evaluation also raises a number of points looking forward. These are specifically around the use of learning, strategy development, integration with business support, leveraging SDI resource and future performance measurement.

Summary

Internationalisation

- 11.4 The econometric analysis produced a number of important findings in relation to internationalisation:
- higher productivity companies are the ones that are more inclined to enter international markets
 - businesses that enter international markets gain from significant post-entry 'learning-by-exporting' and outward investment effects. The former results in a boost to Total Factor Productivity³⁸ of around 16-18%
 - more specifically, SDI-assistance has a strong and significant impact with assisted plants nearly 19% more productive than matched cases with no assistance
 - SDI-assisted plants also had lower employment of somewhere between 13-19% when compared to non-assisted plants (based on using the full data set and 'matched' data)
- 11.5 These improvements in productivity are supported by the telephone business survey which found that 60% of the businesses reported making or planning to make changes in the way they operate as a result of SDI support. The survey also found significant improvements in

³⁸ TFP is measured as the level of output that is *not* attributable to factor inputs (employment, intermediate inputs and physical capital).

the capability of businesses supported to develop their international activities. Those reporting major impacts on export sales were more likely to be account managed by Scottish Enterprise and have been engaged in preparation or internationalisation strategy activities with SDI.

- 11.6 SDI had some positive influence on the original decisions to trade internationally of around a third of assisted businesses, while a ‘before and after’ comparison of the internationalisation capabilities of assisted firms indicates that working with SDI has had a positive impact. As a result 41% have achieved sales in *new* overseas markets and 80% expect to achieve this as a result of the SDI supported internationalisation activities.
- 11.7 The survey also provides new evidence on the number of cases where ideas have been developed. More than a third of those supported considered their international activities to have contributed to improved competitiveness (learning by exporting), a view underpinned by Professor Harris’s analysis and highlighted in the previous work on the rationale for internationalisation support. For 74% of the businesses interviewed the support has or is expected to impact on their export sales (in 36% of cases this impact is considered to be “major”).
- 11.8 The principal difference that SDI support has made is in helping to speed up and increase the scale and quality of firms’ international plans rather than through making non-international firms international. This is important in relation to the ‘ladder’ of internationalisation support that will be complemented by the Smart Exporter programme which focuses more on raising the awareness of internationalisation opportunities with businesses, broadening the number of companies undertaking international activity and developing the skills to successfully trade internationally.

Inward investment

- 11.9 On the inward investment side the econometric results show that although employment, wages and labour productivity are higher among the supported cases, Total Factor Productivity is lower. This reflects the nature of the support, its objectives and the situation of the businesses supported. The survey, for example, indicates that a high proportion of cases received support to safeguard employment which would not tend to be associated with the highest levels of productivity.
- 11.10 Over the period covered by the econometric analysis, the aim was to support investment that would create additional employment, which it has done. This analysis, however, helps emphasise the importance of productivity as the main determinant of long term economic competitiveness and it raises issues about how firms are targeted and how best to ensure that they will be competitive and contribute to economic growth.
- 11.11 The results provide evidence of the range of potential “spillover” benefits that these firms believe they bring to Scottish suppliers, customers, competitors and networks. Although based on a relatively small sample, the scale of the additional employment that was attributed to SDI’s interventions by the businesses was substantial, including several major cases where employment, R&D activity and output would be significantly lower without SDI intervention.

Economic impact summary

- 11.12 The economic impact results report businesses' own perceptions of the contribution that SDI has made to their sales and employment. Both sets of data produce results that in comparison with the main estimates produced for all RDA spending³⁹, are fairly strong.
- 11.13 For internationalisation the results of support provided from 2005/06 to 2008/09 are:
- an additional *cumulative* value of exports of £174 million (an average of £58 million a year to date – taking full account of displacement and deadweight)
 - net additional GVA of £75 million to date
 - 1,100 additional jobs (net) to date
 - GVA per £ invested (excluding multipliers) to date is 4:1 and including multipliers 7:1
 - cost per job without multipliers to date is £18,000 and with multipliers is £11,000
- 11.14 Estimates of future impacts as a result of the support 2005/06 to mid 2009 are more uncertain but based on businesses' views of potential further effects:
- from the sample we estimate a further £72 million GVA over the next three years
 - including future estimates the GVA per £ invested doubles to become 8:1 without multipliers and 13:1 with multipliers
 - there would be a further 380 jobs created on the basis of expected future effects⁴⁰
 - including future estimates cost per job figures become £13,000 and £8,000.
- 11.15 For inward investment the results relate to the support and benefits generated in the period 2001-2009:
- net additional employment of 13,000 jobs and after multiplier effects 18,000
 - estimate of annual GVA generated by employment over the period is £300 million
 - cost per job without multipliers £19,000 and with multiplier £14,000
 - the ratio of GVA to investment excluding multipliers is 8:1 and including multipliers 11:1
- 11.16 Even assuming 100% labour market displacement (i.e. all the jobs would have existed anyway in Scotland) the higher GVA per employee would mean that the ratio of investment to GVA would still be 3:1 without multipliers and 4:1 with them.

³⁹ Impact of RDA spending, PwC, on behalf of BERR March 2009 – The report found that every £1 of RDA spend will add £4.50 to regional GVA.

⁴⁰ This is based only on the cases that reported no impact on exports to date but expected an impact in the future. These results are reduced by 50% to allow for optimism bias. The associated employment is calculated using the same ratio of export value to jobs found in the survey.

Consultations

- 11.17 Overall, consultees were supportive of SDI and its performance. It was recognised that there has been significant progress over the past few years. There is a more explicit strategic background driven by the Industry Demand Statements, more joined up activity between the inward and outward facing work of SDI and a more integrated approach in delivering support between SDI, SE and HIE.
- 11.18 However, looking forward, there were a number of issues raised in the consultations. For example, it may be that SDI needs to communicate better to partner organisations what its strategic thinking is and the assumptions that it is based on. Consultees also felt that internationalisation should have a higher profile generally and that there should be greater emphasis on developing the international capability among Scottish firms.

Equity and equalities

- 11.19 In attracting inward investment SDI's main contribution to equality comes through the Regional Selective Assistance grants mechanisms. RSA grants are awarded to firms investing in areas that face greater economic challenges (and where the creation of new employment is more likely to be additional). This provides a relatively strong equity effect through supporting jobs in the areas that are eligible. The analysis in the report reflects this and shows a high proportion of assisted firms in Glasgow, Paisley and Kilmarnock in the west (RSA Tier 2) compared with Edinburgh and Aberdeen where support is more limited.
- 11.20 Internationalisation support does not have any similar mechanism. Support is spread widely across firms and geographies. Forty percent are categorised as SE DRM businesses and support is also focused (although not exclusively) on SE's key sectors. In terms of equality, like most other forms of business support, public funds here are provided to businesses to overcome market failures. Doing this successfully encourages behaviour that helps to create additional income and employment and the report has shown the scale of this increase. The direct beneficiaries are those that are employed, the business owners and their suppliers.
- 11.21 However, depending on the financial position of these companies and employees, the tax raised from this additional activity is likely to go a long way to offsetting the costs of the support. Our view is that other than the general increase in economic activity reported there is no obvious measurable positive or negative implication for equality issues.

Sustainable development

- 11.22 A second theme is the impact that the agency's support has on sustainability which is interpreted here in relation to carbon emissions. In terms of SDI's internationalisation work the most obvious conclusion is that a large proportion of the direct activity funded relates to travelling internationally (to exhibitions or on missions) and that this in turn is expected to increase exports of goods and services which would intuitively suggest increases in the emission of carbon.
- 11.23 However, a sizeable proportion of SDI's work has been promoting the renewable energy sector - both to encourage inward investment into Scotland and also internationally which may reduce emissions in the countries where sales are made. The report also demonstrates

that SDI support is associated with improved productivity among client businesses. This in itself indicates a more efficient use of resources and suggests that although output grows carbon emissions need not increase proportionately (known as decoupling).

- 11.24 Further complications come in assessing the amount of “embedded” carbon within the goods and services produced and also consideration of the alternatives available to new customers. Any individual exporter can represent an increase or decrease in carbon emissions depending on the alternatives that their customers faced. For example, exporting a boiler to China, and its subsequent use, may represent a reduction in global carbon emissions *relative* to the technology that was used before, but it could also represent an increase when compared with purchasing the same technology locally.
- 11.25 There are similar issues associated with inward investment. Attracting investors to produce goods in Scotland will usually increase carbon emissions in Scotland (although not necessarily in proportion to the level of output), but at a global level this could be positive or negative depending on the alternative locations that the firm was considering.
- 11.26 Overall it is hard to escape the conclusion that in general increasing international activity is likely to require more use of transport and usually more carbon emissions, but there are clearly exceptions where newer, cleaner technologies are adopted. Although the evaluation here captures increases in export sales and jobs supported, there is not sufficient information to quantify the net effect on carbon emissions for Scotland or globally.
- 11.27 SE is currently preparing guidance to staff on assessing the carbon impact of SE’s activities. As part of this process, consideration is being given as to how this might be applied to SDI’s inward investment and internationalisation activities and the necessary internal processes for doing this.

Conclusions

- 11.28 Overall, the report provides a lot of very positive findings which are underpinned by the results of the econometric analysis. There is a strong consensus in Scotland in support of internationalisation activity, both inward and outward; businesses and partner organisations concur in this. However, the evaluation also raises a number of important issues that SDI should consider in working to further improve its performance.

Strategy and rationale

- 11.29 There is no question that significant progress has been made refining and strengthening SDI’s strategy over the past few years. The consultations made clear that there has been a lot of good work done particularly through the focus on key sectors and the prominence given to the Industry Demand Statements. The recent paper, *Internationalisation - Direction, Priorities and Approach*, is a significant step forward.
- 11.30 However, there was a sense that more strategic thinking and analysis could be done, or that if it has been done, it could be communicated more effectively. While SDI must have sufficient flexibility to react quickly to opportunities it also needs to have a strong strategic direction articulating, from rationale onwards, its view of the world and how this shapes the things it

does. For example, outlining the logic for the balance between resources allocated to inward investment and internationalisation, arguing how the specific tools and approaches have been chosen (as opposed to other options) and how SDI is responding to changing economic conditions around the world or global trends in investment/acquisition approaches. These are major changes which the Scottish Economic Recovery Plan⁴¹ refers to:

the rebalancing that has already begun across the global economy will bring new opportunities for Scottish businesses in new markets.

11.31 It is also important to see this within the context of its wider contribution to Scottish business productivity rather than as a separate and specialist form of support. Internationalisation is not the end of the process but a stage which both reflects already strong productivity and indicates the potential for growth in the future. In practice the capability of firms to internationalise is dependent on strong productivity. Ensuring that barriers to productivity improvement are identified and addressed is clearly important if more firms are to have the capability to work internationally.

- **there continues to be a strong rationale for supporting international activity. There are significant benefits that can be achieved and ‘market failures’ that assistance can help overcome**
- **development in strategy has been positive; this could be taken further to demonstrate the rationale for priorities**
- **SDI’s strategic thinking should be communicated to partners on a regular basis.**

Balance of resources

11.32 The allocation of resources between inward investment and internationalisation is a much bigger question than can be answered in this evaluation. Based on the expenditure data provided (and including RSA, R&D and training grants) around seven times as much is invested in supporting inward investment than through SDI’s direct support of internationalisation. The view of a number of consultees was that more might be invested in supporting internationalisation. There are several reasons for this. Consultees saw internationalisation as offering the most effective way of supporting economic growth at a time when domestic demand is expected to remain weak. A more favourable exchange rate would also help. The econometric analysis of internationalisation activity also demonstrated the actual and potential improvements that can be made to TFP.

- **it would be helpful for SDI to explain how the balance of resources between the two main activities is arrived at, although we note that in relation to the take-up of RSA, SDI has little control.**

⁴¹ The Scottish Government’s Recovery Plan: Accelerating Recovery, was updated in March 2010. It sets out a number of priorities for the coming months to accelerate economic recovery in Scotland and increase sustainable economic growth.

Internationalisation

- 11.33 There have been major improvements in the way in which SE and SDI are working together to deliver support to internationalising companies. The process works very well and it gives SDI and SE an excellent platform from which to deliver integrated internationalisation support.
- 11.34 Generally we believe that international activities should have a higher priority within the range of support provided to DRM companies. Account managers need to be aware of the benefits of internationalisation, the barriers and the support available to overcome them. They should be clear about the importance of encouraging internationalisation among their client businesses. This is likely to need greater support, changes to tools and more access to SDI staff through the account teams.
- 11.35 This is not just related to direct internationalisation support, but more generally it is about improving productivity. Professor Harris's analysis identifies internationalisation as part of a virtuous circle which is driven by and then reinforces productivity. This means that many of the SE DRM activities that aim to improve productivity are also necessary to underpin successful internationalisation.
- 11.36 The strands of evidence from this evaluation point toward the importance of international activity as a source of further productivity improvement. Professor Harris's research provides the theoretical basis for anticipating "learning by exporting" effects, while the survey found that 36% of those interviewed had adopted new ideas *and* believed that this had led to improved competitiveness.
- 11.37 It is striking how DRM companies in particular report stronger impacts and produced considerably higher estimates of the difference that SDI support had made (approximately three times as high). It strongly suggests a link with the broader range of business development support provided by SE. It could be argued that this is having an effect on productivity and this, in turn, is helping to ensure that international activity is more successful. The results certainly suggest that working with more DRM companies, which are not operating internationally, would generate stronger benefits.
- 11.38 In summary:
- **internationalisation should have a higher profile within SE and HIE business support and especially among account managed companies**
 - **the route to achieving this is through continuing to strengthen relationships between the account manager/account team role and SDI**
 - **SDI, SE and HIE should consider how the support that account managers need can be provided, for example, by giving internationalisation a higher profile within its guidance.**

Products

11.39 Generally the products delivered through the internationalisation portfolio were considered to be right. However, the survey and the case studies have raised some useful points. Firstly the review of internationalisation evidence concluded that:

“while the range of products available from SDI is relatively broad, covering firms new to exporting as well as those wishing to become global companies, in practice much of its activities have been concentrated at the lower end of the productivity-enhancing spectrum.

11.40 The survey found that companies that received the more strategic or preparedness forms of support tended to report stronger impacts. This would suggest that more of this kind of support would be likely to increase outputs; although we would also caution that many of the firms that SDI works with are experienced exporters and could quickly grow out of preparedness-type support. This is probably more appropriate for companies newer to working internationally (of which SDI is planning to work with larger numbers), both DRM and non-DRM companies.

11.41 The introduction of the *Smart Exporter* programme⁴² will address some of the concerns raised about support only being available for a limited number of companies in specific sectors. The Programme will be a useful addition and will help raise the profile of internationalisation. However, it may also have implications for the balance of SDI products. It could potentially generate a great deal of interest from non-DRM companies which would then have to be considered for support by SDI. Depending on the quality of cases that are brought forward there may be a case of additional resources to provide support.

11.42 There may also be a case for a more sophisticated product. Many of the companies that SDI deals with are experienced exporters who require less generic assistance and more expert help in specific markets and sectors. This will be increasingly expected in the key sectors. Programmes like International Strategy development Programme could potentially work with more businesses.

11.43 A narrower focus on key sectors also raises expectations about the levels of expertise and support that can be provided both overseas and in Scotland. This has implications for the delivery of services which may have to move from broader generic support to narrower more specialist assistance. This would also mean that SDI should ensure that expertise available matches that needed by the key sectors in the appropriate markets.

- **in relation to internationalisation, SDI should consider expanding its activities in supporting preparatory or strategic work with companies**
- **many of SDI’s customers are likely to look for increasingly sophisticated support in the future. SDI should ensure that this can be delivered by, for example,**

⁴² Smart Exporter has the objective of broadening business engagement in internationalisation. It was announced in March 2010 and is supported by SDI, Scottish Chambers International & SCDI to enhance internationalisation skills within Scotland's business community. It is a 3-year, £7.6 million programme that includes £3.4 million from the European Social Fund (ESF). It will offer light touch support to a broad base of businesses to contribute to Scotland's export performance.

flexible arrangements with specialists or working with partner organisations where appropriate

- **the introduction of the Smart Exporter Programme may have implications for SDI Programmes and for the resources needed to work with potentially a greater number of referrals.**

Inward investment

- 11.44 The analysis, specifically the econometric work, focuses activity on attracting higher productivity inward investment. The difference between Total Factor Productivity, which is used in the econometric work (and is arguably the better measure of competitiveness) and labour productivity which is more frequently used, is important here. The econometric results show that although employment and wages were higher among the supported cases, TFP is lower. This reflects the nature of the support which includes a high proportion of cases receiving support to safeguard employment and this would not tend to be associated with high levels of TFP.
- 11.45 The results help to differentiate between potential objectives of inward investment support (employment and productivity). In some cases safeguarding employment will be the priority and would be justified in areas where the loss of jobs could have significant social costs or the attraction of new ones would be more likely to use unemployed labour rather than displace it from other productive activities. In other cases, the investment would be justified through increasing productivity, making better use of Scottish resources. A third case could be made in relation to the higher probability of spillover effects through for example the presence of higher levels of R&D.
- 11.46 A priori it is hard to identify the potential package of these effects that an investment could bring until well after the business has become established. This suggests several conclusions:
- **more analysis and learning from past investments would help shape future activity. SDI and SE could consider how best to capture learning from investments that proved not to be sustainable in Scotland**
 - **a better understanding would allow a stronger strategic approach to targeting types of inward investment and allow a more explicit set of objectives (e.g. spillovers, high productivity and employment). The distinction between jobs and high value jobs goes some way towards this and could be developed further**

Performance indicators

- 11.47 Performance indicators and targets have a powerful effect on individual behaviour and they were seen by all the consultees as a key issue for SDI and for its partners. Work needs to be done to develop a more sophisticated performance measurement framework. Performance indicators should be derived from strategy, objectives and targets and in general terms it might be argued that any difficulties in deriving performance indicators often stem from the need to develop a clear strategy. Strategy and objectives should therefore provide the basis for performance management frameworks.

- 11.48 For example, UKTI use a fairly sophisticated rolling survey (PIMS) to assess the “quality” of the investments that they support. This type of approach provides a good base for understanding the actual and potential impact of investment.
- 11.49 The performance indicators should be led by productivity for both internationalisation and inward investment activity. Areas that could be considered in the framework on the basis of some of the outcomes of this study might include, for *inward investment*, measures of potential spillover effects, embeddedness and employment. Further indicators for activities might have to be developed to reflect the time invested in relationship building.
- 11.50 For *internationalisation*, increasing capability to internationalise, new international businesses, agreed international strategies (with DRM companies), value of exports, international income, learning from internationalisation and GVA should be covered.
- 11.51 Given the strategic focus on developing the key sectors, the measurement framework should be capable of reflecting progress in each of these separately as well as collectively.
- **SDI should continue to develop a full performance measurement framework and ensure that this reflects strategy, objectives and the underpinning rationale**
 - **specifically, we would suggest introducing *productivity* and the *potential for positive spillover effects* into the framework**

Monitoring

- 11.52 There is scope for improvement in the collection, analysis and reporting of data on activity and performance in relation to both outward and inward activity. It is clearly important that monitoring data is kept up to date and maintained in a form that allows easy analysis. This helps in carrying out evaluation and will improve the quality of the research that can be done. Regular evaluation also makes it more likely that beneficiaries are able to recall the assistance they have received and comment on the benefits.
- 11.53 There are several points specific to inward investors. These cases are larger and more complex and some would merit more thorough evaluation in their own right. This could be done as part of a rolling programme to develop a better understanding of how different types of investment contribute to the economy.
- 11.54 This evaluation is one of the first examples of how data resources can be utilised to undertake econometric analysis. This is a valuable resource that aids understanding considerably. Having been through the process and with a stronger understanding of what is needed it could be repeated as new data becomes available.
- **monitoring data on inward investment cases in particular should be collected and kept up-to-date**
 - **the scale of support for some inward investments merits a more thorough evaluation in specific cases. A rolling programme of evaluation of projects over a certain size could be carried out.**

- **evaluations should be planned to ensure that gaps in timing between them are reasonable and to allow proper preparation for future studies.**
- **having undertaken the econometric analysis for SDI for the first time, there is an opportunity to repeat the exercise in later years as new Annual Business Inquiry data becomes available**

Partners and leveraging SDI expertise

- 11.55 Some consultees believed that there was more scope for SDI's partner organisations in Scotland to make more of a contribution to overseas activity. Within this evaluation we cannot comment on how accurate this is, but given the anticipated tightening of resources it is important that SDI is able to work closely with other agencies that have some form of overseas presence, for example, Scottish Chambers International has a strong international network with contacts across many markets that would be valuable to SDI. Other resources would come through the international work of universities and local authorities (through twinning relationships).
- 11.56 Although our analysis is limited to the contribution of SDI to business development, a number of consultees also raised the wider role that SDI's overseas activities could play. Potentially it could bring a useful international perspective to a number of policy areas such as education, social policy, transport, as well as promoting Scotland in the business sphere. Even limited to business development, it is important that the experience that overseas staff have is transmitted through to the Scottish business base. This is happening, but consultees thought that this was an area that could be strengthened further.

Overall

- 11.57 Overall our conclusions fall into three parts. The results of the survey and econometric results provide reassurance that SDI support is delivering significant benefits to businesses. The analysis provides new insights into the ways in which this support is working and highlights a number of areas where better intelligence could help strengthen the delivery of support, for example in working with exporters to maximise productivity through learning generated by internationalisation
- 11.58 A second set of conclusions is around raising the profile of internationalisation among Scottish companies and making it a more central part of Scottish Enterprise's work. The econometric analysis in particular highlights the importance in tackling productivity as the main determinant in encouraging international activity and in seeing exporting not as an end point but as an integral part of helping Scottish companies becoming more competitive.
- 11.59 The route to this is both through the work of account managers and through SDI's increasing role in much of what SE does. A stronger focus on internationalisation should be led by an emphasis on capacity building within companies. The survey results suggest that support for international strategies and preparation has the strongest effects on business performance and this should be extended. With a sharper focus on key sectors and on emerging markets businesses will expect more specialist expertise rather than generic assistance. This can partly be achieved by working more closely with partners.

- 11.60 The final set of conclusions is around building from a stronger rationale. This should be at the heart of strategy as it shapes the way in which SDI operates, the way it allocates resources and the tools and programmes it develops. A lot of good work has been done recently in developing the recent *Internationalisation - Direction, Priorities and Approach* paper and subsequent consultation, more could be done to explain the rationale for intervention, the allocation of resources, the options and priorities that have been chosen and the way in which these will contribute to productivity improvements.
- 11.61 Demonstrating this requires good monitoring and evaluation which must then be translated into learning. A central part of this is a performance measurement framework and the resources (and support) to use it effectively. This ranges from more robust management of data on client businesses through to specific evaluation or impact work on some of the larger inward investments.

Report annex

Annex A: SE Additionality tables⁴³

Additionality Calculator A (for sample survey data) Version: AMcP/SEL/Jun07/5.1					
Enter Project Name			Project Reference		
SDI - internationalisation (to date impacts)					
Additionality Calculation					
			Area of Benefit		
			Local	Scotland	
Intervention Option					Enter Explanation
Gross Impact	GI	Enter gross impacts e.g. 25 (jobs); £1m (turnover)		124,000,000	All assumed to be captured within Scotland
Leakage	L	Enter levels of leakage e.g. 25%		0%	Calculated through responses to survey question
Displacement	Dp	Enter levels of displacement e.g. 10%		11%	Assumed that these additional export sales do not replace domestic sales
Substitution	S	Enter level of substitution e.g. 15%		0%	Same as DRM study
Multiplier	M	Enter multipliers e.g. 1.32, 1.64		1.7	
Reference Case					
Deadweight		Enter level of deadweight e.g. 35%		60%	Calculated from deadweight question in survey
Leakage	L*	Enter Different Reference Case Values if Required	0%	0%	
Displacement	Dp*		0%	11%	
Substitution	S*		0%	0%	
Multiplier	M*		0.00	1.70	
Sampling Error		Enter margin of error from sample survey e.g. 5%		6%	Based on sample and population
Additionality AI					
Lower Limit of Range		(e.g. jobs or turnover)	0	70,542,112	
Upper Limit of Range			0	79,547,488	

Based on GVA estimates

⁴³ These tables are set out in the format required by Scottish Enterprise. A more detailed discussion of the derivation of the additionality calculations is contained within the report

Additionality Calculator A (for sample survey data) Version: AMcP/SEL/Jun07/5.1

Enter Project Name SDI - inward investment

Project Reference

Additionality Calculation

Area of Benefit

Intervention Option

Gross Impact GI *Enter gross impacts e.g. 25 (jobs); £1m (turnover)*

Leakage L *Enter levels of leakage e.g. 25%*

Displacement Dp *Enter levels of displacement e.g. 10%*

Substitution S *Enter level of substitution e.g. 15%*

Multiplier M *Enter multipliers e.g 1.32, 1.64*

	Local	Scotland
Gross Impact		22,185
Leakage		0%
Displacement		20%
Substitution		0%
Multiplier		1.4

Reference Case

Deadweight *Enter level of deadweight e.g. 35%*

Leakage L* *Enter Different Reference Case Values if Required*

Displacement Dp*

Substitution S*

Multiplier M*

	Local	Scotland
Deadweight		48%
Leakage	0%	0%
Displacement	0%	20%
Substitution	0%	0%
Multiplier	0.00	1.40

Sampling Error *Enter margin of error from sample survey e.g. 5%*

	Local	Scotland
Sampling Error		12%

Additionality AI

Lower Limit of Range (e.g. jobs or turnover)

Upper Limit of Range

	Local	Scotland
Lower Limit of Range	0	11,370
Upper Limit of Range	0	14,471

Enter Explanation

Assumed that employment is in target area (Scotland)

Product market based on survey responses

No substitution, net additional activity and employment supported

Based on review of survey and analysis of input/output data

Based on survey cases setting up new premises

Based on survey sample size

Based on employment estimates

Annex B: Internationalisation questionnaire

Company name:	
Telephone number:	
Contact name:	
Job title	
Date of interview:	
Time of interview	
Interviewer	

Interviewer to pre-code

Firm is.....	DRM		Non-DRM	
--------------	-----	--	---------	--

Introduction

Good morning/afternoon my name is (YOUR NAME) and I'm calling from IBP Strategy and Research. We are currently carrying out a survey on behalf of Scottish Enterprise and **Scottish Development International** or **SDI**. You should have received a letter recently from SDI explaining the purpose of the research.

This is to provide an overview of the benefits to customers from Scottish Development International's services. The survey aims to help Scottish Enterprise and the Scottish Government meet the needs of businesses. Your co-operation will ensure that the views expressed are representative of all their customers.

I understand that in the past your business has received information, advice or financial assistance from Scottish Development International to support international trade.

Participation in the study is entirely voluntary and responses will not be attributed to any individual or company. Results will be reported to the survey sponsors on anonymous basis only. The interview will take around 20 - 30 minutes to conduct.

IF RESPONDENT WISHES TO CONFIRM VALIDITY OF SURVEY OR GET MORE INFORMATION ABOUT AIMS AND OBJECTIVES, THEY CAN CALL:

- Scottish Enterprise: Sheila Perry 228 2618
- SQW: Bruce Macdonald, Tel 0131 225 4007

I would like to ask you some questions about the activities carried out here, and the services you have received from Scottish Development International or SDI as I will refer to them.

1. Can I confirm that you are the person best qualified to talk about your company's experience of working with SDI?

- | | | |
|--------------------------------------------------|--------------------------|---------------------------|
| Yes | <input type="checkbox"/> | ASK NEXT Q |
| Someone else at this establishment | <input type="checkbox"/> | TRANSFER AND RE-INTRODUCE |
| Hard appointment | <input type="checkbox"/> | MAKE APPOINTMENT |
| Soft appointment | <input type="checkbox"/> | |
| Refusal | <input type="checkbox"/> | THANK & CLOSE |
| Refusal- company policy | <input type="checkbox"/> | |
| Refusal- taken part in recent survey | <input type="checkbox"/> | |
| Nobody at establishment able to answer questions | <input type="checkbox"/> | |
| Not available in deadline | <input type="checkbox"/> | |

2. Can you confirm that the postcode of this establishment is...(SEE CONTACT SHEET)

Code

Check postcode from contact data and enter or if different, enter new postcode

Postcode
Don't know

3. Is this establishment your company's headquarters?

Tick one Code

- | | | |
|--------------|--------------------------|---------|
| Yes | <input type="checkbox"/> | Go To 6 |
| No | <input type="checkbox"/> | |
| (Don't know) | <input type="checkbox"/> | |

4. In which country is this organisation's overall headquarters located...?

Write Country

Interviewer code

5. In which country is this organisation's overall headquarters located...? Tick one Code
- Scotland
 - Other UK
 - Other EU
 - Other Europe
 - North America
 - Central/South America
 - Middle East
 - Asia
 - Australasia
 - Africa
 - Don't Know
 - No answer

6. Briefly, what is the main business activity of this establishment

Interviewer to code in the tables below based on activity (not market)

Any difficulty in coding, please ask SQW (Bruce Macdonald, Alan Brazewell, Osman Anwar or Alison O'Connor) or Eddy Graham, IBP.

SIC CODE (2-digit)	Tick one	Code
A01 – Agriculture and hunting	<input type="checkbox"/>	
A02 - Forestry and logging	<input type="checkbox"/>	
B – Fishing 05 and fish farming	<input type="checkbox"/>	
C10 – Mining of coal	<input type="checkbox"/>	
C11 - Extraction of crude petroleum and natural gas plus incidental services	<input type="checkbox"/>	
C13 - Mining and quarrying except energy producing materials	<input type="checkbox"/>	

D15 – Manufacturing of food products and beverages	<input type="checkbox"/>
D16 – Manufacturing of tobacco products	<input type="checkbox"/>
D17 – Manufacturing of textiles	<input type="checkbox"/>
D18 – Manufacturing of clothing	<input type="checkbox"/>
D19 – Manufacturing of leather products	<input type="checkbox"/>
D20 – Manufacturing of wood / wood products	<input type="checkbox"/>
D21 – Manufacturing of pulp, paper and paper products	<input type="checkbox"/>
D22 - Publishing and printing and reproduction of recorded media	<input type="checkbox"/>
D23 - Manufacturing of coke, refined petroleum products and nuclear fuel	<input type="checkbox"/>
D24 - Manufacturing of chemicals and chemical products	<input type="checkbox"/>
D25 – Manufacturing of rubber and rubber products	<input type="checkbox"/>
D26 – Manufacturing of other non-metallic mineral products	<input type="checkbox"/>
D27 – Manufacturing of basic metals	<input type="checkbox"/>
D28 – Manufacturing of fabricated metal products except machinery and equipment	<input type="checkbox"/>
D29 - Manufacturing of machinery and equipment not elsewhere classified	<input type="checkbox"/>
D30 – Manufacturing of office machinery and computers	<input type="checkbox"/>
D31 – Manufacturing of electrical equipment and apparatus	<input type="checkbox"/>
D32 – Manufacturing of radio, TV and communication equipment	<input type="checkbox"/>
D33 – Manufacturing of medical, precision and optical instruments	<input type="checkbox"/>
D34 – Manufacturing of motor vehicles	<input type="checkbox"/>
D35 – Manufacturing of other transport equipment	<input type="checkbox"/>
D36 – Manufacturing of furniture	<input type="checkbox"/>
D37 - Recycling	<input type="checkbox"/>
E40 – Electricity, gas, steam and hot water supply	<input type="checkbox"/>
E41 – Collection, purification and distribution of water	<input type="checkbox"/>
F45 - Construction	<input type="checkbox"/>
G50 – Sale and maintenance of motor vehicles and motor cycles	<input type="checkbox"/>
G51 – Wholesale trade and commission trade	<input type="checkbox"/>
G52 – Retail trade (except cars)	<input type="checkbox"/>
H55 – Hotels & restaurants	<input type="checkbox"/>
I60 – Land transport	<input type="checkbox"/>
I61 – Water transport	<input type="checkbox"/>
I62 – Air transport	<input type="checkbox"/>
I63 – Supporting transport activities	<input type="checkbox"/>

J64 – Post & telecoms	<input type="checkbox"/>
K65 – Financial intermediation (except insurance & pensions)	<input type="checkbox"/>
K66 - Insurance and pension funding	<input type="checkbox"/>
K70 – Real estate	<input type="checkbox"/>
K71 – Renting of machinery and equipment	<input type="checkbox"/>
K72 - Computer and related activities	<input type="checkbox"/>
K73 – Research and development	<input type="checkbox"/>
K74 – Other business activities	<input type="checkbox"/>
L 75 – Public admin and defence	<input type="checkbox"/>
M80 – Education	<input type="checkbox"/>
N85 - Health and social work	<input type="checkbox"/>
O90 – Sewage, refuse disposal and sanitation	<input type="checkbox"/>
O92 - Recreational, sporting and cultural activities	<input type="checkbox"/>
093 - Other services	<input type="checkbox"/>

Interviewer to code

Any difficulty in coding, please ask SQW (Bruce Macdonald, Alan Brazewell, Osman Anwar or Alison O'Connor) or Eddy Graham, IBP.

7. One of SE's Key/Growth sectors or indicate other	Tick one	Code
Aerospace, defence & marine	<input type="checkbox"/>	
Chemical sciences	<input type="checkbox"/>	
Construction	<input type="checkbox"/>	
Digital markets and enabling technology	<input type="checkbox"/>	
Education	<input type="checkbox"/>	
Energy	<input type="checkbox"/>	
Financial services	<input type="checkbox"/>	
Food & drink	<input type="checkbox"/>	
Forest industries	<input type="checkbox"/>	
Life sciences	<input type="checkbox"/>	
Textiles	<input type="checkbox"/>	
Tourism	<input type="checkbox"/>	
Other (Not SE Key/Growth sector)	<input type="checkbox"/>	

8. In approximately what year did this establishment first open for business...?

Write year

Don't know

International trade

- 9. Are you or have you conducted any business outside the UK within the last THREE years?**
- | | Tick one | Code |
|---------------------------|--------------------------|----------|
| Yes | <input type="checkbox"/> | Go To 11 |
| No, but planning to start | <input type="checkbox"/> | Go To 13 |
| No, and no plans to start | <input type="checkbox"/> | Go to 10 |

10. If you have not conducted any business outside the UK within the last THREE years and are not planning to, why not?

- | | Tick any | Code |
|----------------------------------------------------------------------|--------------------------|------|
| Have no need; UK market is sufficient for our company | <input type="checkbox"/> | |
| Product/service is not appropriate for sales outside the UK | <input type="checkbox"/> | |
| Would require substantial resources and we have other priorities | <input type="checkbox"/> | |
| Perceptions are that the barriers to overcome would be too difficult | <input type="checkbox"/> | |
| Have just never thought about it | <input type="checkbox"/> | |
| Other (specify) | <input type="checkbox"/> | |

Go to Q13

11. When did you start international trade?

Approximate year

- 12. Over this time would you describe your international activity as:**
- | | Tick one | Code |
|--------------------------------|--------------------------|------|
| regular throughout this period | <input type="checkbox"/> | |
| value varies from year to year | <input type="checkbox"/> | |
| ad hoc - none in some years | <input type="checkbox"/> | |
| a one off to date | <input type="checkbox"/> | |
| no international revenue yet | <input type="checkbox"/> | |

- 13. Over the last THREE financial years, approximately what proportion of your sales are made to the following areas**
- | | Scotland | Rest of the UK | Outside the UK | Total |
|-------------|----------|----------------|----------------|-------|
| 2006 - 2009 | % | % | % | 100% |

14. If you make any international sales to affiliated companies (part of the group), what proportion of your total international sales is this	Percentage	Code
	2008/09	%

Motivation

15. Specifically, what motivated the decision to <i>consider</i> trading internationally? (interviewer – ask then code)	Tick any	Code
----------------------------------------------------------------------------------------------------------------------------	----------	------

- to achieve our growth aims
- higher profit margins outside UK
- utilise existing capacity
- Reduces dependency on small number of markets
- Opportunity to keep abreast of developments
- international markets have always been relevant
- part of an international group set up to trade outside the UK
- Other (specify)
-

16. Did <u>Scottish Development International</u> – <u>SDI</u> play any role in motivating your decision to consider trading internationally?	Tick one	Code
-----------------------------------------------------------------------------------------------------------------------------------------------	----------	------

- Yes, strong influence
- Yes, some influence
- No influence

17. What does your internationalisation activity involve? (Interviewer – read out)	Tick one	Code
---------------------------------------------------------------------------------------	----------	------

- Don't have any international activity**
- New markets** for existing products
- New products** for international markets
- Acquisition** of foreign business
- Joint venture**/partnership
- Other (specify)
-

Finance

18. Over the last year have you found it more difficult to get or maintain borrowing from your bank? **Tick one** **Code**

Yes

No

Don't know

IF No or Don't know GO TO Q20

19. If YES, has this affected your plans for INTERNATIONAL development? **Tick one** **Code**

No effect on international plans

Has delayed internationalisation plans

Reduced scale of our international plans

Abandoned international plans

Other

.....

20. During the past 6 months have you applied for any of the following types of finance AND been turned down? **Tick one** **Code**

INTERVIEWER (IF NOT APPLIED TICK NONE OF THESE AND SKIP TO Q0)

Overdraft

Secured loan

Unsecured loan

Mortgage

Equity

Credit cards

Asset finance

Other

.....

(DO NOT READ OUT) Don't know / None of these

**GO TO
Q22**

21. Which of the following bands best describes the total amount of new finance you have sought and been rejected for in the past 6 months? **Tick one** **Code**

- Less than £5,000
- £5,000 - £9,999
- £10,000 - £49,999
- £50,000 - £99,999
- £100,000 - £499,999
- £500,000 - £999,999
- £1m-£2m
- £2m-£5m
- £5m+

22. If you are planning to grow your business over the next 6 months to 3 years, how are you planning to finance that growth? Are you planning to... **Tick one** **Code**

- Use funds generated by the business
- Obtain or extend an overdraft facility
- Extend or obtain a loan
- Look for investors in the business
- Sell assets to raise cash
- Use asset finance
- Use invoice discounting
- Something else (specify)
-
- Not planning to grow business

- 23. How has the recession affected your plans to develop international activities?** **Tick any** **Code**
- No impact GO TO 24
 - reduced the scale of our plans
 - increased the scale of our plans
 - changed focus to different markets
 - delayed implementation of plans
 - accelerated implementation of plans
 - decided not to go ahead with international plans
 - Other (specify)
-

Information management in the company

- 24. I will now read out a set of statements that will help us understand the level of experience that your business has in making use of ideas developed elsewhere.**

Score 5 **code**
(strongly agree)
to 1 (strongly disagree). 3 is
neutral

Interviewer – read out one at a time

Information is effectively managed throughout the organisation	
We have developed new products in collaboration with other firms	
We have the capacity to adapt others' technologies	
We have capacity for technological development	
Information is freely exchanged with other organisations in networks	

Barriers

25. What have been the most significant barriers that faced in internationalising the business? Tick any Code

Interviewer: ask and then code responses below and try to avoid using "other"

- Obtaining information on an export market
 - Products unsuitable for export
 - No spare production capacity
 - Difficulty in establishing a dialogue with prospective customers or partners
 - Language/cultural differences
 - Preference by overseas customers to work with firms in their own country
 - Payment difficulties
 - Finance
 - Setting competitive prices
 - Currency/exchange rates
 - Import tariffs
 - Transport costs
 - Staff not trained for this
 - Pressure on management time
 - Legislation / standards
 - Export documentation
 - Warranty or service support
 - Other (specify)
-

26. To help in overcoming barriers, did you take advice from? (unprompted) Tick any Code
- Expert staff that you hired
 - Lawyers
 - Accountants
 - Consultants
 - Banks
 - Peer group
 - SDI
 - Other (specify)
 -
None of the above
-

Performance/competitiveness

27. Compared to your competitors, how would you rate your recent sales performance? Tick one code
- Significantly better
 - Better
 - Same
 - Worse
 - Significantly worse
 - Don't know
28. How modern is your product compared to your competitors? Tick one Code
- Very up-to-date
 - Up to 1 year behind
 - 1-3 years behind
 - More than 3 years behind
 - Don't know
-

Working with Scottish Development International - SDI

29. What stage was your firm at when you first started working with SDI? Tick any code

- Had no international strategy
- Had a strategy but wanted to refine it
- Saw opportunities but needed help to research the market
- Saw opportunities but needed help to enter the market (distributors, agents, help with different legal system etc)
- Only wanted financial assistance to support international activity
- Other (please specify)

.....

30. Which of the following had you done **PRIOR** to working with SDI Tick any

- Made sales in UK outside Scotland
- Made sales outside UK
- Joint venture outside UK
- Acquired a business outside UK
- Set up international partnership
- Secured agents / partners outside UK
- None of these
- Other

.....

Other Scottish Enterprise support

31. What forms of support, including **FINANCIAL** support, have you received from **Scottish Enterprise** in the past three years? Tick any Code

- None
- Innovation and R&D related
- Business Development
- Skills and learning
- Business start up
- Accessing finance
- Other (Specify)

.....

Financial assistance

32. Have you received any financial assistance from SDI
- | | Tick | Code |
|-----|--------------------------|----------|
| Yes | <input type="checkbox"/> | |
| No | <input type="checkbox"/> | GO TO 35 |

33. If YES, how much was it and in what year was it first received
- | | Amount | |
|-------|-----------------------------------------------------------------------------------|---|
| Total | <table border="1" style="width: 100px; height: 20px;"><tr><td>£</td></tr></table> | £ |
| £ | | |
| Year | <table border="1" style="width: 100px; height: 20px;"><tr><td></td></tr></table> | |
| | | |

Note to interviewer; where money quantities are asked for throughout, please put in the amount in full, i.e. don't assume that it is in 000s or put entries such as £50k.

34. What was this financial support for?
- Interviewer, ask and then code*

- | | Tick | Code |
|-----------------------------------------------|--------------------------|------|
| Consultancy | <input type="checkbox"/> | |
| Staff | <input type="checkbox"/> | |
| Marketing promotion | <input type="checkbox"/> | |
| Research | <input type="checkbox"/> | |
| Exhibition stand space and construction costs | <input type="checkbox"/> | |
| Travel | <input type="checkbox"/> | |
| Other (specify) | <input type="checkbox"/> | |
-

Interviewer pre-code if possible from database

35. Can I confirm the support you received from SDI and when received?

Tick any

Approximate year received

Preparing to do business

Health check on readiness for international business

Business development review

International Preparedness Programme

Developing Strategy

Strategy advice through one-to-one meetings

International strategy one-day workshop on

Global Companies Development Programme

International business mentoring services

International business manager for hire

International graduate placement

Market support

Standard market reports

Customised overseas market support

Other market support (contacts, advice, guidance)

Overseas missions and exhibitions

Support to attend..... exhibition

.....learning journey

.....overseas mission

Pre-mission in-country briefings

Identification of business contacts/partners

In-market promotion publicity

Overseas accommodation

Virtual offices

Incubator offices

Meeting/training rooms

36. If you went to an exhibition, mission or learning journey, please say here what it was (identify all if more than one)

--

37. Which geographical <u>markets</u> did you intend to tackle through working with SDI?	Tick any	Code
Interviewer, ask and then code		
England / Wales / Northern Ireland	<input type="checkbox"/>	
Rest of European Union (other than UK)	<input type="checkbox"/>	
Other European	<input type="checkbox"/>	
Russia or Central Asia (including Turkey)	<input type="checkbox"/>	
USA	<input type="checkbox"/>	
Canada	<input type="checkbox"/>	
Middle East	<input type="checkbox"/>	
Indian subcontinent (including India, Pakistan & Sri Lanka)	<input type="checkbox"/>	
China	<input type="checkbox"/>	
Japan and South East Asia (including Taiwan & Hong Kong)	<input type="checkbox"/>	
Australia and the Pacific	<input type="checkbox"/>	
South America	<input type="checkbox"/>	
Africa	<input type="checkbox"/>	
Other (specify)	<input type="checkbox"/>	

If did not use accommodation in 35 then GO TO 39

Overseas accommodation

38. If you used overseas accommodation are you still active in that market?	Tick one	Code
Yes - Occupying incubator	<input type="checkbox"/>	
Yes - Have moved on from incubator or shortly intend to do so	<input type="checkbox"/>	
Yes - Still operating through transit or virtual facilities	<input type="checkbox"/>	
Yes – operating there but without premises	<input type="checkbox"/>	
Yes - Other form of activity (specify)	<input type="checkbox"/>	
No	<input type="checkbox"/>	

Satisfaction with SDI

39. How would you rate the quality of support you have received from SDI? Score Code

Please score from 5 very satisfied to 1 very unsatisfied – read out.

Quality and relevance of information	
Usefulness of advice	
Usefulness of contacts it allowed you to make	
Practical support (exhibition attendance, missions etc)	
Experience / skills of advisors	
Understanding of your business needs	
Overall efficiency	

Results

40. As a direct result of working with SDI, which of the following benefits have you experienced? Read out. Tick any Code

- Improved overseas marketing strategy
- Improved market research skills
- Improved knowledge of the competitive environment in an overseas market
- Improved understanding of how to do business in an overseas market
- Confidence to explore a new market
- Met customers / partners otherwise have been unable to meet
- Improved prospects of raising international funding
- Resolved a problem with a foreign contract
- Improved the company's profile overseas
- None of the above
- Other (specify)

International capability

41. In order to assess any change in your firm's international capability can you provide a score for each of the following for BEFORE and AFTER you worked with SDI – *read out*

Score from 5 – very strong to 1 - very weak

Score NOW

Score
BEFORE
working with
SDI

Having a clear view of the advantages / disadvantages of international trade		
Understanding of our strengths and weaknesses in international operations		
Ability to develop a strategic international plan		
Understanding how to develop products for overseas markets		
Ability to reach a target market overseas		
Knowing what needs to be done to establish a local presence		
Able to apply marketing skills to international opportunities		

42. Overall, where there has been an improvement in capability, how important was working with SDI in achieving it?

Tick one

Code

- Very important
- Fairly important
- Not important
- Don't know

43. AS A RESULT OF WORKING WITH SDI, which of the following CHANGES have you made / plan to make? READ OUT

Tick any

Code

- Organisational GO TO 44
- Products or production GO TO 45
- Marketing GO TO 46
- Collaborations, partnerships or acquisition GO TO 47
- Other GO TO 48
(specify.....)
- No changes GO TO 49

44. ORGANISATIONAL changes?

	Has happened	Expect to happen
International strategy/action plan	<input type="checkbox"/>	<input type="checkbox"/>
Recruited specialist staff	<input type="checkbox"/>	<input type="checkbox"/>
Hired external expertise	<input type="checkbox"/>	<input type="checkbox"/>
Management changes	<input type="checkbox"/>	<input type="checkbox"/>
Specialist training	<input type="checkbox"/>	<input type="checkbox"/>
Improved gathering of information	<input type="checkbox"/>	<input type="checkbox"/>
Participation in networks	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify.....)	<input type="checkbox"/>	<input type="checkbox"/>

GO back to 43

45. PRODUCT changes?

	Has happened	Expect to happen
Adapted products for new markets	<input type="checkbox"/>	<input type="checkbox"/>
New products	<input type="checkbox"/>	<input type="checkbox"/>
New production methods	<input type="checkbox"/>	<input type="checkbox"/>
New packaging	<input type="checkbox"/>	<input type="checkbox"/>
New overseas suppliers	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify.....)	<input type="checkbox"/>	<input type="checkbox"/>

GO back to 43

46. MARKETING changes?

	Has happened	Expect to happen
New marketing approaches	<input type="checkbox"/>	<input type="checkbox"/>
New marketing overseas	<input type="checkbox"/>	<input type="checkbox"/>
New market research	<input type="checkbox"/>	<input type="checkbox"/>
New agents/distributors	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify.....)	<input type="checkbox"/>	<input type="checkbox"/>

GO back to 43

47. PARTNERSHIPS or COLLABORATION?

	Has happened	Expect to happen
Foreign acquisition	<input type="checkbox"/>	<input type="checkbox"/>
New international suppliers	<input type="checkbox"/>	<input type="checkbox"/>
Agreements with overseas partners	<input type="checkbox"/>	<input type="checkbox"/>
Joint international R&D project	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify.....)	<input type="checkbox"/>	<input type="checkbox"/>

48. If you indicated another alternative, can you describe briefly.

GO TO 50

49. If you have not taken any of these actions and don't plan to, why not

Tick one

Code

Don't plan to trade internationally in future

We do not need to take any action

Other (specify.....)

Go to 50

50. As a result of working with SDI have you decided **NOT** to trade in any prospective markets?

Tick one

Code

Yes – permanently

Yes – temporarily

No

51. If YES, can you explain why

Outputs

52. As a result of the actions taken because of working with SDI, which of the following HAVE BEEN achieved	Achieved	Expect to be achieved
53. ...and which do you EXPECT to be achieved		
Sales in <i>new</i> overseas market	<input type="checkbox"/>	<input type="checkbox"/>
Increased sales in <i>existing</i> overseas markets	<input type="checkbox"/>	<input type="checkbox"/>
Increased domestic sales	<input type="checkbox"/>	<input type="checkbox"/>
Improved output per employee	<input type="checkbox"/>	<input type="checkbox"/>
Cost savings	<input type="checkbox"/>	<input type="checkbox"/>
Increased investment in R&D	<input type="checkbox"/>	<input type="checkbox"/>
Increased income from intellectual property	<input type="checkbox"/>	<input type="checkbox"/>
Raised new investment funds	<input type="checkbox"/>	<input type="checkbox"/>
Increase in the overall value of the company	<input type="checkbox"/>	<input type="checkbox"/>
Improved ability to attract skilled staff	<input type="checkbox"/>	<input type="checkbox"/>
Achievement of new quality standards (ISO, industry standards)	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>

54. Would the benefits you identified above have been achieved in other ways <u>without working with SDI?</u>	Tick one	Code
No, none of them	<input type="checkbox"/>	
Yes, some of them	<input type="checkbox"/>	
Yes, most of them	<input type="checkbox"/>	
Yes, all of them	<input type="checkbox"/>	

Learning

55. As a result of the international experience supported by SDI, has the firm been <i>exposed to any new ideas?</i>	Tick	Code
Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	GO TO 60
56. If YES, has this knowledge or have these ideas been adopted by the firm	Tick	Code
Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	Go to 57

57. If NO, why have they not been adopted	Tick	Code
Not sufficient capability within the firm	<input type="checkbox"/>	
Not sufficient time to adopt	<input type="checkbox"/>	
Not sufficient funds to invest in these ideas	<input type="checkbox"/>	
Other (specify)	<input type="checkbox"/>	

GO TO 60

58. As a result of new ideas and learning has the firm become more competitive	Tick	Code
Yes	<input type="checkbox"/>	Go to 59
No	<input type="checkbox"/>	Go to 60
Don't know	<input type="checkbox"/>	Go to 60

59. Can you explain how?	Tick	Code
Better use of capacity	<input type="checkbox"/>	
New processes	<input type="checkbox"/>	
New ideas for products	<input type="checkbox"/>	
Sales and marketing	<input type="checkbox"/>	
Management	<input type="checkbox"/>	
New and more knowledgeable staff	<input type="checkbox"/>	
Other (specify)	<input type="checkbox"/>	

.....

International revenue

60. Has working with SDI changed the amount of overall income the firm receives from international trade?	Tick	Code
-----------------------------------------------------------------------------------------------------------	------	------

Note to interviewer, international income includes:

- sales of products (exports)
- income received from royalties, licences etc.

No effect yet, but impact in future	<input type="checkbox"/>
No effect and none in future	<input type="checkbox"/>
Small positive effect	<input type="checkbox"/>
Large positive effect	<input type="checkbox"/>
Negative effect	<input type="checkbox"/>

61. Which countries or areas do you currently generate international income from? And which is the largest (by value)	Tick any	Largest one)	(tick
None	<input type="checkbox"/>	<input type="checkbox"/>	
England / Wales / Northern Ireland	<input type="checkbox"/>	<input type="checkbox"/>	
European Union, outside UK	<input type="checkbox"/>	<input type="checkbox"/>	
Europe outside the European Union	<input type="checkbox"/>	<input type="checkbox"/>	
Russia or Central Asia (including Turkey)	<input type="checkbox"/>	<input type="checkbox"/>	
North America	<input type="checkbox"/>	<input type="checkbox"/>	
Middle East	<input type="checkbox"/>	<input type="checkbox"/>	
Indian subcontinent (including India, Pakistan & Sri Lanka)	<input type="checkbox"/>	<input type="checkbox"/>	
China	<input type="checkbox"/>	<input type="checkbox"/>	
Japan and South East Asia (including Taiwan & Hong Kong)	<input type="checkbox"/>	<input type="checkbox"/>	
Australia and the Pacific	<input type="checkbox"/>	<input type="checkbox"/>	
South America	<input type="checkbox"/>	<input type="checkbox"/>	
Africa	<input type="checkbox"/>	<input type="checkbox"/>	
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	

Cost of investment

62. How much (approx.) has your firm invested in the internationalisation activities that SDI supported (excluding SDI financial support) Amount

Enter £0 if nothing

Total

£

Impacts

Additionality

63. If you had not worked with SDI, what would have happened? Would you have... **Tick ANY** **Code**
(read out)

- Not developed international trade at all
 - Paid someone else for the services we got from SDI
 - Been LESS LIKELY to undertake an international project
 - Undertaken a DIFFERENT internationalisation project
 - Undertaken an internationalisation project, but ON A SMALLER SCALE
 - Undertaken an internationalisation project, but LESS EFFECTIVELY
 - Undertaken an internationalisation project but it would have taken LONGER
 - Undertaken the SAME ACTIVITY AT THE SAME TIME
-

64. Taking into account the effort in accessing SDI assistance as well as direct costs would you say that it has been worthwhile working with SDI? **Tick one** **Code**

- Definitely, yes
- On balance, yes
- On balance, no
- Definitely not
- Don't know

IMPACTS TO DATE

65. For each of the following can you say whether working with SDI has had an effect to date, since you received it.

Indicator	Major impact	Minor impact	No impact/insignificant	Negative impact
Export sales	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other international income	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Profit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Productivity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If respondent indicates any impacts above then continue, otherwise go to 67

66. How much longer do you expect the impact of the support to last? Tick one
- | | | |
|-------------------|--------------------------|-----|
| No further impact | <input type="checkbox"/> | 32. |
| Another year | <input type="checkbox"/> | 33. |
| 2 years | <input type="checkbox"/> | 34. |
| 3 - 5 years | <input type="checkbox"/> | 35. |
| 5 - 10 years | <input type="checkbox"/> | 36. |
| Longer | <input type="checkbox"/> | 37. |

Interviewer note that if respondent indicates above that support will have an impact in the future, you will also need to cover this in Q81

Interviewer – for the following questions, if an answer is not known, enter n/k. Do not enter 0 unless this is the actual value reported

Note that ALL must answer these questions and use routing whether or not they indicate an impact

Export sales

67. Can you tell me the value of EXPORT SALES generated from this establishment in each of the last three financial years? Amount

2008/09	£
2007/08	£
2006/07	£
INTERVIEWER AGREE CHANGE 2006 - 2009	

INTERVIEWER READ – These figures indicate that exports have changed by [SEE FINAL BOX ABOVE] over this period

IF FIGURES INCREASED Q68, IF NOT Q69

68. If exports have increased, how much of this CHANGE is the result of SDI support? Tick one

- SDI support has made no difference
- 1 – 10%
- 11 – 20%
- 21 – 30%
- 31 – 40%
- 41 – 50%
- 51 – 75%
- 76 – 100%
- No increase without SDI
- Don't know

GO TO 70

69. If exports have fallen or stayed the same, would they have fallen further without SDI support? Tick one

- No, support made no difference
- Yes

If YES, how much lower would they have been without SDI support £

Other International income

70. Can you tell me the value of any OTHER INTERNATIONAL INCOME (income from licences, royalties, investments etc)? Amount

2008/09	£ <input style="width: 100px;" type="text"/>
2007/08	£ <input style="width: 100px;" type="text"/>
2006/07	£ <input style="width: 100px;" type="text"/>
INTERVIEWER AGREE CHANGE 2006 - 2009	<input style="width: 100px;" type="text"/>

INTERVIEWER READ – These figures indicate that other international income has changed by [SEE FINAL BOX ABOVE] over this period

IF FIGURES INCREASED Q71, IF NOT Q72

71. If other international income has increased, how much of this CHANGE is the result of SDI support? **Tick one**

- SDI support has made no difference
- 1 – 10%
- 11 – 20%
- 21 – 30%
- 31 – 40%
- 41 – 50%
- 51 – 75%
- 76 – 100%
- No increase without SDI
- Don't know

GO TO 73

72. If other international income has fallen or stayed the same, would it have fallen further without SDI support? **Tick one**

- No, support made no difference
- Yes

If YES, how much lower would they have been without SDI support £

Turnover

73. Can you tell me the turnover of the business at this establishment in each of the last three financial years **Amount**

2008/09	£
2007/08	£
2006/07	£
INTERVIEWER AGREE CHANGE 2006 - 2009	£

INTERVIEWER READ – These figures indicate that turnover has changed by [SEE FINAL BOX ABOVE] over this period

IF FIGURES INCREASED Q74, IF NOT Q75

74. If turnover has increased, how much of this CHANGE is the result of SDI support? **Tick one**

SDI support has made no difference

1 – 10%

11 – 20%

21 – 30%

31 – 40%

41 – 50%

51 – 75%

76 – 100%

No increase without SDI

Don't know

GO TO 76

75. If turnover has fallen or stayed the same, would it have fallen further without SDI support? **Tick one**

No, support made no difference

Yes

If YES, how much lower would they have been without SDI support £

Employment

76. Can you tell me the number of full time equivalent jobs at this establishment in each of the last three years? **Number**

Currently	<input type="text"/>
2008	<input type="text"/>
2007	<input type="text"/>

77. How many of these jobs require education to degree level

Number

78. How many are engaged in R&D

Number

79. Would employment have been higher or lower without SDI support?

Tick one

Would have been lower without SDI

SDI support has made no difference to employment

Would have been higher without SDI

80. How many people would be employed here now if you had not worked with SDI?

Number

FUTURE impacts

81. For each of the following can you indicate whether you EXPECT that work with SDI, to date, will have a major or minor positive effect, no effect or a negative effect, OVER THE NEXT THREE YEARS.

Measure	Major impact	Minor impact	No impact/insignificant	Negative impact
Export sales	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other international income	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How much higher (or lower) do you expect the following to be IN THE NEXT THREE YEARS as a result of the SDI support *to date*?

	82. Export sales	83. Other international income	84. Turnover
SDI support to date will make no difference in the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1 – 10%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 – 20%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21 – 30%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31 – 40%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41 – 50%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51 – 75%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
76 – 100%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No increase without SDI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Don't know	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
They will be lower as a result of SDI support (indicate below)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specify amount if lower	£	£	£

85. And how long do you expect these impacts to last?

	Tick one	
1 year	<input type="checkbox"/>	38.
2 years	<input type="checkbox"/>	39.
3 - 5 years	<input type="checkbox"/>	40.
5 - 10 years	<input type="checkbox"/>	41.
Longer	<input type="checkbox"/>	42.

Displacement (competition)

- 86. Which of the following statements best describe your business?** **Tick** **Code**
- All the businesses I compete with are based in Scotland
- The majority are based in Scotland
- Around half are based in Scotland
- A minority are based in Scotland
- None of the businesses I compete with are based in Scotland, or I have no direct competitors
-
- 87. Would you say that the market for your product in the UK over the last three years has...?** **Tick for the UK** **International**
- 88. And internationally....**
- Declined strongly
- Declined moderately
- About the same
- Improved moderately
- Improved strongly

Suppliers

- 89. Approximately what proportion of your turnover was accounted for by bought in goods & services**

(including raw materials, energy, rent, other services etc but definitely excluding employee costs) in the last financial year

Percentage

	%
--	---

- 90. Which of the following statements best describes your main suppliers, in terms of value?** **Tick** **Code**
- All our supplies come from Scottish based suppliers
- The majority come from Scottish based suppliers
- Around half come from Scottish based suppliers
- A minority come from Scottish based suppliers
- None of our supplies, in terms of value, come from Scottish based suppliers

91. Approximately what proportion of your production is undertaken in Scotland?	Tick	Code
All of our production is based in Scotland	<input type="checkbox"/>	
The majority is based in Scotland	<input type="checkbox"/>	
Around half is based in Scotland	<input type="checkbox"/>	
A minority is based in Scotland	<input type="checkbox"/>	
None of our production is based in Scotland	<input type="checkbox"/>	

Overall

92. Referring back to Qn 35, which elements of the SDI support *is* most important in achieving performance improvement?

Score

Most important

Score only those received with 5 for very important through to 1 for unimportant

Tick

93. And which was the single most important?

Preparing to do business

Health check on readiness for international business

Business development review

International Preparedness Programme

Developing Strategy

Strategy advice one-to-one meetings

International strategy one-day workshop

Global Companies Development Programme

International business mentoring services

International business manager for hire

International graduate placement

Market support

Standard market reports

Customised overseas market support

Other market support (contacts, advice, guidance)

Overseas missions and exhibitions

Support to attend.....exhibition

.....learning journey

.....outward mission

travel grants

pre-mission and in-country briefings

identification of business contacts/partners

in-market promotion publicity

Overseas accommodation

Used virtual offices

Incubator offices

Meeting/training rooms

94. Given current economic conditions what further challenges do businesses face in international development and what support could SDI, Scottish Enterprise and other public agencies provide?

Next Stage

95. A number of companies are being asked whether they would be willing to participate further in the research by acting as a case study. In practice this would mean a further interview to allow a written case study to be prepared as part of our report to Scottish Enterprise. Would you be willing to be considered as a possible case study?

Yes

No

Annex C: Inward Investment questionnaire

Company name:	
Telephone number:	
Contact name:	
Job title	
Date of interview:	
Time of interview	
Interviewer	

Interviewer to pre-code

Firm is.....	DRM		Non-DRM	
--------------	-----	--	---------	--

Introduction

Good morning/afternoon my name is (YOUR NAME) and I'm calling from IBP Strategy and Research. We are currently carrying out a survey on behalf of Scottish Enterprise and **Scottish Development International** – known as **SDI**. You should have received a letter recently from SDI explaining the purpose of the research.

This is to provide an overview of the benefits to customers from Scottish Development International's services. The survey aims to help Scottish Enterprise and the Scottish Government meet the needs of businesses. Your co-operation will ensure that the views expressed are representative of all their customers.

I understand that in the past your business has received information, advice or financial assistance from Scottish Development International to support international investment in Scotland.

Participation in the study is entirely voluntary and responses will not be attributed to any individual or company. Results will be reported to the survey sponsors on an anonymous basis only. The interview will take around 20 - 30 minutes to conduct.

IF RESPONDENT WISHES TO CONFIRM VALIDITY OF SURVEY OR GET MORE INFORMATION ABOUT AIMS AND OBJECTIVES, THEY CAN CALL:

- SQW: Bruce Macdonald, Tel 0131 225 4007
- Scottish Enterprise: Sheila Perry 0141 228 2618

I would like to ask you some questions about the activities carried out here, and the services you have received from **Scottish Development International** or **SDI** as I will refer to them.

1. **Can I confirm that you are the person best qualified to talk about your company's experience of working with SDI?**

- | | | |
|--------------------------------------------------|--------------------------|---------------------------|
| Yes | <input type="checkbox"/> | ASK NEXT Q |
| Someone else at this establishment | <input type="checkbox"/> | TRANSFER AND RE-INTRODUCE |
| Hard appointment | <input type="checkbox"/> | MAKE APPOINTMENT |
| Soft appointment | <input type="checkbox"/> | |
| Refusal | <input type="checkbox"/> | |
| Refusal- company policy | <input type="checkbox"/> | |
| Refusal- taken part in recent survey | <input type="checkbox"/> | THANK & CLOSE |
| Nobody at establishment able to answer questions | <input type="checkbox"/> | |
| Not available in deadline | <input type="checkbox"/> | |

2. **Can you confirm that the postcode of this establishment is...(SEE CONTACT SHEET)**

Code

Check postcode from contact data and enter or if different, enter new postcode

Postcode

Don't know

Business background

3. **Approximately when did your company first invest in Scotland?**

Year

Code

Year

4. **Briefly, what is the main business activity of this firm in Scotland**

Interviewer to code in the tables below based on activity (not market)

Any difficulty in coding, please ask SQW (Bruce Macdonald, Alan Brazewell, Osman Anwar or Alison O'Connor) or Eddy Graham, IBP.

SIC CODE (2-digit)

Tick one

Code

A01 – Agriculture and hunting

A02 - Forestry and logging	<input type="checkbox"/>
B – Fishing 05 and fish farming	<input type="checkbox"/>
C10 – Mining of coal	<input type="checkbox"/>
C11 - Extraction of crude petroleum and natural gas plus incidental services	<input type="checkbox"/>
C13 - Mining and quarrying except energy producing materials	<input type="checkbox"/>
D15 – Manufacturing of food products and beverages	<input type="checkbox"/>
D16 – Manufacturing of tobacco products	<input type="checkbox"/>
D17 – Manufacturing of textiles	<input type="checkbox"/>
D18 – Manufacturing of clothing	<input type="checkbox"/>
D19 – Manufacturing of leather products	<input type="checkbox"/>
D20 – Manufacturing of wood / wood products	<input type="checkbox"/>
D21 – Manufacturing of pulp, paper and paper products	<input type="checkbox"/>
D22 - Publishing and printing and reproduction of recorded media	<input type="checkbox"/>
D23 - Manufacturing of coke, refined petroleum products and nuclear fuel	<input type="checkbox"/>
D24 - Manufacturing of chemicals and chemical products	<input type="checkbox"/>
D25 – Manufacturing of rubber and rubber products	<input type="checkbox"/>
D26 – Manufacturing of other non-metallic mineral products	<input type="checkbox"/>
D27 – Manufacturing of basic metals	<input type="checkbox"/>
D28 – Manufacturing of fabricated metal products except machinery and equipment	<input type="checkbox"/>
D29 - Manufacturing of machinery and equipment not elsewhere classified	<input type="checkbox"/>
D30 – Manufacturing of office machinery and computers	<input type="checkbox"/>
D31 – Manufacturing of electrical equipment and apparatus	<input type="checkbox"/>
D32 – Manufacturing of radio, TV and communication equipment	<input type="checkbox"/>
D33 – Manufacturing of medical, precision and optical instruments	<input type="checkbox"/>
D34 – Manufacturing of motor vehicles	<input type="checkbox"/>
D35 – Manufacturing of other transport equipment	<input type="checkbox"/>
D36 – Manufacturing of furniture	<input type="checkbox"/>
D37 - Recycling	<input type="checkbox"/>
E40 – Electricity, gas, steam and hot water supply	<input type="checkbox"/>
E41 – Collection, purification and distribution of water	<input type="checkbox"/>
F45 - Construction	<input type="checkbox"/>
G50 – Sale and maintenance of motor vehicles and motor cycles	<input type="checkbox"/>
G51 – Wholesale trade and commission trade	<input type="checkbox"/>
G52 – Retail trade (except cars)	<input type="checkbox"/>

H55 – Hotels & restaurants	<input type="checkbox"/>
I60 – Land transport	<input type="checkbox"/>
I61 – Water transport	<input type="checkbox"/>
I62 – Air transport	<input type="checkbox"/>
I63 – Supporting transport activities	<input type="checkbox"/>
J64 – Post & telecoms	<input type="checkbox"/>
K65 – Financial intermediation (except insurance & pensions)	<input type="checkbox"/>
K66 - Insurance and pension funding	<input type="checkbox"/>
K70 – Real estate	<input type="checkbox"/>
K71 – Renting of machinery and equipment	<input type="checkbox"/>
K72 - Computer and related activities	<input type="checkbox"/>
K73 – Research and development	<input type="checkbox"/>
K74 – Other business activities	<input type="checkbox"/>
L 75 – Public admin and defence	<input type="checkbox"/>
M80 – Education	<input type="checkbox"/>
N85 - Health and social work	<input type="checkbox"/>
O90 – Sewage, refuse disposal and sanitation	<input type="checkbox"/>
O92 - Recreational, sporting and cultural activities	<input type="checkbox"/>
093 - Other services	<input type="checkbox"/>

Interviewer to code

Any difficulty in coding, please ask SQW (Bruce Macdonald, Alan Brazewell, Osman Anwar or Alison O'Connor) or Eddy Graham, IBP.

5. Is the firm in one of SE's Key Growth Sectors or indicate "other"?	Tick one	Code
Aerospace, defence & marine	<input type="checkbox"/>	
Chemical sciences	<input type="checkbox"/>	
Construction	<input type="checkbox"/>	
Digital markets and enabling technology	<input type="checkbox"/>	
Education	<input type="checkbox"/>	
Energy	<input type="checkbox"/>	
Financial services	<input type="checkbox"/>	
Food & drink	<input type="checkbox"/>	
Forest industries	<input type="checkbox"/>	
Life sciences	<input type="checkbox"/>	

- Textiles
- Tourism
- Other (Not SE Key Growth Sector)

- 6. How would you describe the operations of the firm in Scotland** **Tick any** **Code**
- Production or manufacturing
 - Service delivery
 - Distribution
 - Sales and marketing
 - Research and development (including software and IT)
 - Training and product support
 - Other (specify)

Parent company

This should be available from CRM data so please code beforehand

- 7. In which part of the world is your parent company headquartered** **Tick** **Code**
- England / Wales / Northern Ireland
 - European Union (other than UK)
 - Other European
 - Russia or Central Asia (including Turkey)
 - USA
 - Canada
 - Middle East
 - Indian subcontinent (including India, Pakistan & Sri Lanka)
 - China
 - Japan and South East Asia (including Taiwan & Hong Kong)
 - Australia and the Pacific
 - South America
 - Africa
 - Other (specify)

8. Briefly, what is the main business of your parent company (if different from this site)

11.62

11.63 Interviewer to code based on activity (not market)

SIC CODE (1-digit)	Tick one	Code
A – Agriculture, hunting & forestry	<input type="checkbox"/>	
B – Fishing	<input type="checkbox"/>	
C – Mining & quarrying	<input type="checkbox"/>	
D – Manufacturing	<input type="checkbox"/>	
E – Electricity, gas and water supply	<input type="checkbox"/>	
F – Construction	<input type="checkbox"/>	
G – Retail, wholesale & repair of motor vehicles	<input type="checkbox"/>	
H – Hotels and catering	<input type="checkbox"/>	
I - Transport, storage and communication	<input type="checkbox"/>	
J - Financial intermediation (Finance)	<input type="checkbox"/>	
K - Real estate, renting & business activities	<input type="checkbox"/>	
L – Public administration and defence	<input type="checkbox"/>	
M – Education	<input type="checkbox"/>	
N - Health and social work	<input type="checkbox"/>	
O - Other community, social & personal service activities	<input type="checkbox"/>	

9. Can you indicate the level of autonomy in decision making that operates at this site in Scotland? Score Code

Enter 5 if you feel the business in Scotland works largely independently through to
1 if you feel that most decisions are made outside Scotland

Level of autonomy of establishment

10. What were the **THREE main motivations** for your parent company to make this investment in the Scotland Tick three Code

Interviewer, read out

- Serve Scottish markets
- Serve the UK market
- Serve European markets
- Serve other firms in the group
- Keep up with competitors who have also invested in Scotland
- Be close to customers who have also invested in Scotland
- Reduce costs
- Launch a new product
- Be close to centres of research
- Establish European base in English speaking country
- Other (specify.....)

11. Can you tell me how important the following factors were in your decision to invest in Scotland? (INTERVIEWER ROTATE FACTORS) Scale Met expectations

Use the a scale of 1- 5, where 5 is very important and 1 not important)

12. For those that you scored 4 or 5, can you indicate whether these have met your expectations

Knowledgeable and skilled workforce	1	2	3	4	5	<input type="checkbox"/>
Workforce with strong work ethic	1	2	3	4	5	<input type="checkbox"/>
Cultural affinity	1	2	3	4	5	<input type="checkbox"/>
English spoken	1	2	3	4	5	<input type="checkbox"/>
Stable economic environment	1	2	3	4	5	<input type="checkbox"/>
Political and regulatory environment	1	2	3	4	5	<input type="checkbox"/>
Environment for protection of intellectual property	1	2	3	4	5	<input type="checkbox"/>
Communications infrastructure	1	2	3	4	5	<input type="checkbox"/>
International transportation and logistics	1	2	3	4	5	<input type="checkbox"/>
Gateway to markets in Europe	1	2	3	4	5	<input type="checkbox"/>
Important location for businesses in your sector	1	2	3	4	5	<input type="checkbox"/>
Ethical approach to business	1	2	3	4	5	<input type="checkbox"/>
Grants	1	2	3	4	5	<input type="checkbox"/>
Sites and premises	1	2	3	4	5	<input type="checkbox"/>
Reputation for research and innovation	1	2	3	4	5	<input type="checkbox"/>
Other (specify.....)	1	2	3	4	5	<input type="checkbox"/>

13. Has the role of this site changed from the original plan at the time of the investment? Grown No change Reduced Code

Size	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Level of autonomy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Range of products services offered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R&D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Markets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Geographic responsibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

14. Overall, where there has been a change, how important has working with Scottish Development International - SDI - been in achieving this? Tick one Code

- Very important
- Fairly important
- Not important

15. Overall, how important has working with SDI been in ensuring the company's continuing presence in Scotland?	Tick one	Code
Very important	<input type="checkbox"/>	
Fairly important	<input type="checkbox"/>	
Not important	<input type="checkbox"/>	

Barriers to investment

16. I'm now going to read out a list of barriers firms sometimes encounter when locating in an overseas country and I would like you to tell me whether this is something that you encountered during investment in Scotland?	Yes	No	Don't know	Code
Obtaining visas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Understanding and implementing legal requirements such as company registration or tax	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Finding suitable sites and premises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Recruiting suitable staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Retaining staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Identifying local suppliers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Protecting your intellectual property	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Working with SDI

17. For which of the following types of investment did SDI provide assistance?	Tick any	Code
Locating new operations in Scotland	<input type="checkbox"/>	
Safeguarding activity at an existing Scottish site	<input type="checkbox"/>	
Expanding an existing Scottish site	<input type="checkbox"/>	
Setting up a research agreement	<input type="checkbox"/>	
Setting up a business partnership	<input type="checkbox"/>	
Other (specify)	<input type="checkbox"/>	

.....

18. Which of the elements of the SDI support is most important in influencing your company's decisions or in achieving performance improvement?

Score 1 – 5
for those
received

Tick
Most
important
one

Score only the elements received with 5 for very important through to 1 for unimportant

19. And of these which was the single most important?

Regional tour	<input type="checkbox"/>
Tailored presentation or report	<input type="checkbox"/>
Help to find sites and premises	<input type="checkbox"/>
Help with recruitment	<input type="checkbox"/>
Help to identify customers, suppliers, business partners	<input type="checkbox"/>
Help to identify contacts at universities or research centres	<input type="checkbox"/>
Providing information that you would otherwise have been unable to find	<input type="checkbox"/>
Presentation to your company in a group with other companies	<input type="checkbox"/>
Brochures, booklets or other 'off-the-shelf' publications	<input type="checkbox"/>
Directed you towards public sector financial assistance	<input type="checkbox"/>
Help with planning applications or other permits	<input type="checkbox"/>
Help with understanding local legal or tax requirements	<input type="checkbox"/>
Help in preparing a business case to secure investment	<input type="checkbox"/>
Help to access political support	<input type="checkbox"/>
Help with material or presentation for you to give to your management	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>

Satisfaction

20. How would you rate the quality of support you have received from SDI?

Score

Code

Please score the following from 5 very satisfied to 1 very unsatisfied

Quality and relevance of information	
Usefulness of advice	
Usefulness of contacts made	
Experience / skills of advisors	
Understanding of your business needs	
Practical support on sites, premises, recruitment etc	
Quality of aftercare service	

Results

21. As a result of working with SDI have any of the following happened.....

Tick any

Score

22. And how important was working with SDI in this happening?

Can you score from 1 not important to 5, very important

Set up new premises or plant in Scotland	<input type="checkbox"/>	
Acquired or merged with an existing firm in Scotland	<input type="checkbox"/>	
Increased the investment at an existing site	<input type="checkbox"/>	
Employment/activity safeguarded	<input type="checkbox"/>	
Increased the R&D activity at this site	<input type="checkbox"/>	
Improved access to Scottish universities or research organisations	<input type="checkbox"/>	
Increased the firm's use of Scottish-based suppliers	<input type="checkbox"/>	
Increased the firm's involvement in collaborative R&D in Scotland	<input type="checkbox"/>	
Increased the training at this site	<input type="checkbox"/>	
No further activity	<input type="checkbox"/>	

Innovation

23. Which of the following R&D and new product development activities is this establishment involved in? **Tick any** **Code**
- Conduct R&D internally
- Commissioning external R&D
- Product development internally
- Commissioning external product development
- No R&D and product development activities
24. Does this Scottish site deal with any significantly *new products* that have been introduced in the last three years? **Tick one** **Code**
- Yes, completely new to the world
- Yes, new to the UK
- Yes, new to your industry or sector
- Yes, new to your business
- No
- Don't know
25. Would you say that any of the *business models, ways of working or technical processes* employed at this site are new to Scotland? **Tick one** **Code**
- Yes
- No Go To 28
- Don't know
26. Have any of these been adopted in Scotland by your competitors, suppliers or customers? **Tick one** **Code**
- Yes
- No Go To 28
- Don't know Go To 28

27. If yes, can you describe how and by whom?

28. Has working with SDI had any impact on the amount of R&D carried out in Scotland by the firm Tick one Code
- Yes, we would not undertake any without support
- Yes, it has increased the amount of R&D carried out
- Yes, it has increased the quality
- Yes it has brought it forward
- No substantive effects
- Don't know

Suppliers

29. Approximately, can you tell us what proportion of your supplies, by value, comes from the following geographical areas..... % Code

Scotland	
Rest of the UK	
Rest of Europe	
Rest of the world	
Total check	100%

30. Has your presence in Scotland influenced the behaviour of your suppliers in Scotland in any of the following ways...? Tick any Code

- Raised quality standards
- Introduced them to new technologies
- Improve their productivity
- Other (specify.....)
- No substantive effects
- Don't know

31. Has working with SDI had any impact on your use of Scottish-based suppliers? Tick one Code

- Yes, we use more than we would have otherwise
- No, but we gave Scottish-based suppliers greater consideration
- No impact
- Don't know

Exports

32. In the last financial year, what <u>proportion of your sales</u> was made in	%	Code
Scotland	%	
Rest of the UK	%	
Overseas	%	
Total = 100%	%	

33. What proportion of sales are made to affiliated companies (part of the group)	Percentage	Code
2008/09	%	

Customers

34. Does this Scottish site provide any goods or services that could be described as 'hi-tech' or 'highly innovative' to Scottish customers, business or otherwise	Tick one	Code
Yes	<input type="checkbox"/>	
No	<input type="checkbox"/>	
Don't know	<input type="checkbox"/>	

35. Do you think that your presence in the market has influenced the behaviour of your customers in Scotland in any of the following ways?	Tick any	Code
Encouraged them to introduce higher quality standards	<input type="checkbox"/>	
Reduced their costs	<input type="checkbox"/>	
Increased their costs	<input type="checkbox"/>	
Encouraged them to introduce new technologies	<input type="checkbox"/>	
No Scottish customers	<input type="checkbox"/>	
No substantive effects	<input type="checkbox"/>	
Other (specify)	<input type="checkbox"/>	

.....

Competitors

- 36. Which of the following statements best describe your business?** **Tick** **Code**
- All the businesses I compete with are based in Scotland
- The majority are based in Scotland
- Around half are based in Scotland
- A minority are based in Scotland
- None of the businesses I compete with are based in Scotland, or I have no direct competitors
-
- 37. Would you say that the market conditions in your main area of business over the past two years or so have** **Tick one**
- Declined strongly
- Declined moderately
- Are about the same
- Improved moderately
- Improved strongly
-
- 38. Do you think that your presence in the market has influenced the behaviour of your competitors in Scotland in any of the following ways** **Tick any** **Code**
- Pushed up quality standards
- Led to their introduction of new products or processes
- Led to them identify new markets
- Increased their productivity
- Reduced their output
- No Scottish competitors
- No effects
- Other (specify)
-
-

Networks

- 39. Is your organisation a member of any Scottish-based trade or sector networks?** **Tick one** **Code**
- Yes
- No Go to 43
- Don't know

40. Has the support from SDI played any role in your decision to participate in these networks Tick one Code

Yes

No

Don't know

41. Are there any examples of how your participation in these networks has benefited other Scottish member firms Tick one Code

Yes

No

Don't know

Go To 43

Go To 43

42. If Yes, can you describe

Additionality

43. Without all the support (financial and non-financial) you received from SDI what would have happened? Tick any Code

The firm **would not be operating** in Scotland at all without SDI support

Go To 44

The activities of the firm in Scotland would have **taken longer** to start

Go To 46

This activity would be **less likely** to be taking place in Scotland

Go To 46

Activities would have been on a **smaller scale** in Scotland

Go To 46

Activity in Scotland would have involved **less R&D activity**

Go To 46

Activity in Scotland would have involved **lower skills**

Go To 46

The support **made no major difference** to our decision to locate operations in Scotland

Go To 46

Other (specify)

Go To 51

.....

44. If the firm would not have been operating in Scotland at all, where would this activity have taken place instead? **Tick one**

Elsewhere in the UK

Elsewhere in Europe

Elsewhere in the rest of the world

Not invested internationally at all

Go To 52

Go To 52

Details

45. If the investment would have taken place somewhere else in the UK, where would it have been and would it have been the same size?

Why would it have gone somewhere else?

Details

46. If the support brought forward the start of operations in Scotland, can you estimate by how many months?

Months

Code

Number of months

47. If the support made activities in Scotland more likely – how influential was the support?

Tick

Code

Very influential

Some influence

Small influence

Negligible / no influence

48. If the support has increased the scale of output, by what percentage?

Percentage

Code

Percentage

49. If activity in Scotland would have involved less R&D activity without support, can you estimate how much less, as a percentage?

Percentage

Code

Percentage

50. If activity in Scotland would have involved lower skills without support, can you estimate how many fewer people would have received training? **Number** **Code**

Number

51. If you indicated another alternative, can you describe briefly

Outputs

Can you estimate the numbers below in relation to;

- the overall investment first and then
- if you had not worked with SDI

Number

**Number if you
had not received
SDI support**

52. If you have invested in a new site...(If not leave blank)

How many people are employed there

--	--

What was the value of the investment

--	--

53. If you have acquired or merged with a firm in Scotland.....(If not leave blank)

How many jobs have been retained

--	--

How many jobs have been added/or lost

--	--

54. If you have increased the level of investment in equipment, premises or other capital expenditure at an existing site.....(If not leave blank)

How many jobs have been added/or lost

--	--

55. If you have safeguarded activity.....(If not leave blank)

How many jobs have been retained in Scotland that would have been lost

--	--

56. If you have increased the amount of R&D activity at this site.....(If not leave blank)

How much more has been invested in R&D

--	--

How many more people are employed in R&D

--	--

57. If you have increased the amount of training you do at this site.....(If not leave blank)

How many more people will receive training

--	--

How many more people will receive qualifications

--	--

Impacts

58. Would you say on balance that it has been worthwhile working with SDI? Tick Code
- Definitely, yes
- On balance, yes
- On balance, no
- Definitely not
- Don't know

59. For each of the following can you indicate whether working with SDI has had a major or minor positive effect, no effect or a negative effect on the business in Scotland to date

	Major impact	Minor impact	No impact/insignificant	Negative impact
Export sales	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Profit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Productivity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If respondent indicates any impacts above then continue, otherwise go to Q71

60. How much longer do you expect the impact of the support to last? Tick one
- No further impact 43.
- Another year 44.
- 2 years 45.
- 3 - 5 years 46.
- 5 - 10 years 47.
- Longer 48.

Interviewer – if an answer is not known, enter n/k. Do not enter 0 unless this is the actual value reported

Note that all must answer these questions and use routing

Where money quantities are asked for, please put in the amount in full, i.e. don't assume that it is in 000s and don't use entries such as £50k

Turnover

61. Can you tell me the turnover of the business at this establishment in each of the last three financial years **Amount**

2008/09	£
2007/08	£
2006/07	£

INTERVIEWER AGREE CHANGE 2006 - 2009 £

INTERVIEWER READ – These figures indicate that turnover has changed by [SEE FINAL BOX ABOVE] over this period

IF FIGURES INCREASED Q74, IF NOT Q75

62. If turnover has increased, how much of this CHANGE is the result of SDI support? **Tick one**

SDI support has made no difference

1 – 10%

11 – 20%

21 – 30%

31 – 40%

41 – 50%

51 – 75%

76 – 100%

No increase without SDI

Don't know

GO TO 64

63. If turnover has fallen or stayed the same, would it have fallen further without SDI support? **Tick one**

No, support made no difference

Yes

If YES, how much lower would they have been without SDI support £

Employment

64. Can you tell me the number of full time equivalent jobs at this establishment in each of the last three financial years? **Number**

Currently	
2008	
2007	

65. Of your current workforce, currently how many... **Number** **Code**

Are engaged in R&D activity	
Are in positions that require a degree	
Were recruited locally and are new to the sector	
Joined from competitors in Scotland	
Were brought into the company from outside Scotland	

66. Would employment have been higher or lower without SDI support? **Tick one**

- Would have been lower without SDI
- SDI support has made no difference to employment
- Would have been higher without SDI

67. How many people would be employed here now if you had not worked with SDI? **Number**

--

Export sales

68. Can you tell me the value of EXPORT SALES generated from this establishment in each of the last three financial years? **Amount**

2008/09	£
2007/08	£
2006/07	£
INTERVIEWER AGREE CHANGE 2006 - 2009	

INTERVIEWER READ – These figures indicate that exports have changed by [SEE FINAL BOX ABOVE] over this period

IF FIGURES INCREASED Q68, IF NOT Q69

69. If exports have increased, how much of this CHANGE is the result of SDI support? **Tick one**

- SDI support has made no difference
- 1 – 10%
- 11 – 20%
- 21 – 30%
- 31 – 40%
- 41 – 50%
- 51 – 75%
- 76 – 100%
- No increase without SDI
- Don't know

GO TO 71

70. If exports have fallen or stayed the same, would they have fallen further without SDI support? **Tick one**

- No, support made no difference
- Yes

If YES, how much lower would they have been without SDI support £

FUTURE impacts

71. For each of the following can you indicate whether you EXPECT that work with SDI, to date, will have a major or minor positive effect, no effect or a negative effect, **IN THE NEXT THREE YEARS.**

Measure	Major impact	Minor impact	No impact/insignificant	Negative impact
Turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Export sales	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Productivity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How much higher (or lower) do you expect the following to be IN THE NEXT THREE YEARS as a result of the SDI support to date?

	72. Export sales	73. Turnover	74. Employment
SDI support to date will make no difference in the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1 – 10%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 – 20%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21 – 30%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31 – 40%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41 – 50%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51 – 75%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
76 – 100%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No increase without SDI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Don't know	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
They will be lower as a result of SDI support (indicate below)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specify amount if lower	£	£	£

75. And how long do you expect these impacts to last?

Tick one

- 1 year 59.
- 2 years 60.
- 3 - 5 years 61.
- 5 - 10 years 62.
- Longer 63.

Business inputs

Approximately what proportion of your turnover was accounted for by bought in goods & services.....

(including raw materials, energy, rent, other services etc but definitely excluding employee costs) in the last financial year?

Percentage

	%
--	---

76. Approximately what proportion of the goods and services sold by this establishment are produced in Scotland? **Tick** **Code**

- All the production is based in Scotland
- The majority based in Scotland
- Around half based in Scotland
- A minority is based in Scotland
- None of our production is based in Scotland

Overall

77. How has the recession impacted on the operation of this site **Tick any** **Code**

- No impact **GO TO 79**
- Our parent is considering the presence of the firm in Scotland
- We are scaling back operations in Scotland
- We are remaining the same size but refocusing activities in Scotland
- We have delayed implementation of development plans
- We have accelerated implementation of our plans
- Other (specify)

78. Where the recession has impacted on the business, why is this? **Tick one** **Code**

- Restricted access to capital for international development
- Reduced demand for our goods and services
- Reduced cashflow
- Recession has created new international opportunities for us
- Focus is on survival rather than growth
- Other (specify)

79. What do you think are the major threats to continuing operations at your current level in Scotland over the next 5 years?

80. What other forms of assistance could be provided by the public sector to counteract these threats more effectively?

Next Stage

81. A number of companies are being asked whether they would be willing to participate further in the research by acting as a case study. In practice this would mean a further interview to allow a written case study to be prepared as part of our report to Scottish Enterprise. Would you be willing to be considered as a possible case study?

Yes

No