MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

SSI RESEARCH
EVALUATION &
ANALYSIS

Evaluation of the NZTE International Growth Fund

April 2015

New Zealand Government

Ministry of Business, Innovation and Employment (MBIE)

Hīkina Whakatutuki – Lifting to make successful

MBIE develops and delivers policy, services, advice and regulation to support economic growth and the prosperity and wellbeing of New Zealanders.

MBIE combines the former Ministries of Economic Development, Science + Innovation, and the Departments of Labour, and Building and Housing.

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Rationale for the International Growth Fund (chapters 3 and 4)

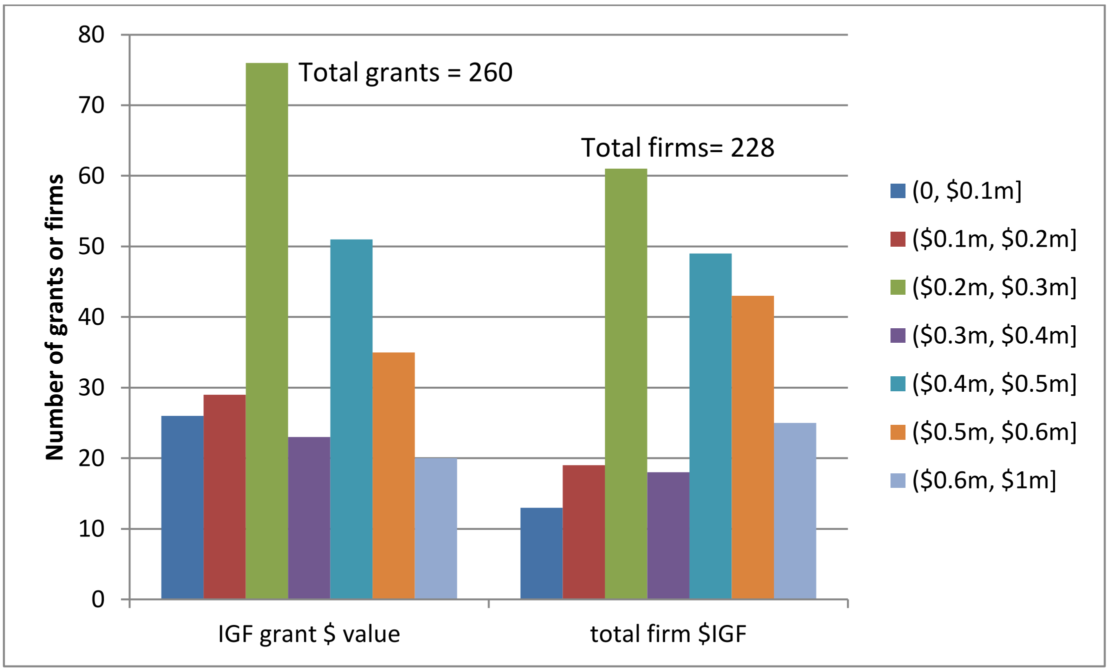
1. Using the International Growth Fund (IGF) to assist high-growth firms to internationalise was one of the actions identified by the government's Business Growth Agenda as contributing to the high-level initiative of helping businesses internationalise and the goal of increasing the ratio of exports to GDP to 40 per cent by 2025. Exports and the number of firms exporting has increased in recent years. The number and proportion of high-growth firms in the New Zealand economy fell between 2008 and 2011, possibly reflecting the impact of the global financial crisis. Both indicators have since almost regained their 2008 levels. The IGF is of a size that it could have or be having an impact on a significant proportion of exporting businesses, particularly those with more than 50 per cent of sales from exports.

2. Our survey of IGF participants found that New Zealand businesses continue to face barriers when exporting, including distance from markets, limited knowledge of specific markets and limited access to finance for expansion beyond New Zealand. The IGF and other New Zealand Trade & Enterprise (NZTE) services address these barriers. Two barriers not addressed by the IGF that are important to business success are exchange rate level and exchange rate volatility.

3. Due to the small size of the domestic economy, New Zealand businesses are usually small when they start exporting. This is one of the reasons for their limited access to finance for expansion beyond New Zealand.

IGF outputs (chapter 5)

4. From the commencement of the programme in 2009 until March 2014, 260 grants had been awarded to 228 businesses. The average grant size was \$380,000 and the median \$300,000.



5. While IGF grant objectives are varied, entering new overseas markets and expansion within existing markets are the most frequently cited.

6. There is no prescribed list of activities eligible for IGF funding. Employing in-market specialist staff accounts for 30 per cent of planned IGF expenditure. Other commonly budgeted items include product launch and marketing collateral (17 per cent), market or product development (13 per cent) and other travel to market or trade show/conference (11 per cent). Currently excluded from support are business as usual, capital expenditure and development activities in the New Zealand and Australian markets.

7. While the value of grants approved is reaching annual targets, businesses are not claiming the full grant, leading to significant underspend of the IGF appropriation.

	2009/10	2010/11	2011/12
Number of completed grants	10	29	32
Fully claimed (<0.1% of grant unclaimed)	3	12	13
Completed grants with >25% of grant unclaimed	2	9	12

8. Businesses often underestimate time required to achieve milestones, for example, to employ specialised staff or achieve sales targets:
   - *'I need to be patient about growth, it always takes longer than you think in Asia.'*
   - *'The achievements have been good, but we have had to work deeper in the market with a smaller turnover than first thought.'*

   This inability to plan offshore activities and plan up to three years in advance possibly reflects a lack of experience in particular offshore markets and may be partially responsible for the underspend discussed above. The business environment can also be unpredictable.

IGF efficiency and effectiveness (chapter 6)

9. As the programme has matured, costs of funding as a percentage of disbursement have fallen. Costs are currently just over 5 per cent of the amount of approved funding per year. However only 75–80 per cent of individual grants are being claimed. Relative to claimed amounts, costs have fallen from 14 per cent in 2011/12 to 7 per cent in 2013/14.

10. The average grant approval process costs approximately $12,350. Over the life of the grant, average costs of claims is $4,350.

11. Most businesses (95 per cent of survey respondents) thought compliance costs were justified. The following survey quotes illustrate this sentiment:
   - *'Very simple process which incurs little cost to our business to provide claims and reporting.'*
   - *'This would have been very draining on resources without good leadership and assistance from our NZTE lead (customer manager).'*

IGF outcomes (chapter 7)

12. There is evidence of the IGF having a positive impact at a business level, with individual businesses increasing in size as reflected in increased employees, revenue and export revenue.

13. Direct economic impact (DEI) measures are calculated for each project. In the planning phase, potential DEI is calculated. In the closeout report, realised DEI is calculated. The closeout report is completed after the DEI interval – typically three years unless the project duration was longer than three years. To May 2014, 29 closeout reports had been completed – 22 of these projects involved initiatives that were intended to raise sales revenue, and 10 of these 22 projects had exceeded DEI forecasts. While over half had overestimated DEI, only six had DEI less than 1. While DEI is a useful measure, it is only an estimate of grant additionality and takes no account of external factors or project sustainability.

14. There is evidence of businesses achieving other outcomes including taking on increased risk in international markets, improving strategy and internationalisation processes, greater business confidence to undertake international projects and improved in-market networks.

15. While economic spillovers are part of the policy rationale for the programme, they are notoriously difficult to measure. Qualitative evidence of spillovers occurring was provided by both IGF businesses and NZTE customer managers.

Attribution (chapter 8)

16. IGF is seen by both NZTE customers and customer managers as part of the suite of NZTE services. Firms receiving IGF grants are in the Focus 500 and have received, on average, two other NZTE services in the last three years, and 58 per cent of IGF businesses had received grants through IGF precursor schemes. Over half of IGF businesses had also received government R&D services, and 46 per cent of survey respondents were also receiving MFAT services. Attributing a project's success solely to the IGF grant cannot be done. Proportioning success between the business and various government services is fraught with uncertainty.

Selection bias (chapter 8)

17. A significant number (approximately 70 per cent) of grant recipients had experienced positive growth in the year prior to receiving a grant. While some firms have said that the IGF projects are a stretch for their business, the question remains as to whether NZTE is selecting firms that would be successful anyway.

Additionality (chapter 8)

18. Additionality of the IGF is difficult to measure – 80 per cent of survey respondents indicated that the project would have at least partially gone ahead without grant funding, two-thirds of those who provided comments indicated that the IGF grant sped up their projects and 22 per cent of firms said the project wouldn't have gone ahead. Their comments included:
    - *'This has given the board comfort to pursue a more aggressive marketing strategy.'*
    - *'It allowed us to have the ability to create a step change.'*

- *'We simply could not have funded this project. Speed to market was of utmost importance, so it was essential that we created a highly targeted and aggressive project so as to be within the first companies to market with that offering.'*

19. IGF projects were a stretch for three-quarters of the survey respondents. Approximately half of the survey respondents said that the IGF project was different from their other international projects (16 per cent of respondents had no other international projects).
    - *'This is by far our most active and professional. We are putting most resources into this project/market.'*
    - *'The cultural differences and setting up facilities has been a new experience.'*
    - *'Largest scale to date.'*
    - *'It provides a more targeted approach.'*
    - *'It was more aggressive to achieve the required goals. Other international projects have historically been more organic with less return or market impact.'*

20. There is a small proportion, possibly as much as 20 per cent of the participant businesses, for whom the additionality from the IGF grant is questionable. Approximately 20 per cent of survey respondents said the IGF project was not a stretch for the business, the project would have gone ahead without IGF funding or the IGF return/expected return was similar to other international projects. While more nuanced questions may have illustrated additionality better, there is evidence of deadweight in the programme. This is to be expected.

21. Businesses most commonly see the most useful aspects of the IGF as market expansion with less risk and more speed. Improved networking in international markets was also considered important. There are a significant number of businesses for whom business strategy improves through the IGF process and others benefit from improved confidence in their ability to work in international markets.

Summarised recommendations

1. This evaluation recommends that the programme continue.

2. Performance measures for the IGF should be reviewed.

3. The wording in the IGF output description 'is limited to supporting high growth firms' should either be changed to reflect operational practice or specific criteria introduced to select for high growth.

4. MBIE needs to consult with relevant stakeholders to determine how best to target the IGF.

5. Recommendations for future work are included in chapter 9.

2. Introduction

The International Growth Fund (IGF) is now NZTE's main fund for businesses seeking financial support for expanding their international activity.

The IGF was created in 2009,[1] when three precursor funds were disestablished to achieve greater value for money, better economic development outcomes and generate savings from having one smaller, but better targeted, grant programme. The Market Development Assistance Fund (EDG-MD) and the Enterprise Development Fund (EDG-CB) were closed. The Growth Services Fund (GSF) was also subsumed into the IGF. IGF funding increased from $20 million in 2010/11 to $30 million in 2011/12 and out-years. That reflected phasing in of the IGF and phasing out of the EDG-MD.

The IGF has enabled businesses to employ and locate management and staff, establish an office in overseas markets and travel within those markets. These activities are in line with NZTE's advice to firms to establish themselves in markets as soon as it is practicable. These activities, other than travel, were previously ineligible costs under the GSF. On the other hand, the GSF previously co-funded IP protection (patents or trademarks), regulatory registrations[2] and clinical trials, which are not generally co-funded under the IGF. These matters are pre-requisites to market certain products or services, which should be borne by firms.

2.1 Commitment to evaluate

A full evaluation by June 2014 was promised in 2009 in Cabinet Minute EGI (09)39.

To comply with this requirement, this evaluation sets out to determine if the programme is delivering against the policy objectives. The evaluation plan spelt out the key questions for the evaluation process. These questions were designed to investigate the programme intervention logic, including attribution and additionality (see Appendix 1). Evidence addressing the questions is provided in subsequent chapters or sections (see Table 1).

Table 1: Areas of evaluation questioning and location of evidence in report

Area of evaluation	Evidence presented in
Rationale and relevance of the programme	Chapters 3 and 4
Allocation of resources	Chapter 5
Effectiveness and efficiency	Chapter 6
Outcomes	Chapter 7

[1] See paper to Cabinet Economic Growth and Infrastructure Committee EGI (09) 39.

[2] For example, US Food and Drug Administration (FDA) registration including its 'Generally Recognized as Safe' (GRAS) designation, CE conformity marking, various electrical standards, international standards (ISO).

Synergy with other NZTE and government services	Section 8.1
Additionality	Section 8.2
Attribution	Sections 8.3–8.5

While the programme has been operational since 2009/10, most grants are three or four years in duration. Hence, only a small number have been completed. For this reason, the evaluation should be considered an early-stage reporting of evidence of outcomes. With time, it is expected that further outcomes will be more fully reported and understood.

2.2 Scope

This evaluation is important in the context of the Business Growth Agenda, the 40 per cent of GDP exports target and NZTE's focus on internationalisation. The IGF is NZTE's only major grant programme (there is also the small Strategic Investment Fund) and should be seen as a powerful incentive for firms to do things that contribute to meeting the government's economic development objectives.

While it is important that the programme is delivered as effectively and efficiently as possible, this was not the prime focus of the evaluation. NZTE's own internal controls and client management and monitoring data, including an annual client satisfaction survey, are used to provide NZTE with customer feedback about operational matters.

Some demographic analysis was undertaken in Statistics New Zealand's Integrated Data Infrastructure (IDI). Results of this are incorporated in Appendix 2. Resources were not available for this to extend to an econometric determination of IGF additionality. This would be possible, as IGF participation is recorded as part of the suite of government assistance programmes in the Statistics New Zealand IDI. Attribution, selection bias, additionality and a counterfactual would, however, still be challenges for such work.

Realised direct economic impact (rDEI) measures from the closeout reports, which are self-reported measures, are the only quantitative additionality measure.

While performance of IGF firms can be compared with general economic data, a specific counterfactual group of other firms was not identified. The businesses receiving IGF are active in a large number of offshore markets and are subject to a variety of external influences. There was no attempt to identify a similar group of businesses not receiving grants with which to compare.

Success of IGF projects, while receiving direct funding from IGF, may also be partly attributable to other government (and/or NZTE) services.

2.3 Advisory group

An evaluation advisory group was established to provide opportunities for significant stakeholders to provide the evaluation team with advice from a stakeholder perspective and to provide the evaluation with any relevant material or contextual information. It included officials from relevant MBIE policy teams, NZTE, Ministry of Foreign Affairs and Trade (MFAT) and Treasury.

The group met a number of times with specific discussion regarding the evaluation plan, the participants' survey and the final report. The advisory group was kept informed of progress in the evaluation.

2.4 Methodology

Evidence presented in this report has been collated from a number of sources as described below. Evidence has been selectively chosen where it addresses the evaluation questions.

Administrative data

NZTE provided access to administrative data including information from its customer relations management system and, as of May 2014, 29 completed IGF closeout reports.

Participant business survey

Participant businesses were surveyed electronically. Twenty questions were developed addressing IGF project outcomes, capital for IGF projects, barriers to internationalisation, spillovers and IGF processes.

Some challenges were encountered implementing the survey. The first release was carried out anonymously. There were also multiple responses from individual businesses. While some respondents could be positively identified, a number couldn't be. After the first week, further survey respondents were identified. Identified respondents could be linked to NZTE administrative data and described as, for example, large or small businesses. (Businesses were informed that this would happen.) Analysis of the survey responses was undertaken for two sets of data – all responses and identified responses.

Overall, 92 responses have been identified – 92 out of 217 is a 42 per cent response rate. In total, there were 124 survey responses – a 57 per cent response rate (not allowing for duplicates of which there were at least four). Given that the unidentified firms had taken the time and made the effort to respond, their responses are included where possible.

Some analysis looking at firm size was undertaken. Businesses with more than 50 full-time equivalents (FTEs) were large businesses (47 identified responses), and those with fewer than 50 FTEs were small businesses (45 identified responses).

Interviews

Nine businesses were selected for interview to provide more detail and more specific understanding of the businesses' perspectives.

Five NZTE customer managers and the manager of the New Zealand Export Credit Office were interviewed. Where possible, interviews were undertaken in person, but those outside Wellington were phone interviews.

Stakeholder consultation

An evaluation team met fortnightly. It included the NZTE IGF programme manager, NZTE Manager Performance and Evaluation, MBIE Enterprise Development Policy team members and Science Skills and Innovation, Research Evaluation and Analysis (SSI REA) team members involved in the evaluation. This group was critical to ensuring information passed between the organisations involved and that the evaluation remained grounded in the operational implementation of the programme.

2.5 Literature review

A comprehensive literature review was undertaken. The review summarised:

- export promotion programmes in overseas jurisdictions
- evaluations of other jurisdictional programmes, agencies and one specific evaluation of a national innovation system
- international literature on determinants of export performance
- research on the determinants of export performance for New Zealand firms.

The determinants of firm export performance vary, but irrespective of jurisdictional context, there are common factors to all firms wishing to internationalise. These are internal and external determinants. Internal determinants are managerial characteristics and perceptions, organisational/export marketing capabilities, relationship factors and firm characteristics. This includes, for example, management's degree of international experience and expertise, a firm's ability to develop strategic marketing capability and improve upon the technology and performance of a product, leveraging off network connections and utilising firm resource, products and culture to internationalise. External determinants are domestic and foreign market characteristics, such as the legal and political environment, and adaptation to cultural idiosyncrasies of an export market.

Export promotion programmes run in other jurisdictions are generally smaller and focus on specific export promotion assistance activities. Many are state or provincially run programmes. These programmes can include tradeshow access, marketing assistance, export loans, strategy workshops, mentoring and specialist business development advice. In contrast, New Zealand firms can use funding from the IGF to purchase such assistance if they choose to.

A key determinant for New Zealand firms focused on internationalisation is networking. Being able to leverage off established networks improves New Zealand firms' ability to enter global markets faster, gain access to market infrastructure and learn from international experience to improve upon the technology and performance of a product.

International evidence shows there is a role for governments to play in providing export promotion assistance. This is no exception with respect to government helping New Zealand firms internationalise, especially since New Zealand has economic geographic barriers (size and distance from markets) and low levels of international trade (regulatory barriers to trade are low, and therefore, non-regulatory barriers and market failures may be constraining trade). However, government agencies need to work more closely with each other, which includes academic institutions and working with private sector agencies where applicable, to provide co-ordinated, tailored and therefore effective and efficient export promotion assistance. Siloed approaches negate the benefits of such assistance.

3. Programme policy and rationale

3.1 Objectives of the International Growth Fund

The single overarching purpose of the appropriation that the IGF output exists in is to provide support to high-growth firms and sectors in securing new market opportunities.

The IGF output description identifies that this category is limited to supporting high-growth firms to undertake additional market development and business capability activities required for growth in new markets that deliver benefits for both the firm and the wider New Zealand economy.[3]

The IGF aims to help firms acquire the capabilities required for, and reduce the risks and costs of, developing new markets for new or existing products. Firms must be export ready or exporting and client managed by NZTE and their IGF project must have potential to contribute to the growth of the firm's exports and/or international revenue. While the appropriation states that support should be for high-growth firms, this has not been tightly defined.

While there is no prescribed list of eligible costs, support is provided for four broad areas of activity:

- Building knowledge of and developing new markets.
- Acquiring the business and management skills needed for internationalisation.
- Managing the commercialisation of R&D (as distinct from carrying out R&D) for international markets.
- Seeking finance to fund international opportunities.

3.2 Policy rationale

Government business development grants should meet both of these key tests:

- The funded activity will generate economic benefits for the economy that exceed the cost of support.
- The funding results in additional business activity that would not occur or otherwise occur more slowly.

Firms involved in international trade and investment tend to be more productive, innovative and growth oriented than the general population of firms. By entering larger markets, they benefit directly through increased competition and economies of scale and access to new ideas and technologies and from having to improve their management skills and capability.

The benefits of internationalisation are not restricted to these firms. There can be indirect benefits for other firms. These may include knowledge transfer as firms interact and staff move to other firms, enhancing the performance of firms in exporters' supply chains, reputational benefits for New Zealand and easier market access for firms producing complementary goods. Exporters do not take these benefits into

[3] The Estimates of Appropriations 2014/15 – Vote Economic Development and Employment.

account when making their investment decisions so, from an economy-wide perspective, will underinvest in international activities. NZTE has a role in facilitating the flow of benefits to the wider New Zealand economy.

There are significant impediments to New Zealand firms succeeding internationally. The risks inherent in expanding into international markets are amplified by New Zealand's size (which means our firms have to consider exporting earlier than their counterparts in larger economies) and distance from major markets. The same factors mean that most New Zealand firms find it difficult to acquire the capabilities needed to operate in those markets and to obtain financing for what is usually perceived to be a risky venture. It is also costly (particularly for smaller firms) to obtain information about markets and market opportunities.

3.3 Programme description

The IGF process is integrated into the NZTE customer management process, with customer managers identifying a growth project in consultation with the customer. Only NZTE Focus 500[4] firms are eligible. When the IGF was established, businesses were eligible for grants of between $20,000 and $1 million on a GST exclusive basis. This was changed in July 2012 so that Focus 500 customers are eligible for up to $600,000 over five years. Under NZTE's IGF operational guidelines, businesses that have received their full entitlement (currently $600,000) can apply for a new IGF grant only five years after receiving the first grant.

The IGF is based largely on the Growth Services Fund, albeit with significant modifications to its parameters in 2009. Grants have a 50:50 co-funding requirement. Around 70 projects per year are funded. The median grant size is about $300,000 and the mean about $400,000. The following section contains further details on recipients and grants.

IGF projects have four stages: discover, develop, decide, and deliver (see Figure 1). Very few projects have been declined, as customer managers usually ensure businesses have been in the Focus 500 for some time prior to IGF applications being made. This ensures that the customer managers have a good understanding of the business and the project development is robust.

A potential direct economic impact (pDEI) over three years is calculated in the business case (develop stage), and the realised DEI (rDEI) is reported in the closeout report

The closeout report, developed jointly by the customer manager and customer on completion of the project, is completed after the DEI period, which is typically three years – see section 5.6 for more detail on calculation of the DEI.

NZTE's customer relationship management system (CRM) is used to track the process.

[4] In 2014, the Focus 500 was expanded to 700 firms, but we will refer to Focus 500 in this evaluation in relation to the time under consideration.

Figure 1: Summary of IGF grant process

Discover The NZTE customer manager initiates a project to be considered for IGF funding. A decision is made to proceed or not with the grant application.	• Results in a one-page 'consent to proceed' document, prepared by the customer manager, which outlines the project and discusses why it would be a good investment for NZTE. • Wider NZTE consulted and informed. • Approval sought from NZTE customer director. • Customer invited to apply. • Target is 90 days – 60 business days – for approval from consent to proceed.
Develop IGF business case developed with two sections – one written by the customer manager and one by the customer with guidance from the customer manager.	• Customer informed of process and develops customer submission. • Milestone table developed as basis for funding agreement. • Project financial analysis undertaken.

Decide
 	
Decision by delegated authority depending on the amount of funding.
	• The IGF GM Panel, including three NZTE general managers (Customers; International; Strategy, Performance and Partners), reviews the business case using an assessment matrix. If recommended, the customer manager presents:
	  ○ an IGF proposal for up to $100,000 to the GM Strategy, Performance and Partners
	  ○ an IGF proposal for up to $300,000 to the NZTE CEO
	  ○ An IGF proposal for over $300,000 to the IGF Committee (NZTE Board subcommittee).
	• If declined, written feedback is provided and the possibility of reworking the business case is addressed.

Deliver Funding agreement is finalised and signed, and claims processes are explained to the customer.	• NZTE customer relationship management system is used to track process. • Claim payments made to businesses in accordance with agreed milestones completed. • Customer manager manages funding agreement including signing off completion of milestones. • Variations can be agreed. • Following completion, a closeout report is completed by the customer manager and the customer, reported to NZTE and contributes to programme reporting.

3.4 Performance measures

NZTE has three performance measures for the IGF set out in the Statement of Performance Expectations.

- **Percentage of businesses that give their experience in the IGF a positive rating:** This is measured in the annual NZTE customer survey. All Focus 500 businesses are surveyed, and in 2013, a 90 per cent customer response rate was achieved. 92 per cent of responses to the IGF question in 2013 were positive, with 77 per cent saying the experience was very good or excellent. This was near average for all NZTE services, which range from 71 per cent to 100 per cent satisfaction.
- **pDEI ratio for approved IGF projects:** This measure was established in 2012/13 when the pDEI was $4.50 for every $1.00 invested.
- **Number of businesses receiving the IGF:** There is a demand-driven target of 60 businesses per annum. In 2012/13, 73 businesses received grants.

NZTE also uses a range of additional internal performance measures to track and manage the IGF, for example, number of IGF grants, the dollar value of IGF grants, realised DEI for completed IGF projects, time taken to approve grants, the number of IGF closeout reports and comparisons of Focus 500 and IGF participants by region and revenue.

NZTE produces quarterly and annual dashboards showing various administrative data, including progress towards key internal targets. An example is provided in Figure 2. NZTE is actively using IGF administrative data in its management processes.

3.5 IGF budget

The IGF annual appropriation has not been consistent over time but has increased significantly since 2009/10 and has been over $20 million since 2010/11. The amount of IGF funding contracted, the amount claimed by firms and the costs of administering the grants, as shown in Table 2, have been provided by NZTE.

The calculation of the costs is explained in section 5.1. The grant costs were only considered over the last three years to represent a more normal pattern.

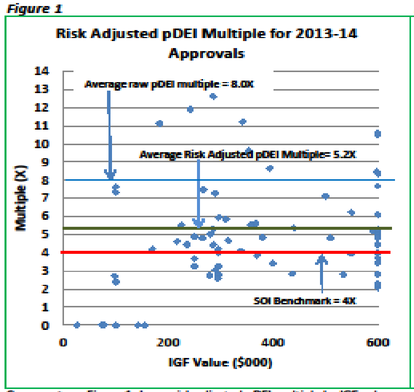
Table 2: IGF budget summary

	2009/10	2010/11	2011/12	2012/13	2013/14
Grant funds approved/contracted	$6.044m	$19.966m	$30.007m	$30.001m	$25.917m
Grant funds claimed	$0.056m	$2.706m	$12.962m	$18.580m	$19.958m
Cost of administering grants (see section 5.1 for cost per grant x number of grants in that year)	Only 12 grants approved – not enough to be representative	Only 47 grants approved – not enough to be representative	$1.751m	$1.489m	$1.408m
Cost as % of claims			14%	8%	7%
Cost as % of approved grant value			5.8%	5.0%	5.4%

Figure 2: IGF quarterly dashboard (source: NZTE)

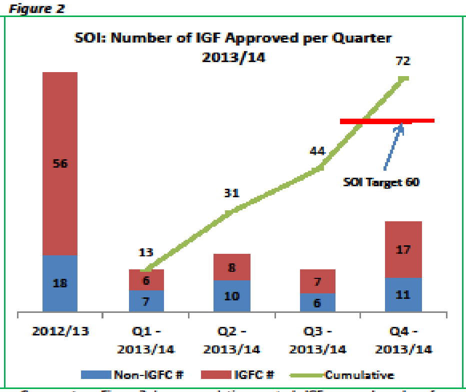
Quarterly IGF Dashboard for the IGF Committee - Q4

Figure 1



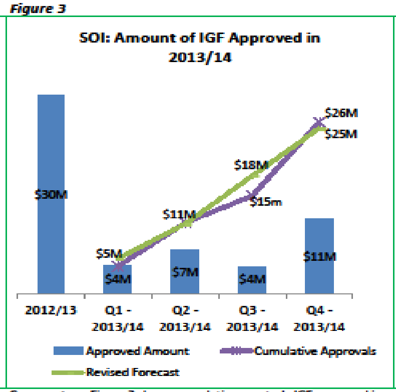
Commentary: Figure 1 shows risk adjusted pDEI multiple by IGF value. The SOI benchmark is 4 times (risk adjusted) and the average risk adjusted multiple is 5.2 times (compared to 5.6 times in Q3). Average raw pDEI multiple is 8.0 times (compared to 8.7 times in Q3). The quarterly change is largely due to new approvals with lower pDEI.

Figure 2



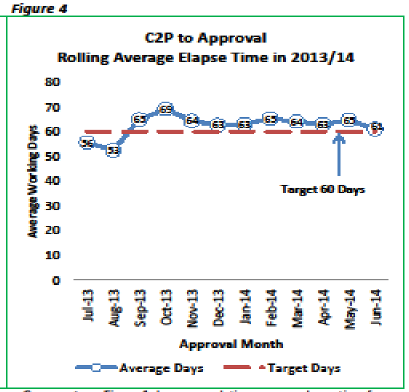
Commentary: Figure 2 shows cumulative quarterly IGF approval numbers for 2013/14 compared with total approvals in 2012/13.
For 2013/14, total number of approvals were 72 against the SOI target of 60 approvals.

Figure 3



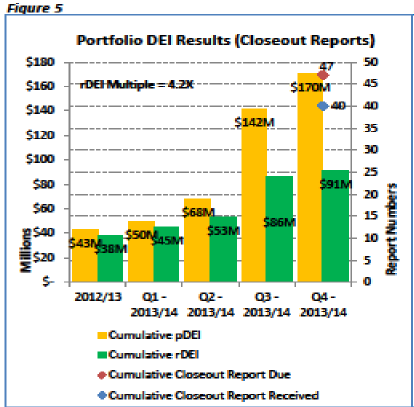
Commentary: Figure 3 shows cumulative quarterly IGF approved in 2013/14 compared with 2012/13 total.
For 2013/14, total amount approved was circa $26m, $1m higher than the revised forecast.

Figure 4



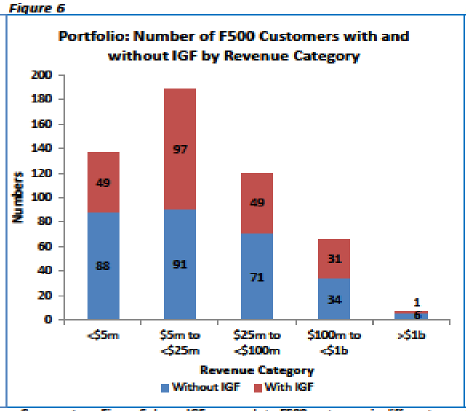
Commentary: Figure 4 shows cumulative average elapse time from Consent to Proceed (C2P) to Approval.
Target days from C2P to Approval is 60.

Figure 5



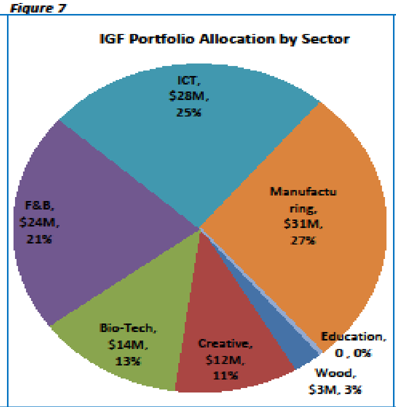
Commentary: Figure 5 shows cumulative rDEI ($91m) against cumulative pDEI ($170m) for all Closeout Reports received up to Q4 of 2013/14. It also shows cumulative number of Closeout Reports received against the expected number up to Q4. Cumulative average rDEI multiple is 4.2 times compared to 4.8 times in Q3. (Note: some Q3 closeout reports were revised, resulting into changes in Q3 rDEIs.)

Figure 6



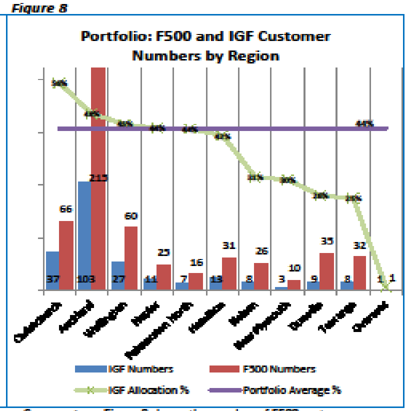
Commentary: Figure 6 shows IGF approvals to F500 customers in different revenue categories. For example, out of 137 customers (F500) with revenue below $5m, 49 customers have IGF.

Figure 7



Commentary: Figure 7 shows the distribution of $112m of IGF portfolio to various sectors.

Figure 8



Commentary: Figure 8 shows the number of F500 customers per region (red bar) and the portfolio of F500 IGF customers in the region (blue bar). It also shows IGF allocation percentage for F500 per region against the portfolio average of 44%. For example, 56% of F500 customers in Christchurch have IGF.

11632818_1.xlsx

Prepared in July 2014

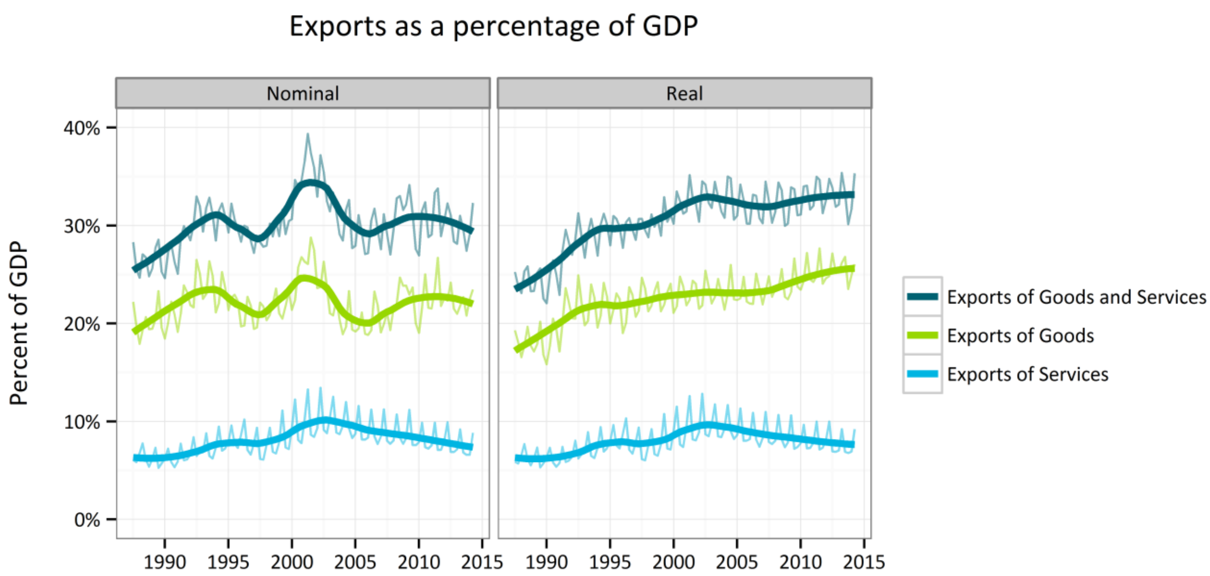
4. Identifying the need for the programme

The Government's Business Growth Agenda identifies six key drivers of business growth: export markets, capital markets, innovation, skilled and safe workplaces, natural resources, and infrastructure. In each area, goals and initiatives have been identified.

Using the IGF to assist high-growth firms to internationalise was one of the actions identified as contributing to the high-level initiative of helping businesses internationalise and the goal of increasing the ratio of exports to GDP to 40 per cent by 2025.

The *Business Growth Agenda, Future Direction 2014*[5] provides background information on recent exporting performance. New Zealand exports increased 3 per cent in 2013. There was a 51 per cent increase in exports to China. This is against a background of steadily increasing exports.

Figure 3: 25 years of New Zealand exports (Source: Statistics New Zealand Infoshare)



According to the Statistics New Zealand Business Operations Survey (BOS), in the four years 2010–2013, there has been a 50 per cent increase in the number of firms exporting. However, this is largely due to the survey capturing smaller businesses from 2012 on. However, there has still been a significant increase (approximately 20 per cent or more) in the number of larger (>20 employees) businesses exporting.

Looking at the number of businesses with more than 50 per cent of sales from exports, there has been a 20 per cent increase (from approximately 1,850 to approximately 2,230 businesses) over the four years 2010–2013. The biggest increase has been in the size category 20–49 employees, where there has been a

[5] http://www.mbie.govt.nz/pdf-library/what-we-do/business-growth-agenda/bga-reports/future-direction-2014.pdf – ISBN 978-0-478-43311-1 (Online) ISBN 978-0-478-43307-7 (Hardcopy)

significant increase of approximately 30 per cent from approximately 240 to approximately 310 businesses, over the four years 2010–2013.

In this context, the IGF assisting approximately 60 new international projects (or approximately 60 businesses) a year has the potential to make a significant difference. Of the 214 IGF recipients who provided NZTE with performance information in 2012, 71 per cent (153 businesses) reported more than 50 per cent of sales from exports.

4.1 Barriers to exporting

Beleska-Spasova (2014)[6] reviewed the literature on determinants and measures of export performance. She found that the current state of the export performance literature is:

- methodologically fragmented – there is a variety of analytical and methodological approaches
- conceptually diverse – a large number of determinants have been identified as having direct or indirect influence on a firm's export performance
- inconclusive – studies have produced inconsistent results of the impact of different determinants on export performance.

Despite these findings, the literature classifies export performance determinants under two categories – internal and external – each with associated characteristics. Internal determinants are firm-specific factors under some degree of firm control such as management characteristics and perceptions, organisational/export-marketing capability, relationship factors and firm characteristics. External determinants refer to environmental factors outside a firm's control and include domestic market characteristics and foreign market characteristics.

It is well recognised that New Zealand's small domestic market constrains business growth. Businesses need to consider exporting or internationalisation earlier in their growth cycle. New Zealand is geographically a small and remote country, and this impacts businesses' exporting behaviour.

Survey respondents were asked to identify issues that made it difficult for their business to generate overseas income. This was based on a question in the international module of the BOS last run by Statistics New Zealand in 2011 (see Table 3).

Table 3: Barriers to generating overseas income

	All responses	
Exchange rate level	57	46%
Distance from markets and language and cultural differences	51	41%

[6] Beleska-Spasova, K. (2014). Determinants and measures of export performance: comprehensive literature review. *Journal of Contemporary Economic and Business Issues,* 1(1): 63–74.

Limited knowledge about specific markets	38	31%
Exchange rate volatility	43	35%
Limited access to finance for expansion beyond New Zealand	39	31%
Overseas government regulation or tariffs (for example, product standards, import duties)	34	27%
Limited access to distribution networks	28	23%
Limited experience in expanding beyond New Zealand	16	13%
Low market demand or increased competition in overseas markets	18	15%
Inability to rapidly increase supply	11	9%
Total responses	124	100%

More large businesses were concerned about exchange rate level and volatility. For small businesses, the most common barrier was distance from markets and language and cultural differences. For small firms, exchange rate level was the second most common barrier, but exchange rate volatility was ranked sixth. Small firms ranked limited access to finance for expansion beyond New Zealand as the third most common barrier.

Comparing the IGF survey responses with BOS responses, knowing that IGF businesses are usually established exporters, the IGF responses are similar. However in the 2011 BOS, low demand or increased competition was one of the top four barriers, whereas in the IGF survey, it was one of the lowest responses. This is possibly due to changes in external determinants (the general economic situation).

4.2 Raising capital

Interviews with customer managers and the Export Credit Office indicated that small businesses have difficulty raising money from banks for projects without a known return. Banks require either a guaranteed return or assets to cover the value of a loan. While some small firms have assets, many do not, particularly businesses in the service or ICT sectors, for example.

Compac Sorting Equipment

Compac Sorting Equipment has approximately 390 employees of which almost two-thirds are based in New Zealand. It had group export revenues of $75 million in 2013. The business manufactures sorting equipment for fruit and vegetables and has supplied machinery for pack houses in many countries including the Americas, Australia, South Africa, Europe, China, Malaysia and Korea.

R&D is vital to their business, particularly software development related to their Vision system. All their machinery needs to be tailored for specific purposes.

Compac Sorting Equipment invests very heavily in R&D.

Compac Sorting Equipment is using the IGF grant to help access new markets and attend additional trade shows that it would otherwise not have been able to. They updated their website and filmed several customer installations that use their equipment. These video clips have been used in various marketing activities. The funding enabled them to attend several new offshore trade shows including the main one in Europe (Fruit Logistica – Berlin).

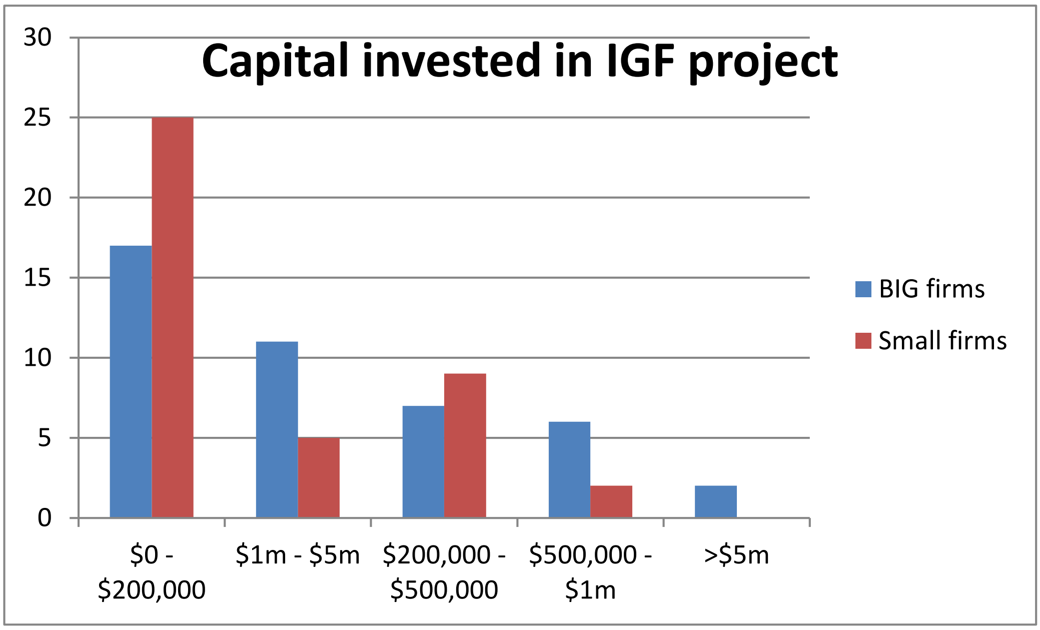
It is difficult to pin down the difference IGF is making to Compac's growth. Projects tend to have long lead times, including discussions, and back and forth quoting exercises. It can take up to two years for a lead to mature into a project.

However, NZTE and the IGF funding enabled research to be undertaken on Mexico, and Compac have now appointed a distributor there and are exporting to that market. The funding helped free up cash for trade shows (funding is 'hard', with the banks 'hard to deal with'). NZTE is good for market research, while Compac does most of the legwork.

In this evaluation, a small business is one with turnover less than $100 million. NZTE performance data indicates that this would include at least 80 per cent of the IGF recipients.

This is corroborated by the survey responses. Most project expenses are funded from cash flow. IGF recipients were asked how much additional capital expenditure was required to enable the project to go ahead. Responses are shown in Figure 4. Small firms are defined as those with fewer than 50 full-time equivalent employees.

Figure 4: Capital expenditure required to enable the project to go ahead



Businesses were asked to identify the source of funding. It could be more than one source. Over 50 per cent of businesses were using cash flow to fund capital expenses.

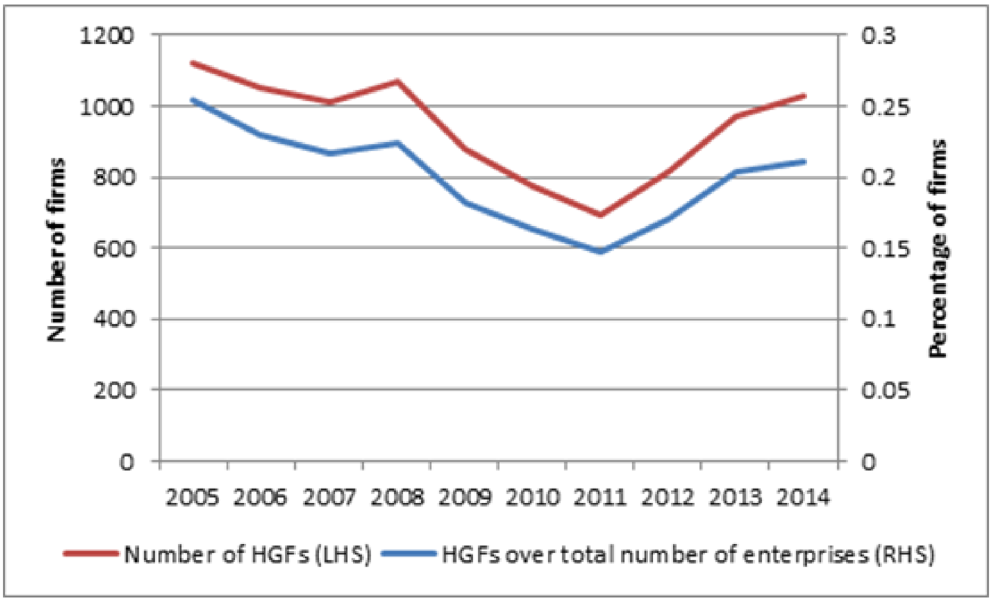
Of 34 small businesses responding to that question, only two had used bank funding and six had used shareholder funding. Of the 39 larger businesses responding, a third (13) had used banks and seven had used shareholders. Projects that required larger amounts of capital were more likely to have used banks for funding.

A quarter of survey respondents indicated that simple financial assistance was the most useful aspect of the IGF. Nearly equal numbers of big and small firms said this. Over a third of survey respondents also identified limited access to finance for expansion beyond New Zealand as a barrier to generating overseas income (see section 4.1).

4.3 Targeting high growth

Both the Business Growth Agenda and Vote Economic Development and Employment are looking for the IGF to target high-growth firms. The findings of an MBIE report *Defining Success: high-growth firms in New Zealand* are therefore relevant to this evaluation.

New Zealand has a number of policies that either specifically target potential high-growth firms or are intended to generally contribute to firm growth. The chart below tracks the number and proportion of high-growth firms in the New Zealand economy from 2005 to 2014. The fall and then rise in the number and proportion of high-growth firms between 2008 and 2014 may be related to the global financial crisis. There is, however, insufficient understanding of what underpins rapid firm growth to draw a definitive conclusion on this.



There is a lot of debate in the international literature around what causes high growth, whether high-growth-potential firms can be selected and what governments can do to leverage high-growth firms. From this body of work, the following stylised facts regarding high-growth firms have been established (Autio & Hölzl, 2008) and, based on New Zealand evidence, appear to largely hold true in our economy:

1. High-growth firms are rare.
2. High-growth firms matter to GDP growth.
3. High-growth firms are widely disbursed across the economy.
4. High-growth firms innovate.
5. High growth is unsustainable, volatile and unpredictable
6. High-growth firms thrive in specialised factor markets.
7. High-growth firms are about entrepreneurial individuals rather than the sheer number of new firms in the economy.

Ways that governments can leverage high-growth firms include, for instance:

a. developing policies focused on creating a business environment that is conducive to sustained growth for a wide range of businesses – examples include policies amed at improving access to capital and lowering the barriers to internationalisation
b. targeting a particular subset of new firms seen as having the potential to make a large contribution to economic development, which New Zealand does through initiatives such as research and development grants, the Incubator Support Programme and the Accelerator Programme
c. recognising that managers with growth aspirations are a necessary condition for high growth, and encouraging this mindset is an area where intervention might be beneficial, for example, removing perceived barriers to exporting in order to improve the willingness to grow via internationalisation.

It is worth noting that policies to stimulate rapid growth may increase revenue volatility. (All businesses experience such volatity. Analysis shows that the median annual growth rate for New Zealand business was negative (for any one year, half of all businesses experienced a drop in sales).

Adapted from *Defining Success: high-growth firms in New Zealand*, MBIE 2013.

The IGF could be a vehicle for leveraging high-growth businesses using the mechanisms described in a–c above.

a. Customer managers appear to be selecting firms that are mostly experiencing positive growth. However, growth measures are not explicit criteria for either receiving an IGF grant or for being a Focus 500 customer.
b. The IGF targets some of the barriers to internationalisation and has wide uptake across sectors, business size and target markets.
c. NZTE is using customer managers to actively select projects for the IGF. In this way, they are ensuring that the firms have the growth aspirations, business capability and ability to engage with NZTE. This would appear to have at least contributed to ensuring a high project success rate.

Finding: New Zealand firms continue to face barriers to generating overseas income.

The IGF is well placed to assist them with some of these challenges.

In its current form, IGF would appear to be well placed to support high-growth firms in the economy. Unfortunately, there is no quantitative data to determine the number of high-growth businesses in the IGF. *Defining Success* reported that, in the years 2000–2008, 17 per cent of Beachheads businesses, 15 per cent of Better by Design businesses and 6 per cent of Venture Investment Fund businesses had experienced high growth.

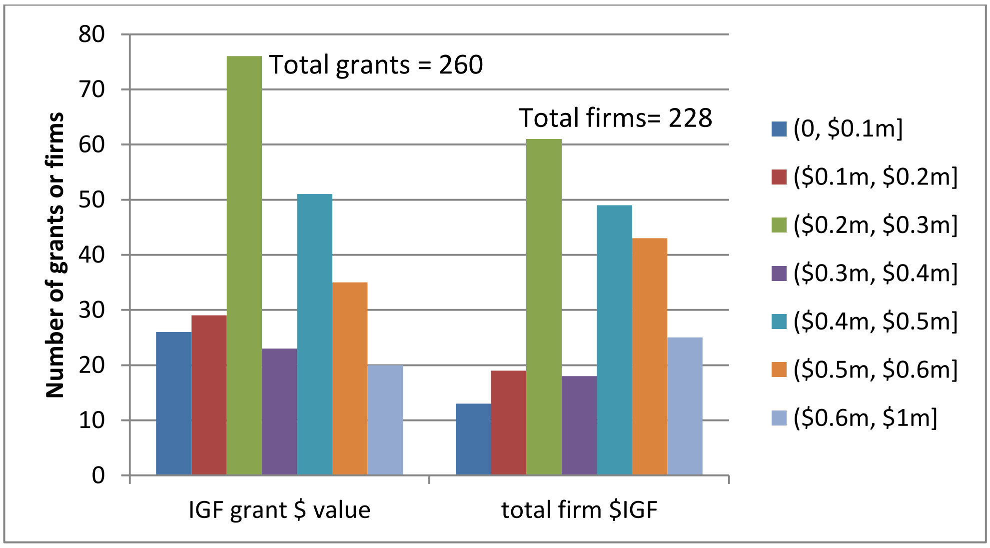
5. Programme outputs

5.1 Grants

From the commencement of the programme in 2009 until March 2014, 260 grants had been awarded to 228 businesses. The average grant size was $380,000 and the median $300,000.

The size distribution of individual grants and the total IGF grants for individual firms are given in Figure 5 and Table 4.

Figure 5: Size of grants and total IGF$ allocated to individual businesses from programme inception in 2009 to March 2014



In Figure 5, the number in the two largest categories is greater than the number of grants, as some firms have received two grants.

Table 4: Number of grants and businesses' total IGF funds by $ value

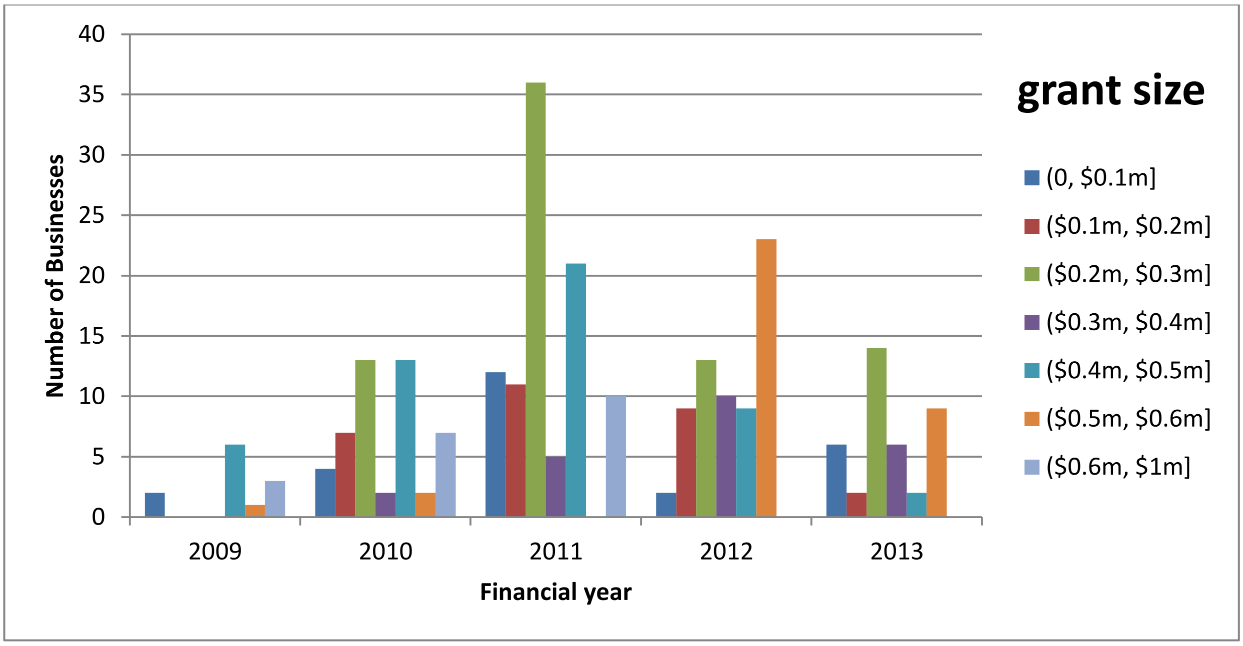
IGF grant value	# of grants	# of businesses
$0-0.1m	26	13
$0.1-0.2m	29	19
$0.2-0.3m	76	61
$0.3-0.4m	23	18
$0.4-0.5m	51	49
$0.5-0.6m	35	43
$0.6-1m	20	25
Total number of grants	260	
Total number of firms		228

In Figure 5, the number in the two largest categories is greater than the number of grants, as some firms have received two grants.

Table 4, 26 firms have received two grants, and one business three grants. Where businesses have received multiple grants, the total amount of funding has been less than $600,000 or $1 million for earlier participants.

The maximum grant size changed in 2012 from $1 million to $600,000. Prior to 2012, NZTE had a different business classification or segmentation process. Rather than having Foundation and Focus 500 businesses, there were pipeline and key accounts. Pipeline businesses were only eligible to apply for grants up to $500,000. Only key accounts, of which there were only approximately 80, were eligible to apply for grants over $500,000. With the new segmentation in 2012, more firms received bigger grants ($500,000–600,000) than in earlier years.

Figure 6: Distribution of size of grant by year (maximum grant size dropped from $1m to $600,000 in 2012)



5.2 Businesses

Only businesses in NZTE's Focus 500 are eligible for IGF grants. For businesses to be in the Focus 500, they need the scale, commitment and drive to succeed internationally. Most but not all of these companies are in the middle ($3–24 million) revenue range, with some experience and scale in exporting and a willingness to engage.[7]

[7] This is taken from an NZTE communication. The Focus 500 is not tightly defined. This statement needs to be considered within other NZTE strategy documents including The Customer Way, the NZTE value proposition and NZTE's broad economic development mandate.

Customer managers highlighted the diversity of firms receiving the IGF. They can be large or small firms. Larger firms usually have professional management teams with project managers and internal accountants. These contrast with small family firms with family members having multiple roles and possibly using external accountants. The common factor is that IGF businesses are growth businesses.

Māori business participation in the IGF

NZTE has had a Māori business team since 2012. Businesses self-select to be part of the Māori business portfolio and are generally Māori owned and identify as Māori businesses. There are no specific NZTE services for Māori businesses – they access the services available to all businesses. By developing a Māori business team, NZTE is ensuring that appropriate knowledge, services and communication are used for dealing with Māori businesses. It also facilitates networking amongst Māori businesses and promotes growth of Māori business leaders.

There are 18 Māori businesses in the Focus 700, and as of August 2014, six of these had received IGF grants. These are similar to the proportions of other Focus 700 businesses in the IGF. There are 48 Māori Foundation firms. Currently, most of the Māori firms are in the food and beverage sector. While there is less incentive for businesses in ICT or high-technology sectors to identify as Māori, NZTE is working to establish Māori business profiles in these and other sectors.

Appendix 2 profiles IGF businesses by ANZSIC sector, employees, sales, age, ownership, exporting history and history of government assistance. This analysis was based on data in the Statistics New Zealand Integrated Data Infrastructure (IDI). The IGF data was updated in January 2014, at which time 216 businesses had received IGF grants.

The profile of all IGF recipients in 2012 was broadly similar to that of all Focus 500 businesses. This included their industry distribution, size, age distribution, likelihood of being foreign owned and exporting history. IGF recipients were slightly more likely than Focus 500 businesses to be in the ANZSIC manufacturing sector.

IGF businesses tended to be well established medium-sized or large operations with prior exporting histories.

Their profile was very different from that of the New Zealand firm population. The latter is dominated by small, domestically owned firms operating solely in the domestic market and includes a much higher proportion of young firms.

Characteristics of the subgroup of IGF businesses that exported goods in the 2012 year, representing 65 per cent of the total IGF population,[8] were compared with all Focus 500 goods exporters and with all goods-exporting firms in the same year.

[8] Goods exporters do not include businesses that are solely services exporters, for example, businesses in ICT. Goods export data is based on cross-border Customs data. If both services and goods were included, it is likely to include 100% of the IGF population.

More than a third of the IGF recipients had export sales exceeding $10 million in 2012, and another third were exporting in the $1–10 million range. For most, these export sales were achieved prior to the start of the IGF project.

NZTE-assisted goods exporters were quite different from the total goods-exporting population, being:

- significantly larger
- more likely to be in located in the manufacturing industry
- responsible for much higher export sales per firm in 2012.

The IDI analysis in Appendix 2 includes two snapshots (June 2012 and January 2014) of the Focus 500 population. These show the Focus 500 in 2014 has more smaller businesses that are slightly more likely to be younger than Focus 500 businesses in 2012.

5.3 Big versus small businesses

Survey data was analysed to look at differences between big and small businesses. Big firms were defined as those with 50 or more FTEs (from linked NZTE administrative data). This divided survey responses approximately in two – half big and half small businesses. The following conclusions were made, but note that some of these are based on small numbers due to limited detail in survey responses.

Big businesses are more likely to use banks for capital than small businesses.

Big businesses were more likely to say exchange rate level and volatility were barriers to generating overseas income. Big businesses were more likely to have systems in place to manage exchange rate risks than small businesses.

Big businesses were less likely to have other international projects than small businesses. Big businesses' IGF projects were more likely to have similar returns to their other international projects.

Offshore networks were more important for small businesses than big businesses. Distance from markets and language and cultural barriers were the most frequently cited barrier for small businesses. For large businesses, the most frequently cited barrier was the exchange rate level, ranked second for small businesses.

Finding: While there are some differences in survey responses between big and small firms, there is no clear evidence for differences in programme additionality or effectiveness.

The rDEI measures from closeout reports were also analysed by size of business, and while there was a suggestion that larger businesses had higher returns, there is too little data for this to be concluded.

While a business with 50 or more FTEs might be considered big by New Zealand standards, this is not big by global standards.

5.4 IGF project objectives

For the 260 projects active by March 2014, objectives were coded by NZTE from project milestones.

IGF objective	Projects
Introduction of new products into overseas markets	95
Entering new overseas markets	155
Expansion within existing markets	155
Investing in a physical offshore presence	96
Innovation and product development	84
Building the capabilities needed to internationalise	100

Projects had, on average, two or three objectives.

Only 28 of the 260 projects did not have either entering new overseas markets or expansion within existing markets as an objective. Of these 28, most were investing in innovation and product development (distinct from the activities funded by Callaghan Innovation's research and development grants) or building capability to internationalise.

Approximately 30 per cent of projects (77) had the objective of entering a new market but not expanding within an existing market.

5.5 How are businesses spending the grant money?

EGI (09) 39 says, 'There will be no change to the broad range of business activities eligible for co-funding under the current GSF and no prescribed list of activities. This leads to solutions based interventions that meet the changing needs of firms. The grant will continue to focus on four enablers of growth – market knowledge and/or market development, business and management capability, innovation and commercialisation of R&D and access to finance.'[9]

Currently excluded from support are business-as-usual activities, capital expenditure and development activities in the New Zealand and Australian markets.[10]

NZTE has guidelines for activities that are included or excluded. The circumstances of individual projects can influence the inclusion or exclusion of some activities, for example, development of IP or certification and accreditation costs.

[9] See paper to Cabinet Economic Growth and Infrastructure Committee EGI (09) 39.

[10] The Australian market is excluded due to the New Zealand-Australia Closer Economic Relations agreement.

To provide an indication of how the IGF money is spent, NZTE coded project budgets as shown in Table 5. It is possible for firms to modify their planned expenditure if the project changes direction over its duration (an average of two to three years).

Table 5 indicates that, while there is some commonality, a diverse range of activities is funded. A third of the IGF money, across 70 per cent of projects, was budgeted for in-market/specialised staff. This is a significant change from IGF precursor programmes, which did not permit claiming of salaries. Over 60 per cent of projects have budgets for product launch or marketing collateral.

Table 5: IGF project budgets breakdown including 260 projects to March 2014 – numbers should be considered as indicative only and do not represent final claims

	Budget $/m	No. firms budgeting $	No. firms budgeting >$100,000
In-market/specialised staff	31.67	184	119
Product launch/marketing collateral (brochures, websites etc.)	16.76	166	62
Market/product development	13.23	118	39
Travel to market (other than above purposes)	5.72	107	17
Conference/trade show attendance	5.46	102	11
In-market strategic advice/consultants/legal advice	4.97	69	14
Develop/work on distribution relationships	4.61	67	16
Other	2.67	66	7
IT service development	3.92	58	8
Market research, for example, focus groups, customer requirements	2.17	49	5
Assessment of feasibility/establishment of physical offshore presence	4.39	45	10
Regulatory compliance	1.88	30	5
Capability building	2.44	30	6
Total	100.31	260	

Travel to market for a number of purposes, including conferences, trade shows and product launches, accounted for more than 11 per cent of the total project budgets.

This information was corroborated by a survey question where firms indicated which strategies they used to generate offshore income both in their general and IGF projects. The IGF projects more often:

- employed people with specific market knowledge or connections
- customised advertising and promotion according to the market.

Skyline Group

Skyline is a group of businesses in the adventure tourism, accommodation and event space, casino and restaurant industries, including their brand business in the Skyline Luge and Gondola, located in Queenstown and Rotorua. Skyline has around 750 full-time equivalent employees.

Skyline's only export is its luge business, a successful business model with low capital cost and high turnover that has worked 'spectacularly well' in Singapore. They also operate in Canada and are looking for other sites to expand their business.

Skyline turned to NZTE for help. Significant deadweight costs of a project come from prospecting – when the company needs to make sure a site is viable, accessible, attractive as a luge location and that necessary permits can be obtained. Projects can have lead times of up to 10 years, and NZTE support is very valuable for maintaining momentum.

NZTE granted an IGF to Skyline for prospecting projects in Korea and Spain as well as to complete a project in Calgary, Canada. The money was used for the cost of consultants in Korea and travel expenses to prospective sites.

Skyline found the offshore offices of NZTE in Korea and Spain to be very supportive of their projects and thought the IGF 'made them more active' in carrying out business plans. However, the project in Spain did not proceed due to a range of factors, which Skyline will factor in to the criteria for future site assessment.

Skyline has also used the Better by Design and Better by Strategy and implemented Better by Lean.

5.6 Project monitoring

NZTE customer managers do 90-day customer reviews for all Focus 500 businesses. This opportunity is used to formally monitor progress towards IGF milestones, as defined in the develop phase and recorded in NZTE's CRM.

A business's claims, variations to funding agreements and reports are facilitated or scrutinised by the NZTE customer manager.

A closeout report is completed after the DEI period, which is typically three years unless the project duration was longer than three years. The IGF customer manager guide states: 'This provides a chance to review end-to-end the IGF process and also provide a clear picture of the Direct Economic Impact benefits that have resulted from the funding. A chance to explain what went well, what went wrong and what the return on investment was for the government.'[11]

[11] International Growth Fund Customer Manager Guide NZTE doc #11154606_3

The IGF was set up so that the potential direct economic benefit (pDEI) of individual projects would be estimated as part of the project development, and the realised direct economic benefit (rDEI) would be calculated as part of the closeout report. This enables an estimate of programme additionality to be made.

Calculating DEI

To calculate potential DEI, in the project development phase, actual financial data for the two years prior to the project are supplied, and forecasts are made for the subsequent three years (or up to five years for projects with long sales lead time). Two sets of forecasts are completed – one with the project being undertaken and one without the project being undertaken. By comparing the two forecasts, the DEI of the project is a calculation of:

- additional earnings before income tax, depreciation and amortisation (EBITDA)
- additional salaries and wages
- additional supplier spend in New Zealand.

The financial data includes assumptions about FTE annual salary (average), supplier spend in New Zealand, New Zealand ownership and a discount factor. While assumptions made are no doubt realistic, they are likely to be subjective, as there are a lot of factors other than the IGF project impacting the variables concerned.

A three-year forecast is the norm (except for feasibility studies or market validation projects when DEI calculation is not mandatory). A handful of projects have five-year forecasts, and NZTE accepts these exceptions when it is demonstrated that it takes a long time to close a deal (long lead time) due to:

- the nature of the product, which could be costly capital expenditure items requiring potential customers to undertake lengthy investment decision involving their board's approval ('costly' is a relative measure depending on the size of the potential customer)
- a potential customer's need to consider switching costs as a result of using the new technology as other parts of, say, the production line need to change as well
- very new technology that a major potential customer wanted to be field tested.

NZTE has developed a spreadsheet for consistency in making these calculations, and customer managers have undertaken training in completing the calculations.

When calculating the rDEI for the closeout report, the actual data with the project can be used, but the 'without project' financials still require assumptions to be made.

As of the end of March 2014, 29 closeout reports had been completed – see section 7.2 for reported DEI measures.

5.7 Funding allocation processes

NZTE has a culture of improvement. By regularly considering their performance, through for example Performance Improvement Framework reports, annual customer surveys, monitoring and evaluation, NZTE can determine if processes need to change. Changes to IGF processes have been made since programme inception, for example, claims processing.

Allocation of IGF grants is driven by customer managers. In consultation with clients, customer managers identify projects that may be eligible for funding. NZTE has 46 customer managers dealing with Focus 500 firms.

Five customer managers were interviewed. They emphasised that being in the Focus 500 was not a sufficient condition for receiving IGF funding. Businesses needed to be ready to undertake the project and be capable of doing it successfully, including having the resources to fund it. One customer manager thought businesses should be experiencing growth.

The process of setting up the IGF project can change a business's relationship with NZTE. To calculate DEI, the business has to provide financial information and agrees to provide ongoing financial information. By matching funding for IGF projects, businesses see that NZTE is putting 'skin in the game'. For some businesses, this changes their attitude to NZTE in general, and they will take other advice more seriously. This change in attitude is more likely to occur with small businesses. Customer managers are key in a business's relationship with NZTE, and this came through in survey comments:

- *'The IGF will have a lasting impact. Clearly the funding has allowed us to progress our market development work more quickly than would be possible without it but it has also increased our engagement with our industry representative groups and Government agencies, NZTE in particular, which has improved our strategic thinking. These relationships are on-going and will continue to add value to our business and the wider NZ export effort beyond the IGF funding initiative.'*[12]

From a customer manager's perspective, developing the IGF project enables them to develop a better understanding of a business, and they are then able to suggest more tailored services. This is particularly important for businesses accessing NZTE offshore office services.

- *'The in-market BDMs (NZTE) have been instrumental in opening doors to customers. These customer intros have been at a very senior level, we never expected such an audience. Without the IGF I don't believe we would have picked up two significant contracts we deployed last year.'*

Customer managers were asked if they thought the current project cap of $600,000 over five years was appropriate. They had a range of opinions. For most businesses in the Focus 500, a project of scale of $300,000 or $600,000 is sufficient. Medium-sized firms can handle this sort of project from their cash flow. If they successfully complete one $300,000 project, then a second project to reach the cap is appropriate. One customer manager thought there should be no cap on the IGF amount or what the money can be used for and funding linked more directly to more robust calculation of DEI and the return to New Zealand.

For larger businesses, with turnover say over $200 million, the current cap does limit the scale of the project. Analysis of survey responses showed businesses with more than 50 full-time equivalent employees were more likely to exceed the co-funding requirement and more likely to be using banks to fund some of that expenditure.

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[12] This and the following comment were made in response to the question, 'What do you see as the most useful aspect/s of the IGF?'

Customer managers thought the restriction of IGF only being available to Focus 500 businesses was appropriate. As one pointed out, 'If a firm was ready for an IGF project, then they should have their segmentation changed to Focus 500.' NZTE has a range of businesses segmentations: Foundation, Managed Foundation and Focus 500. Business segmentation is addressed on a monthly basis, enabling firms to change segmentation relatively quickly. The segmentation impacts the level of customer manager engagement.

Finding: NZTE is implementing the IGF in line with policy and operational objectives prescribed for it.

6. Programme efficiency and effectiveness

6.1 IGF administration costs

NZTE has identified IGF grant administration costs as detailed in Table 2. Total administration costs vary slightly from year to year. It is just over 5 per cent of the amount approved per year. However, as discussed in section 6.5, only 75 per cent of individual grants are being claimed, and relative to claims, administrative costs have fallen from 14 per cent in 2011/12 to 7 per cent in 2013/14.

To calculate the costs of the IGF grant process, NZTE has split the time between the approval process and the claims process. In addition, there is the monitoring and evaluation process. The annual cost was obtained by multiplying the grant cost by the number of active grants.

	Cost per grant approval $	Cost per claim $	Cost of claims over life of grant $
Approval process	12,348		
Claims process		870	4,352

The approval process, outlined in section 3.3, includes functions of the following groups plus the NZTE overhead allocation:

- Customer manager and customer director
- International office
- Grants programme manager and commercial support
- GM panel
- Grants administration team
- Board subcommittee (IGFC).

The allocation of costs was based on average time spent by each of the above groups per grant and the number of grants.

Claims process includes the following functions:

- Grants administration team, who process the claims.
- Finance, who complete the accounting transactions and approval process.

> **Finding:** Costs of funding the programme as a percentage of disbursement have fallen as the programme matures. Costs are currently just over 5 per cent of the amount of approved funding per year. As a percentage of amount claimed by firms, costs have fallen from 14 per cent in 2011/12 to 7 per cent in 2013/14. In either case, this is higher than average costs for R&D grants of approximately 4.8 per cent.

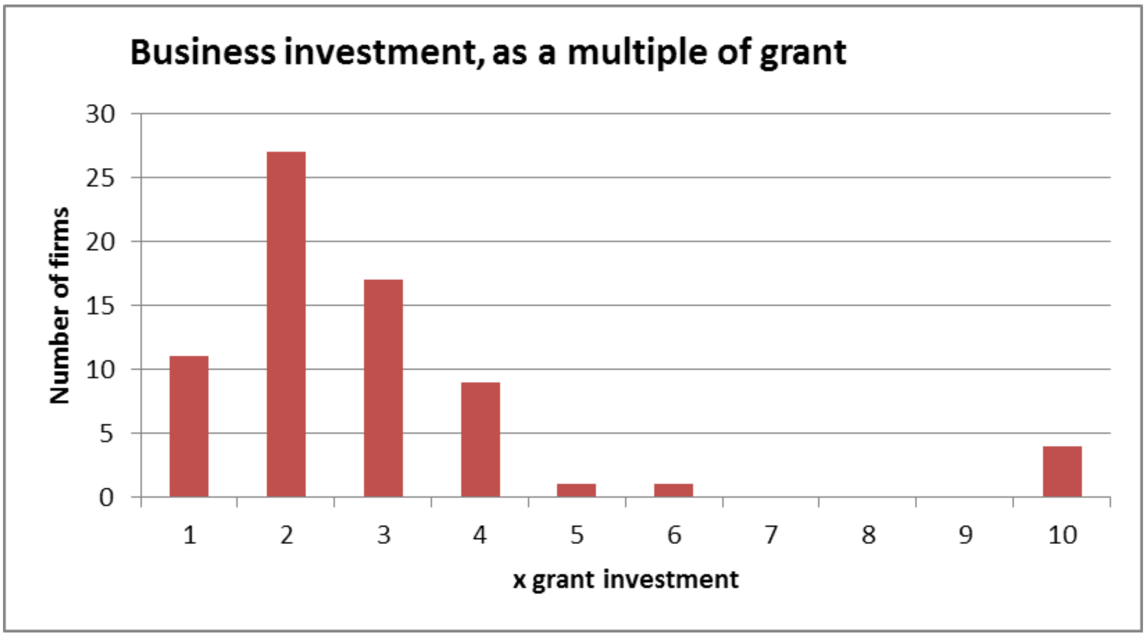
A high-level comparison with Callaghan Innovation grants can be made. The 2014/15 estimates show Callaghan Innovation received funding of $6.830 million a year for administration of the business R&D contracts. The business R&D appropriation is a multi-year appropriation. They budget to spend around $141 million a year (although in fact they spent less in 2013/14). At the aggregate level, this would indicate an overhead cost of 4.8 cents per dollar funded.

6.2 Business project costs

The IGF grants are co-funding, with NZTE meeting up to 50 per cent of project costs. Costs exclude business-as-usual activities, capital expenditure and activities in New Zealand and Australia.

Respondents to the participants' survey indicated levels of investment significantly higher than one to one for most projects, as shown in Figure 7.

Figure 7: Business investment in IGF project as a multiple of NZTE investment – fractions given were rounded down



84 per cent of respondents spent at least twice the grant value on the project. This did not include capital expenditure to enable the project to go ahead.

Preliminary data from 19 closeout reports and associated business cases indicates almost half had higher business expenditure on the IGF projects than originally planned.

Table 6: Capital expenditure required to enable the IGF project to go ahead

	Identified responses	
$0–200,000	42	50.00%
$200,000–500,000	16	19.05%
$500,000–1m	8	9.52%
$1m–5m	16	19.05%
>$5m	2	2.38%
	84	100.00%

Survey comments and interviews with customer managers indicated that IGF approval often gave the businesses confidence in the market strategy. This encouraged them and/or their businesses' shareholders or management or governance to invest more in the IGF projects.

Businesses were asked if they had considered other sources of funding for the IGF project before applying for the grant. Approximately one-third of businesses had considered alternative funding. Respondents were asked to identify these sources of funding and why they decided against using them.

- *'The wraparound services provided by NZTE and overall strategy for the grant made it the only logical option.'*
- *'We looked at funding internally but the board is very conservative and we would not have made as much impact as we have.'*
- *'We did use them in addition. IGF helped us move more quickly and manage the risk.'*

Finding: Businesses are investing at a higher rate than the 50:50 requirement.

Most businesses are funding capital expenditure through cash flow. For amounts over $1 million, banks and shareholder funding are more common.

One NZTE customer manager saw IGF 'as providing capital for growth, something banks were often reluctant to do for small to medium-sized businesses'.

6.3 Does the grant size justify the compliance costs?

The survey of participant businesses asked: 'Are the IGF transaction and compliance costs (e.g. time and effort) justified, given the size of the grant?' 95 per cent of survey respondents agreed that costs were justified.

Finding: Most (95 per cent) of survey respondents thought compliance costs were justified. Of the few who did not, some identified the application process as the challenge. Streamlining of the claims process in January 2014 should alleviate compliance costs in claiming grant funds.

The following survey comments illustrate a range of experiences:

- *'The IGF consumes a lot of time to complete reports, I understand this is required as it is tax-payers' money. I would not be interested in this sort of programme again. There are probably better mechanisms to help businesses expand overseas.'*
- *'Very simple process which incurs little cost to our business to provide claims and reporting.'*
- *'This would have been very draining on resources without good leadership and assistance from our NZTE lead (customer manager).'*

Two identified survey respondents indicated the application process was challenging rather than the claims process.

Some survey respondents commented on detail required in the claims process. This was hopefully addressed by changes in claims processing implemented in January 2014.

Businesses must spend money before they can claim against the IGF grant. That they are not claiming is most likely because they have not spent. The reason for not spending may be that they have overestimated the required expenses, the timing of the project has extended or changed or early project completion. Businesses often underestimate the time required to achieve offshore milestones.

NZTE administrative data (see Table 7) shows that a significant number of grants have unused funds at project completion. Unused funds could reflect a number of issues including withdrawing from the programme, complex claims processes (hopefully now resolved), changes in strategy or early project completion. Variations can occur and have occurred in IGF projects.

Table 7: Funds drawn by completed grants, by year – both large and small grants are both fully claimed and significantly unclaimed

	2009/10	2010/11	2011/12
Number of completed grants	10	29	32
Fully claimed (<0.1% of grant unclaimed)	3	12	13
Completed grants with >25% of grant unclaimed	2	9	12

The ongoing level of underclaiming has contributed to the ongoing underspend of the appropriation (see section 6.5).

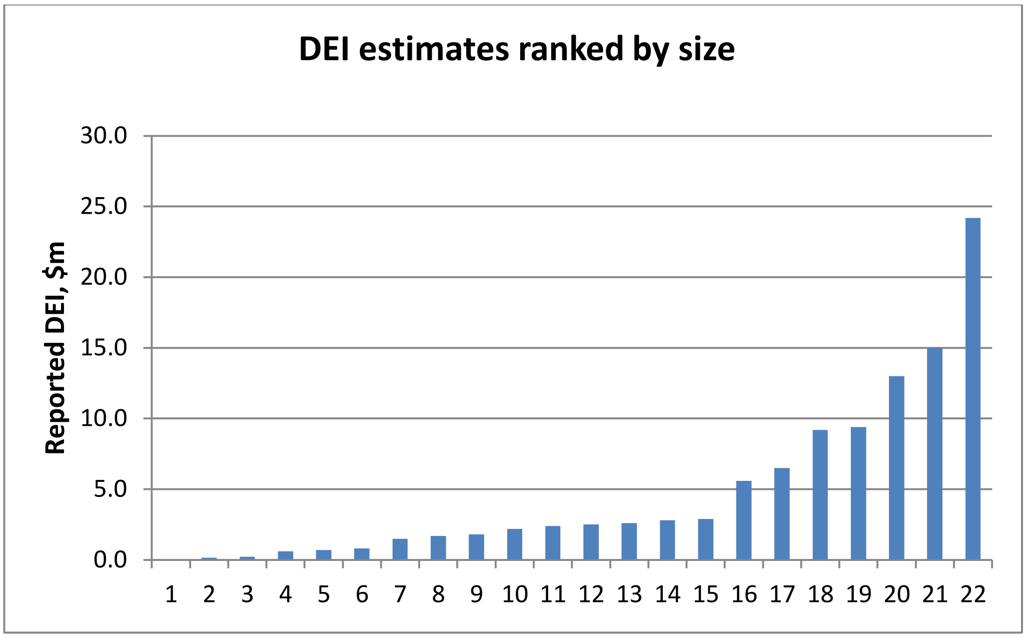
This inability to plan offshore activities and plan up to three years in advance possibly reflects a lack of experience in (particular) offshore markets. The business environment can also be unpredictable.

6.4 Programme delivery

Over the first five years of the IGF programme, NZTE has fine-tuned its administration processes. NZTE provides a quarterly and annual summary of programme monitoring data (see Figure 2). This includes the number and dollar value of IGF approvals, time taken for grant approval processes, potential and realised DEI and a comparison of the Focus 500 and IGF portfolios.

A measure of success for some IGF projects is provided by the rDEI measurements (chapter 7 discusses other interpretations of success). From the 29 closeout reports received to May 2014, there are 28 project outcomes because one firm had completed two projects. Four of the 28 projects were for market investigations that were not intended to have an immediate direct impact on revenue, and DEI was not calculated. (Individually, these grants were all less than $100,000.) For two grants, the businesses were unwilling to supply data/estimates needed for a DEI. There is, however, no obvious reason why these projects might be different from the rest. Twenty-two grants aimed to increase revenue from exports, and DEIs were available (see Figure 8).

Figure 8: Direct economic impact measures for 22 projects completed by May 2014



The 22 DEI estimates total $76.34 million, and project claims total $6.47 million ($6.85 million for all 29 projects). It is unknown how much the firms invested in these projects. Assuming it was the same as the amount claimed, the return is 5.9 times the amount invested (5.6 times across all 29 projects). (Most firms indicate they invest more in the project – see Figure 7.)

On an individual level, approximately one-third of projects had exceeded their DEI forecasts. Almost two-thirds overestimated the potential economic impact. The closeout reports include identification of key lessons and challenges, and from these, it can be seen that a significant number of the businesses underestimate the time required to achieve project milestones. Examples include difficulties in recruiting the right person offshore and in achieving sales objectives.

DEI estimates provide a useful self-reported measure of grant additionality. They are, however, only estimates and not robust measurements. The business and its customer manager estimate key financial data with and without project funding.

There are also no measurements or accounting for project sustainability. The project might be unsustainable but still have a large positive DEI because of the payments that were made to employees and suppliers in New Zealand, outweighing the negative impacts on company earnings (EBITDA).

While the DEI is a useful measure in some or even the majority of projects, it should not be used as a driver for the whole programme. The IGF Committee has approved projects with pDEI ratios below the target threshold where they saw the project's benefit for the business's internationalisation strategy.

An NZTE customer manager described a project where the DEI was not the primary objective. The project set out to establish data that

> **Finding:** DEI estimates provide a useful but self-reported measure of grant additionality. Potential DEI measures should not be used as a driver for the whole programme.
>
> In some cases, a positive DEI over the project life may mask relatively poor sustainability of international revenue.
>
> There is evidence that objectives other than DEI are being considered.

measured a product's functionality. While there were no financial returns from establishing the data, financial returns will occur with any subsequent sales.

The flexibility of the IGF to address a number of outcomes needs to be continued and encouraged.

6.5 Is the fund over/undersubscribed?

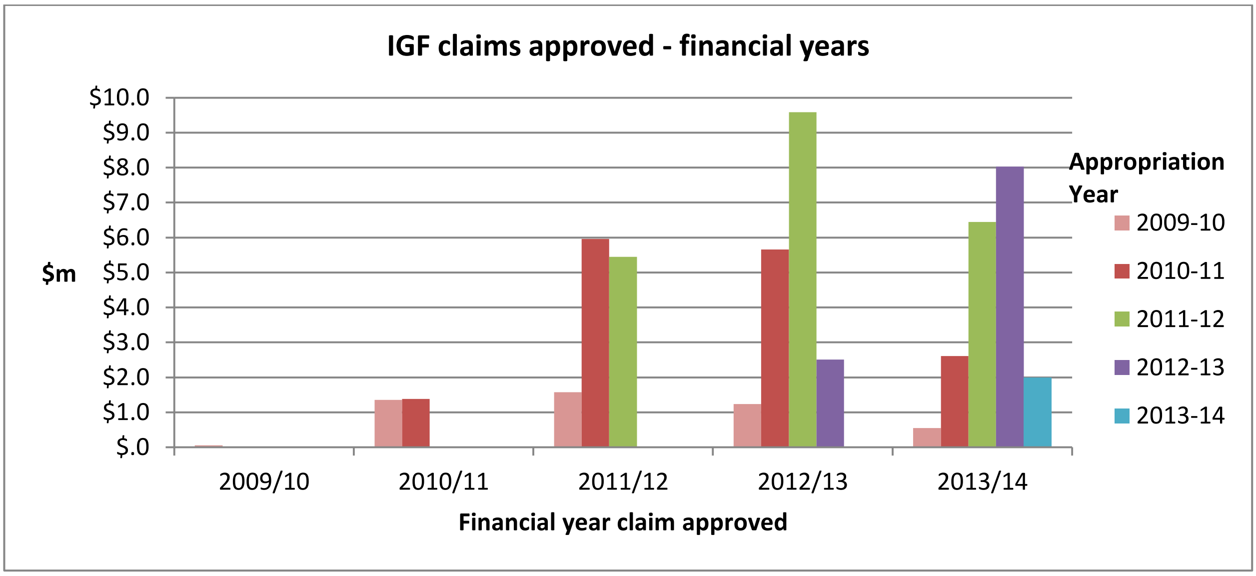
While most of the IGF's annual appropriation is allocated to IGF projects, there has been an ongoing underspend due to underclaiming of grants. Grants are usually multi-year projects, and while there are nominal endpoints, for example, in two or three or five years, project variations can enable time extensions.

Table 8: IGF claims approved by financial year to 4 August 2014

Appropriation	IGF$ approved	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	TOTAL $ claimed	% IGF$ claimed	Ended	Ongoing
2009–10	$6.045	$.057	$1.356	$1.572	$1.233	$.554	$.0	$4.772	78.9%	10	2
2010–11	$19.841		$1.380	$5.959	$5.656	$2.606	$.302	$15.903	80.2%	33	13
2011–12	$28.655			$5.449	$9.584	$6.447	$.174	$21.653	75.6%	45	36
2012–13	$27.311				$2.509	$8.025	$.928	$11.461	42.0%	14	55
2013–14	$9.872					$1.996	$.375	$2.371	24.0%	4	25
Totals	$91.723	$.057	$2.736	$12.980	$18.982	$19.627	$1.779	$56.161			

Note: This does not include projects with no claims, for example, withdrawn. Values are in million dollars. The final two columns give the number of projects from that year that have been completed and the number that are still ongoing.

Figure 9: IGF$ claimed from grants approved by year (see Table 7)



The IGF appropriation is currently an annual appropriation, and this is leading to significant underspend. NZTE cannot overcommit the appropriation. Businesses are not spending their entire grant, and they are taking longer than planned to complete their projects.

MBIE and NZTE need to consider more flexible deployment of the IGF. Work is currently under way to investigate this possibility.

Most customer managers thought it would be challenging to find more projects of the current quality. It was suggested that, if the current budget of $30 million was increased, the project quality would decline.

While the economic return varies considerably from one project to another, there do not appear to be many projects that ‘fail’ completely. Three out of 92 survey respondents said that the IGF project had not had a material impact on international revenues. While this success rate is commendable, backing projects with higher risk may also both increase overall returns and ‘failures’ as well. Businesses and individuals involved in ‘failures’ can learn from the experience, benefiting in other ways.

Finding: The IGF is currently underspent due to firms not claiming their full grant. MBIE and NZTE are currently investigating more flexible deployment of the IGF to address this issue.

Finding: There is currently a high level of IGF project success. This reflects NZTE selection processes – both the profile of firms in the Focus 500 and the selection of projects with a high chance of success.

Whilst current projects have a spread of risk, as shown by their rDEI, NZTE’s operational approach might be considered too risk averse.

Relaxing project selection criteria and engaging companies earlier or with riskier execution profiles may increase the number of projects funded but with higher rates of project failure. Riskier projects may result in some higher returns.

7. Programme outcomes

> **Finding**: There is evidence of the IGF having a positive impact at a business level.

Success of the programme depends on perspective. The intervention logic (see section 3.2) describes outputs, intermediate outcomes and final outcomes. This chapter addresses outcomes.

From a firm perspective, the programme appears to be successful. Three-quarters of businesses receiving grants were achieving or mostly achieving their objectives (and presumably would interpret this as success). Assuming reported realised DEIs reflect real achievements of IGF projects, individual firms have increased in size as reflected in increased employees, revenue and export revenue. Robust statistical evidence from evaluations of precursor programmes (see Appendix 5) showed significant positive impact on sales of firms receiving assistance. While there have been some changes in programme selection criteria and services provided/funded, it is likely that the type of returns from the precursor programmes would be replicated in the IGF.

Evidence of success at a wider economic level is less certain. Outcomes other than individual firm successes are more in line with the intermediate rather than final outcomes at this stage, with only five years of programme operation.

It is too early to try and measure some of the final outcomes: increases in the number of exporting businesses, shifts by businesses and their supply chains to higher-value goods and services, development of new markets, number of businesses engaged in overseas direct investment and value added per employee. These outcomes require robust measurement, including comparison with unassisted firms, to try and determine programme additionality. This could be attempted in an econometric study using the Statistics New Zealand Integrated Data Infrastructure (IDI) with an appropriate level of resources.

In 2014, only a limited number of firms have completed their IGF projects. This, combined with the time it takes for relevant data to become available in the IDI, meant analysis of IGF in the IDI would have some challenges. It would be more appropriate in two or three years.

It is also too early to determine if the businesses receiving IGF are subsequently higher-intensity exporters. Fabling and Sanderson (2008)[13] found that, while there are a significant number of products and firms that export continuously, there are also a large number that export for relatively short periods. Has the IGF made a difference to businesses' exporting behaviour?

IDI analysis in 2013 (see Appendix 2) indicates that IGF recipients are experienced exporters. Drawing on the Customs-sourced export data, at least two-thirds of the IGF firms were active commodity exporters in the period 1990–2009, before the creation of the IGF. In total, 75 per cent had commodity exports in at least one year in the years 1990–2012, and 71 per cent exported goods in the years 2010–2012. If an IGF

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[13] Fabling, R. and Sanderson, L. (2008). *Firm Level Patterns in Merchandise Trade*. Ministry of Economic Development Occasional Paper 08/03.

firm had exported at least once in the years 1990–2012, they had, on average, exported for 12.1 years over that interval.

To determine if the IGF project has had an impact on a firm's continuity as an exporter or on the volume of exports or international revenue will require a number of years' data following the IGF grant. While section 7.2 shows that IGF businesses have increased revenues, exports, and employees, this cannot all be positively attributed to the IGF grant (see section 8.3).

7.1 Businesses were largely achieving their objectives

The survey asked participant IGF businesses, 'Did your IGF activities achieve your desired outcomes? (For projects in progress: Is your progress as expected and likely to meet your desired outcomes?)' There was no obvious difference between the distributions for completed projects and projects still in progress.

Table 9: Did your IGF-funded activities achieve your desired outcomes?

	Identified responses	
Yes	42	46%
Mostly	27	30%
Partially	19	21%
Limited	1	1%
No	2	2%
Total	91	

While a number of businesses were only partially achieving their objectives, comments indicated this was sometimes because markets had not worked out for some reason or the progress was slower than expected.

7.2 Recipient businesses have increased revenue, employees

NZTE collect annual data on customers' exports, international revenue, total revenue and employees. The data on international revenue is less complete than that of exports and total revenue. If the IGF is used simply to define a basket of businesses and only those businesses that have five years of data are considered for the respective measures, the businesses have increased their average number of employees, annual exports and total revenue over the five years 2009–2013. (No attempt has been made to adjust for economic growth or decline or to indicate how many of the firms were active in the programme in different years.)

Table 10: Average reported full-time-equivalent employees (FTEs), export revenue and total revenue for businesses in the IGF programme who had reported data for the five years from 2009 to 2013 – these businesses joined the IGF across the five years being considered

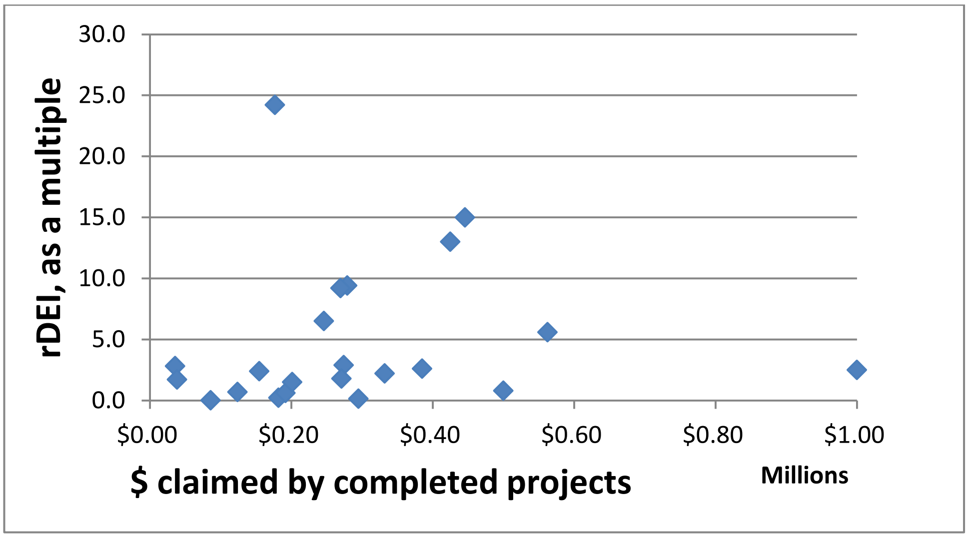
Average	Measures	2009	2010	2011	2012	2013	% increase
FTEs	152 firms	162	164	178	194	206	27%
Export revenue	167 firms	$39.1m	$39.9m	$44.1m	$46.1m	$47.0m	20%
Total revenue	170 firms	$61.8m	$62.8m	$70.2m	$72.1m	$74.8m	21%

The increases in revenue, exports and employees may be, at least in part, due to the programme, but the increase cannot be positively attributed to the programme.

Sixteen out of 22 closeout reports (over two-thirds) for which rDEI measurements were relevant had rDEI>=1.

There were closeout reports for 22 projects seeking a return on investment (see Figure 10). There is a tendency for higher returns to come from larger grants (>$200,000). However there is insufficient data for this to be a robust conclusion. At this stage, it is more appropriate to conclude that the size of grants does not impact returns.

Figure 10: Realised DEI as a function of grant size (NZTE administrative data)



7.3 Grants encourage businesses to assume more risk

Half of survey respondents indicated that the most useful aspect of the IGF was that it enabled market expansion with less risk and/or more speed.

- *'Assists risk taking in business set-up.'*
- *'The best aspect has been to augment an existing commercialisation plan – by additional staff, affording experts and consultants and carrying out greater promotional activity.'*
- *'Ability to apply additional resources and commitment to a project in order to speed up ROI.'*

Finding: Businesses believe that the grants encourage them to assume more risk in international markets.

The survey also asked if businesses had raised non-government funding for other international projects since completing their IGF project. While approximately 30 per cent of respondents had not completed their IGF project, another approximately 30 per cent said they had subsequently raised funding for other international projects, and they were asked to identify the sources of this funding. One-third was from banks and another third from shareholders. Large firms were more likely to access funding from shareholders than small firms. Only small firms had used private investors.

Table 11: Sources of funding for other international projects – differences between big and small firms are highlighted (big firms are businesses with >50 employees)

Source	All responses		Big firms		Small firms	
Number providing yes comment	33		11		16	
Private investors	6	18%	0	0%	6	38%
Callaghan Fund	2	6%	2	18%	0	0%
New Zealand institutional investors	2	6%	0	0%	1	6%
Owners/personal debt	2	6%	1	9%	2	13%
Related party/partner funding	3	9%	0	0%	2	13%
Shareholders/equity	12	36%	7	64%	4	25%
Bank	11	33%	3	27%	5	31%

7.4 Some businesses improved their internationalisation processes and/or strategy and became more confident

15% of survey respondents indicated the most useful aspect of the IGF was the robust process that strengthened strategy. This was significantly more common for large firms (>50 FTEs) than for small firms.

- *'The rigour required to apply is useful in order to clarify the benefits early on. Obviously the money helps speed the process up that might have starved for cash meantime.'*
- *'It is very milestone driven, clear on the objectives, flexible enough so underspending in one area can be used in other activities.'*
- *'Provides a discipline and focus in terms of our international activities that drive outcomes.'*
- *'Thinking through our projects and success measures being committed to finishing these projects tracking expenditure.'*

Receiving an IGF grant also gave businesses more confidence to take on other international projects. Again, it was more frequently cited by larger firms than smaller ones.

- *'Shareholders have confidence – it's not just them putting everything at risk again! This has also led to shareholders actually wanting to pursue other international opportunities ahead of plan.'*
- *'Once we had won the IGF, we all had the confidence to take risks in some other areas of our business. The IGF was also relatively easy to administer once it was in place.'*

Finding: Some businesses provided feedback that the robust IGF processes strengthened their strategy and improved their internationalisation processes.

Receiving an IGF grant also gives some businesses more confidence to expand or take on other international projects.

In both cases, these businesses were more likely to be larger businesses.

- *'Confidence to take the investment to grow markets that have a higher degree of risk, but higher payback.'*

ikeGPS

ikeGPS provides mobile software and hardware products for measuring assets. While the company sells its products globally, IGF funding has been used to support its focus on developing the US utilities market. An initial foothold in the US was originally established eight years ago when ikeGPS received development funding from the US military. *'The IGF has subsequently allowed us to be very specific and focus where we want to grow.'*

With IGF funding, the company has developed a brand and market presence in the US, including securing a branding and distribution relationship with their market partner GE Digital Energy (General Electric). Working with this globally recognised brand has been essential as has been building a US-based sales and marketing team. Working with locals has mattered. *'You need to put US people into US roles, not transplanted New Zealanders, as they have the local knowledge.'*

After benefiting from government export market development grants and R&D grants, ikeGPS considers that they are now in a phase of sustainable growth in offshore markets. *'We needed to invest in developing our markets over a sustained period of time in order to establish our in-market presence, and the grants have been instrumental in our success.'* This was the case with the IGF grants. *'The 2012 funding kept our momentum in the US market during the economic downturn there.'*

ikeGPS listed on the main board of the NZ Stock Exchange in July 2014. The company is currently building its global sales and marketing organisation in Colorado, USA, and development and manufacturing organisation in Wellington, New Zealand.

7.5 The IGF improved networks in market

Almost a quarter of survey respondents indicated that the most important aspect of the IGF was improved networks in markets.

- *'The funding and the government contacts in the new markets, which lend weight and credibility to our bid.'*
- *'The ability to get into market more often. The ability to get more than one person into market more often. The ability to access knowledge/skills/expertise that comes with being part of the IGF.'*
- *'The in-market BDMs (NZTE) have been instrumental in opening doors to customers. These customer intros have been at a very senior level, we never expected such an audience. Without the IGF, I don't believe we would have picked up two significant contracts we deployed last year.'*

Finding: IGF participation improved in-market networks for some firms. This had a significant impact on project success.

This was also reflected in conversations with NZTE customer managers. They found that the process of setting up the IGF grant gave them more detailed knowledge of the businesses and their internationalisation strategy. This enabled the customer managers to better advise their clients and recommend more specific services.

Firms are accessing a range of markets.

Table 12: Market for IGF project – more than one market can be selected (Source: NZTE business case data)

Market	Number of businesses
Europe	85
India	15
Middle East	19
Africa	16
Greater China	85
East Asia	71
Australia/Pacific	13
North America	126
South America	27

Networks can include in-market businesses, other New Zealand businesses both in New Zealand and offshore, New Zealand Government officials and industry networks. The importance of different networks varies in different markets.

Shott Beverages

Shott Beverages had a fledgling export business in Australia and was looking to grow when approached by a Korean business, Tiwi Trade, that specialised in taking New Zealand products to the Korean market. Tiwi persuaded Shott to consider expanding the New Zealand concentrated juices company into South Korea. - After a few initial trips and conversations, Korea became an enticing market for Shott. It has a vibrant café culture, and Koreans have a taste for beverages similar to Shott's products. It also has a strong economy and a cold climate conducive to the sale of Shott's hot beverages.

After initial success using Tiwi as Shott's distributor, Shott approached NZTE for help to speed its development of the Korean market. NZTE supported Shott with an IGF grant, which enabled the business to employ an export sales manager, send representatives to trade shows, cover travel expenses, establish connections and open an office in South Korea. It meant Shott could reduce its reliance on Tiwi Trade and bring in more distributors to expand the business.

Shott CEO Tami Louisson believes that NZTE support services were crucial, if not more important, than the dollar funding. *'The IGF helps you to be braver.'*

Mrs Louisson worked closely with the NZTE Korea office and, with their help, was able to find the right employment agency who then located the right man to manage Korea operations for Shott. The IGF grant and NZTE relationship went hand in hand.

In addition, at home, Shott has completed the Better by Lean (with a refresher) and Better by Design manufacturing programmes. The IGF has made banks more comfortable supporting Shott.

Shott has learned from other New Zealand food companies in Korea, and other companies have benefited from Shott's experience, particularly its branding. (It is the only New Zealand company with its own vans in Korea.)

Shott now has five distributors that sell to a growing number of cafés, hotels, bars and retail outlets in Korea. The product is manufactured in Petone and shipped and stocked in Korea. Shott has grown from five employees to currently 25 (2014). Shott's revenues have also been growing due to this new market and are expected to triple by next year.

Shott is now looking to England to increase its export market reach. Shott is in the middle of implementing its second IGF grant.

7.6 Impacts on the wider New Zealand economy

While economic spillovers are part of the policy rationale for the programme, they are notoriously difficult to measure. This evaluation did not have the resources to quantify economic spillovers. Qualitative evidence was provided by both IGF businesses and NZTE customer managers.

The IGF is providing opportunities for more New Zealand business people to obtain business experience offshore. This was the most commonly cited spillover in the survey.

- *'Placing NZ staff in market (thanks to the IGF support) has allowed these people to experience first hand customer demands, supply chain issues and global commerce on a scale that would never have been achieved based in NZ with a few trips to market.'*
- *'For our product that the IGF grant relates to, we were required to get a CE (European Certificate) for our product – we had to submit to a rigorous testing programme and also to an annual audit (in NZ) of our site. For all staff involved in the initial certification and ongoing QA activities to meet audit requirements, this has been hugely beneficial.'*

Finding: There is anecdotal evidence of spillover benefits for the wider economy.

Networking through business or industry networks and forums was also commonly cited. While businesses gave examples of sharing their experiences with others, networking was also given as one of the most useful aspects of the IGF programme.

- *'The IGF will have a lasting impact. Clearly the funding has allowed us to progress our market development work more quickly than would be possible without it, but it has also increased our engagement with our industry representative groups and government agencies, NZTE in particular, which has improved our strategic thinking. These relationships are on-going and will continue to add value to our business and the wider NZ export effort beyond the IGF funding initiative.'*

While there were fewer citings of reputational benefits for other businesses, industry and New Zealand, suppliers having to improve the quality and timeliness of their goods and services and other New Zealand businesses being more easily able to enter new markets because the feasibility of New Zealand companies doing so has been demonstrated, the economic value of these spillovers could be greater.

- *'Our project has put New Zealand on the map within our industry. We have seen other businesses carry out overseas operations since successfully. The training our staff have gone through and the processes we have put in place have helped both our business and our suppliers and competitors as our staff move through the system.'*

NZTE customer managers provided corroborating evidence of sharing experience through networking. Customer managers can be particularly useful in facilitating such networking by being able to identify businesses with common interests or experiences.

8. Programme additionality and attribution

8.1 How does the programme work with other NZTE activities to ensure maximum leverage/synergy?

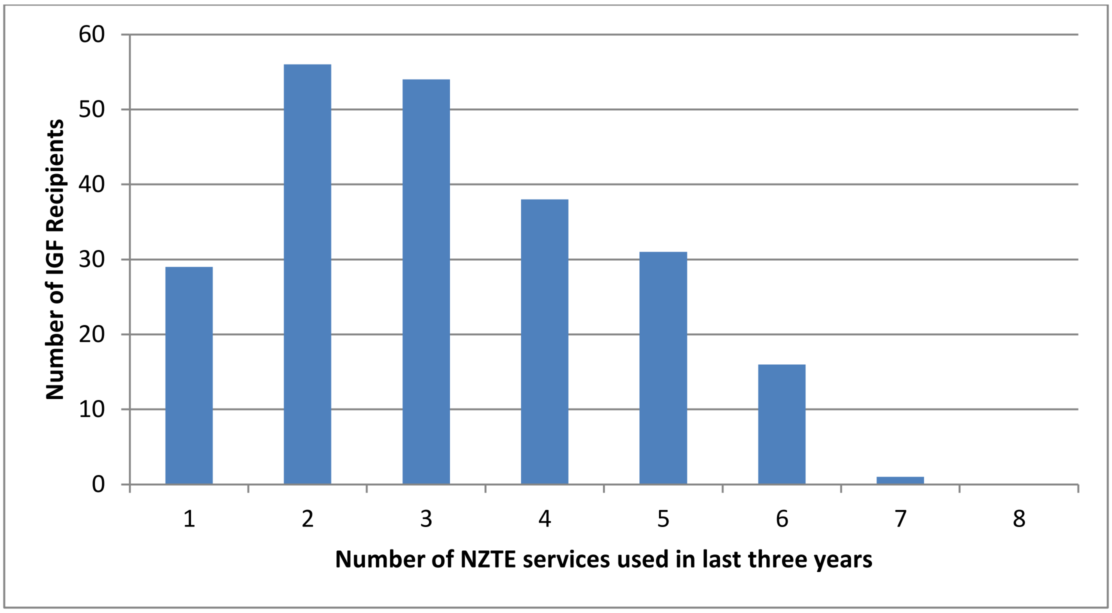
While NZTE records are not comprehensive, data was available to indicate which other NZTE programmes IGF businesses have participated in over the last three years (18 months in the case of Market Research). The list is not exhaustive but covers the most commonly used services.

Table 13: Other NZTE services accessed by IGF participants over the last three years (Source: NZTE administrative data)

Programme name	Number of firms	% of IGF firms
IGF	225	100%
Beachheads	121	54%
Market Research (only 18 months)	96	43%
Better by Design	69	31%
Better by Strategy	63	28%
China Business Training	57	25%
Lean Programme	45	20%
Industry Capability Network	23	10%
Better by Capital (launched in 2013)	11	5%
Path to Market	3	1%

IGF participants have accessed, on average, two other NZTE programmes in the last three years. There were 29 businesses who had only participated in IGF over the last three years. Some of these may have received other services prior to this.

Figure 11: Number of NZTE services IGF recipients have received over the last three years (Source: NZTE administrative data)



The IDI analysis (see Appendix 2) indicates that 58 per cent of the IGF firms previously received assistance through either an Enterprise Development Fund grant or a Growth Services Fund grant, the two largest NZTE programmes that preceded the IGF.

53 per cent of the IGF recipients have also received an R&D grant from the government at some time between 1994 and 2012.

For Focus 500 businesses, interaction with NZTE is co-ordinated by a single customer manager who meets regularly with the CEO or nominated NZTE contact. This ensures that NZTE services are not duplicated and also that the customer manager develops an understanding of the businesses and which NZTE or other government services are most pertinent.

Of the 92 businesses who responded to the electronic survey, 46 per cent had also used MFAT services and 32 per cent R&D grants/services.

Finding: Businesses receiving IGF grants have received, on average, two other NZTE services in the last three years.

Duplication of NZTE services is not occurring due to relationship management by NZTE customer managers.

IGF businesses also receive other government services, most frequently those from MFAT and Callaghan Innovation.

Table 14: Other government services used by survey respondents.

Other government services	Firms	%
Ministry of Foreign Affairs and Trade ambassador or other MFAT services	42	46%
Callaghan Innovation (or predecessor organisations MSI/FRST)	29	32%
Ministry for Primary Industries	15	16%
Intellectual Property Office New Zealand	12	13%
Export Credit Office	11	12%
Total survey respondents	92	100%

The businesses involved in IGF are aware of and use a range of government services. Their focus would appear to be on exporting, with a significant portion also actively involved in R&D.

Open Cloud NZ Ltd

Founded in 2000, Open Cloud NZ Ltd is an established exporter of cloud software products designed for telecoms. Research and development activities are undertaken in New Zealand. The head office is located in Cambridge, UK, close to investors and the important EMEA market. Sales and marketing offices are located in Jakarta, Madrid and Sao Paulo.

IGF funding was originally granted to open a sales and support office in China and to develop associated distribution channels. This was a challenging goal given the large Chinese multinationals operating in their home telecommunications market. With support from NZTE, the company therefore redirected its IGF activities to pursue South American opportunities, looking to extend existing relationships that had already been built with companies in Madrid.

The relationship with the New Zealand Government is also important. The government imprimatur offered by NZTE/MFAT has been very useful in Latin America where there is a lot of red tape in terms of becoming established, says David Long, one of the founders. He said that the 'stamp of government does help open doors' and this 'is not appreciated in New Zealand'.

'The customers love to go and talk with senior executives and officials, and this makes a difference.'

Historically, the company has used the government's technology development grants, such as TBG, Techgrant and more recently Beachheads support from NZTE. From the company's perspective, there is a valuable point of difference offered by the IGF, saying that it is focused on selling and marketing, and that is what has been missing in the past. *'New Zealand is good at supporting tech stuff but less so in marketing. so IGF is really important. It takes a lot of time to develop markets when you're initially facing 18-month sales cycles.'*

Having the right people is always important. Not having the right people is a real issue when you're spending money on expanding export activities. The company's experience has showed that it takes time to employ and develop the right staff and says that "sales and marketing [staff] are key in selling the value proposition to future customers".

8.2 What is the grant additionality?

Three-quarters of the survey respondents said their IGF projects were a stretch for their businesses. Approximately half of the survey respondents said that the IGF project was different from their other international projects (16 per cent of respondents had no other international projects:

- *'This is by far our most active and professional. We are putting most resources into this project/market.'*
- *'The cultural differences and setting up facilities has been a new experience.'*
- *'Largest scale to date.'*
- *'It provides a more targeted approach.'*
- *'It was more aggressive to achieve the required goals. Other international projects have historically been more organic with less return or market impact.'*

There is a proportion, possibly as much as 20 per cent of the participant businesses, for whom the additionality from the IGF grant is questionable – 22 per cent of survey respondents said that the IGF project is not a stretch for the business, 19 per cent said the project would have gone ahead without IGF funding, 26 per cent said the IGF return/expected return was similar to other international projects and 30 per cent said the IGF project does not differ significantly from their other international projects. These responses do not necessarily coincide as might be expected, and some of the businesses are responding to other questions in ways that illustrate real benefits from IGF projects. However, there is sufficient alignment to indicate that a small number of businesses are not achieving additionality from the grants.

Most of the survey respondents who said the IGF project was not a stretch for their business said that the project would have either gone ahead or partially gone ahead without funding (see Table 15).

Table 15: Firms saying their IGF project was not a stretch for their business were more likely to say the project would have gone ahead without funding.

	Would your IGF project have gone ahead without funding?			
Was IGF project a stretch ?	No	Partially	Yes	Totals
No	2	11	7	20
Yes	15	42	9	66
Totals	17	53	16	86

Even those firms saying both that the IGF was not a stretch and that the project would have gone ahead without IGF funding indicated that participation had been beneficial:

- *'[The IGF] provides a discipline and focus in terms of our international activities that drive outcomes.'*

More nuanced questions may have illustrated additionality better. However, there is evidence of deadweight in the programme. This is to be expected.

Finding: There is anecdotal evidence of grant additionality – 75 per cent of businesses said their projects were a stretch for the business, and 50 per cent said their IGF projects were different from other international projects.

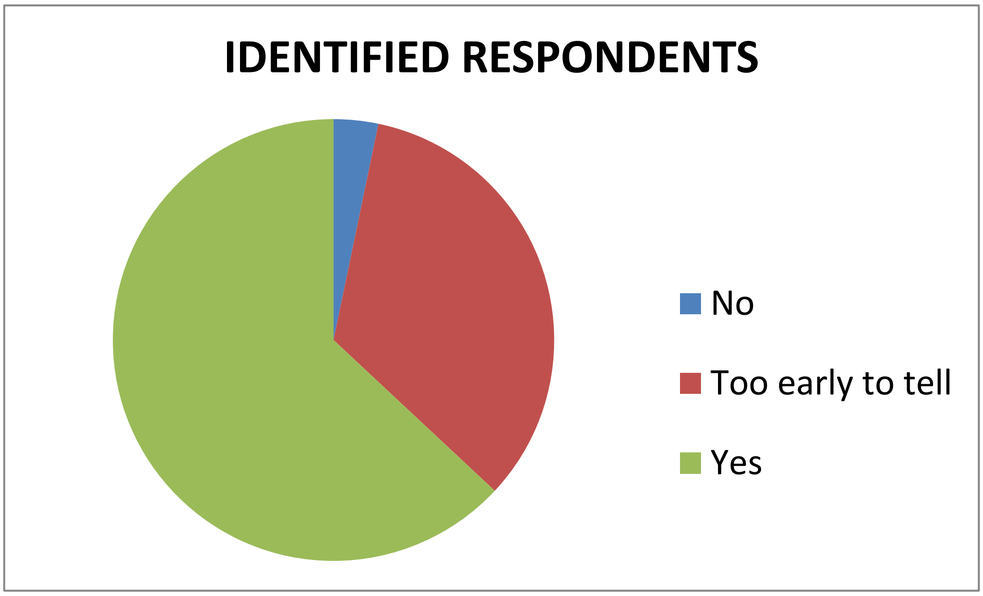
More robust evidence would require statistical analysis of business performance data and careful matching with a counterfactual.

8.3 To what extent can the changes in firm outcomes be attributed to the programme?

The ability to attribute changes in firm outcomes to the IGF programme relies on the participant businesses' own assessment. Survey respondents were asked a number of questions regarding how the programme had impacted their business. Most firms whose projects were sufficiently advanced had seen material impact on both their international revenues and other business activities.

The first survey question was, 'Did the project activities co-funded by the IGF grant have a material impact on your international revenue?'

Figure 12: Have project activities had a material impact on international revenues?



Over 60 per cent of firms said the grant had a material impact on international revenues. One-third said it was too early to tell, and three said there had been no impact. (Of the three not seeing impact, one IGF was not aiming to impact revenues, another had withdrawn from the programme and the third had observed a general downturn in the market where they were operating.)

Survey respondents were asked to identify other business activities impacted by the IGF – 80 per cent of respondents had seen other impacts, 12 per cent said it was too early to tell and 5 per cent had not seen other material impacts. The impacts identified included:

- increased employment, both in offshore markets and onshore to meet increased workloads
- increased marketing
- strategy
- competitive advantage
- product, company and customer development.

8.4 Is the grant just facilitating things that would happen anyway?

Programme guidelines (see section 5.5) specifically exclude business-as-usual activities.[14]

Survey participants were asked, 'Would your project have gone ahead without IGF funding?' – 80 per cent of respondents said the project would have gone ahead, at least partially.

Table 16: Would your project have gone ahead without IGF funding?

	Responses
No	20%
Partially	61%
Yes	20%

Forty of the 63 comments indicated that the IGF grant sped up the process:

- *'IGF funding has afforded the opportunity of an earlier start with a greater level of commitment, i.e. the increased funding has significantly improved the likelihood of a successful outcome.'*
- *'We would have limited the scope of the project without funding.'*
- *'We would have still gone ahead but at a much slower pace.'*
- *'The IGF funding will help to speed up the progress of our international expansion.'*
- *'Process would have been much slower with high opportunity cost.'*
- *'But the project may have fallen short of its desired outcomes.'*

Finding: There is evidence for some expected deadweight in the programme.

These comments were from businesses saying that the project wouldn't have gone ahead:

- *'This has given the board comfort to pursue a more aggressive marketing strategy.'*
- *'It allowed us to have the ability to create a step change.'*
- *'We simply could not have funded this project. Speed to market was of utmost importance, so it was essential that we created a highly targeted and aggressive project so as to be within the first companies to market with that offering.'*

Finding: Most firms whose projects were sufficiently advanced identified a material impact on both their international revenues and other business activities attributable to the IGF grant.

[14] This is also spelt out in NZTE International Growth Fund Customer Manager Guide and Customer Guide.

The majority of comments from businesses saying the project would have gone ahead indicated that it would have been slower or delayed:

- *'But the project may have fallen short of its desired outcomes.'*
- *'The reason for this is we are determined to grow in this area!!'*

8.5 Businesses receiving IGF have a history of success

If we use NZTE's reported annual data to look at year-on-year growth, approximately 70 per cent of firms were experiencing positive export growth before joining the programme.

Previous research (Hull and Arnold, 2008) found that the volatility of New Zealand firm sales turnover makes it practically impossible to distinguish growth from volatility unless high definitions of growth were used or long timeframes of analysis undertaken, such as 10 years. For short periods, such as less than five years, the volatility in sales turnover made it very difficult to see patterns in the data, other than strong decline, stability or strong growth. Moreover, while the five-year timeframes indicated patterns, the majority of firms did not sustain the patterns beyond five years. Eighteen per cent of the 192 IGF firms with five years of total revenue data had achieved what the paper called 'moderate growth' or better. This was just over twice the rate for the general population found by Hull and Arnold.

This data does indicate that NZTE is ensuring that most firms entering the programme have a record of recent sales growth.

Funding: Most firms receiving IGF grants have a record of recent sales growth.

This selection bias will need to be carefully accounted for in any future statistical analysis.

9. Recommendations and operational suggestions

9.1 Collected findings

Chapter 4: Identifying the need for the programme

- New Zealand firms continue to face barriers to generating overseas income.
  The IGF is well placed to assist them with some of these challenges.

Chapter 5: Programme outputs

- While there are some differences in survey responses between big and small firms, there is no clear evidence for differences in programme additionality or effectiveness.
- NZTE is implementing the IGF in line with policy and operational objectives prescribed for it.

Chapter 6: Programme efficiency and effectiveness

- Costs of funding the programme as a percentage of disbursement have fallen as the programme matures. Costs are currently just over 5 per cent of the amount of approved funding per year. As a percentage of amount claimed by firms, costs have fallen from 14 per cent in 2011/12 to 7 per cent in 2013/14. In either case, this is higher than average costs for R&D grants of approximately 4.8 per cent.
- Businesses are investing at a higher rate than the 50:50 requirement.
- Most (95 per cent) of survey respondents thought compliance costs were justified. Of the few who did not, some identified the application process as the challenge. Streamlining of the claims process in January 2014 should alleviate compliance costs in claiming grant funds.
- DEI estimates provide a useful, but self-reported, measure of grant additionality. Potential DEI measures should not be used as a driver for the whole programme.
  In some cases, a positive DEI over the project life may mask relatively poor sustainability of international revenue.
  There is evidence that objectives other than DEI are being considered.
- The IGF is currently underspent due to firms not claiming their full grant. MBIE and NZTE are currently investigating more flexible deployment of the IGF to address this issue.
- There is currently a high level of IGF project success. This reflects NZTE selection processes – both the profile of firms in the Focus 500 and the selection of projects with a high chance of success. Whilst current projects have a spread of risk, as shown by their rDEI, NZTE's operational approach might be considered too risk averse.
  Relaxing project selection criteria and engaging companies earlier or with riskier execution profiles may increase the number of projects funded but with higher rates of project failure. Riskier projects may result in some higher returns.

Chapter 7: Programme outcomes

- There is evidence of the IGF having of a positive impact at a business level.
- Businesses believe that the grants encourage them to assume more risk in international markets.
- Some businesses provided feedback that the robust IGF processes strengthened their strategy and improved their internationalisation processes.
  Receiving an IGF also gives some businesses more confidence to expand or take on other international projects.
  In both cases, these businesses were more likely to be larger businesses.
- IGF participation improved in-market networks for some firms. This had a significant impact on project success.
- There is anecdotal evidence of spillover benefits for the wider economy.

Chapter 8: Programme additionality and attribution

- Businesses receiving IGF grants have received, on average, two other NZTE services in the last three years.
  Duplication of NZTE services is not occurring due to relationship management by NZTE customer managers.
  IGF businesses also receive other government services, most frequently those from MFAT and Callaghan Innovation.
- There is anecdotal evidence of grant additionality – 75 per cent of businesses said their projects were a stretch for the business, and 50 per cent said their IGF projects were different from other international projects.
  More robust evidence would require statistical analysis of business performance data and careful matching with a counterfactual.
- There is evidence for some expected deadweight in the programme.
- Most firms whose projects were sufficiently advanced identified a material impact on both their international revenues and other business activities attributable to the IGF grant.
- Most firms receiving IGF grants have a record of recent sales growth.
  This selection bias will need to be carefully accounted for in any future statistical analysis.

9.2 Recommendations

1. **This evaluation recommends that the programme continue**. There is evidence that funded projects, when coupled with NZTE's other support mechanisms, are leading to direct economic benefits, improved exporting capabilities and the formation of in-market networks. There is some anecdotal evidence of spillovers occurring, particularly through other business people benefiting from enhanced staff capabilities in IGF recipients and networking. These benefits flow to other New Zealand businesses who are suppliers and customers of the firms involved in the IGF.

2. Performance measures for the IGF should be reviewed. Currently, formal performance measures include:
    i. a target for the number of businesses receiving the IGF
    ii. pDEI ratio for approved IGF projects
    iii. percentage of businesses that give their experience in the IGF a positive rating.

While these measures have been useful to date, now that significant numbers of projects are being completed, it is recommended that the second measure be changed to reflect realised DEI rather than potential DEI. While there are still estimates involved, what has actually been achieved is more important than an estimate of what might be achieved. Realised DEI should at least be included as an additional measure.

Firm growth is another important measure. NZTE is collecting firm performance information and could use this to track a business's international revenue growth before, through and after the IGF process. This would be useful in determining programme effectiveness. Data on firm growth could help inform both programme operation and policy.

3. The wording in the IGF output description 'is limited to supporting high growth firms' should either be changed to reflect operational practice or specific criteria introduced to select for high growth. This would need both consultation between MBIE and NZTE and careful consideration of which businesses should be targeted by the programme. It has not been possible to determine the number of high-growth firms receiving IGF as part of this evaluation, but high growth is rare in the business population. High growth is also unsustainable, volatile and unpredictable. While approximately 70 per cent of participant businesses have recently experienced positive growth prior to receiving the IGF, the OECD defines high growth as 'all enterprises with 10 or more employees at the beginning of a three-year period that record average annualised growth (in employment or turnover) greater than 20 per cent per annum over the three-year period'. Tailoring the high-growth definition for New Zealand was recently suggested in *Defining Success: high-growth firms in New Zealand* (MBIE, 2013).

4. **MBIE need to consult with relevant stakeholders to determine how best to target the IGF.** Current policy, the Business Growth Agenda and 2014 Vote Economic Development and Employment indicate that the programme should be targeting high-growth firms. Growth is not a readily available measure, and the proportion of IGF recipients who are high growth has not been determined by this study. Previous research (MBIE, 2013) has shown that, in New Zealand, as elsewhere, high growth is rare in the business population. It is also unsustainable, volatile and unpredictable.
   The IGF is targeting a wide range of businesses, capturing big and small (for New Zealand) across a wide range of sectors, with a wide range of offshore markets in view. This will maximise its likelihood of capturing or encouraging high growth. The larger a business is, the more difficult it is to achieve high growth.

   In view of the rDEI measures to date and survey responses, it can be concluded that the projects funded to date have had a relatively high 'success' rate. There is possibly room for more high-risk, potentially high-return projects in the IGF portfolio. (More high-risk projects would also involve higher failure rates.) There should continue to be support for projects not directly targeting DEI but targeting capability, spillovers or improved internationalising strategy.

   Possibly the words used to describe the Focus 500 businesses are appropriate – 'the scale, commitment and drive to succeed internationally'. Unfortunately, these are not easily measurable attributes and rely on NZTE customer managers' knowledge of individual businesses.

9.3 Further work

Limited resources precluded this evaluation from undertaking robust statistical analysis of firm performance. The following recommendations should be considered:

1. Due to the challenges of attribution, businesses receive a suite of NZTE services. A robust statistical analysis should be undertaken addressing the question: ‘Does NZTE assistance impact a business’s exporting performance?’ This would need to carefully consider the counterfactual group of companies.
2. In two or three years, the impact of IGF on individual firm performance could be addressed. Again, a significant component of the work would involve considering the counterfactual. Sustainability of exporting needs to be considered over a number of years, hence the proposed delay in undertaking this work.

Appendix 1: IGF Intervention Logic Model

The following is the intervention logic model for the enhanced growth services fund and indicative outcomes measures, as outlined in the 2009 Cabinet Paper, EGI (09)39).

Policy Rationale	Outputs	Intermediate outcomes	Final outcomes
• In terms of what's required for achieving New Zealand's economic growth goals, there are currently not enough New Zealand firms assuming the risks and acquiring the capabilities and resources needed to expand or continue to expand into new markets. The main constraints relate to resources and management capability. • Firms are also facing increasing barriers to exporting as a result of the global economic crisis with the result that they may defer or cancel investment in key capabilities and market development activities required for future successful growth. • There can be important spillover benefits (particularly from	• Rigorous assessment of firms' capability, needs, and potential additionality and net economic benefits, in order to identify firms that are eligible for and can benefit from co-funding alongside other NZTE services. • Development of a Client Engagement Plan outlining a firm's growth strategy, milestones, performance measures, and expected additionality and net economic benefits. • Regular monitoring of the progress of participating firms against agreed milestones. This includes exiting of firms which fail to meet expectations to ensure ongoing best use of available resources.	Develop firms' capability and resources required for global engagement, and encourage firms to assume the risks of developing new markets. Targeted outcomes: • Firms improve their market knowledge and/or market development capabilities as measured by: - Formal market research - Increased global connections and networks • Firms improve their business and management capability to plan for and pursue internationalisation, as measured by improvements in: - Business planning - Governance structures	• Increase the number and size of New Zealand firms embedded in the global economy, as measured by: - Number of firms in domestic and global markets - Size of globally engaged firms (employees and revenue) - growth in revenue from new market activity and other revenue flows accruing to New Zealand • Shift production of participating firms and other firms in their supply chains into higher value goods and services that can compete in global markets, as measured by: - Profitability (EBITDA), value added and productivity - Breakdown of domestic and international revenue as % of

investment in Key Accounts firms) from the success of New Zealand firms in new markets, demonstrating to other firms what is possible, and enhancing the performance of New Zealand firms in their supply chains.	• Co-funding eligible projects undertaken by eligible firms.	- Financial management • Firms improve their capability to innovate and manage the commercialisation process as measured by: - R & D expenditure - Number of new/significantly improved products/services, % of revenue from these products and services - New/significantly improved operational, organisational, or marketing processes • Firms improve the likelihood of accessing finance for internationalisation as measured by changes in debt and equity structures	total revenue • Capture the best return to NZ by encouraging firms to adopt business models which offer good prospects for long-term development of new markets. Measured by: - Number of new markets - Number of firms engaged in overseas direct investment

Appendix 2: Profile of IGF firms with comparisons

Access to the data used in this Appendix was provided by Statistics New Zealand under conditions designed to give effect to the security and confidentiality provisions of the Statistics Act 1975. The results in this paper are the work of the authors, not Statistics New Zealand.

Profile of IGF recipients – compared with all Focus 500 firms and all firms

This note summarises an analysis comparing the characteristics of IGF recipients in the year ended March 2012 with the characteristics of all Focus 500 firms, all New Zealand firms with employees and all New Zealand firms with positive commodity exports. It provides background information for use in the evaluation of the IGF.

Description of the data

The data were obtained by linking NZTE records to data held in Statistics New Zealand's Integrated Data Infrastructure (IDI).

Firm characteristics have been profiled using data for the year ended March 2012. This is the latest available financial year for many IDI datasets, such as Customs data on exports and imports.

In the dataset supplied by NZTE, 216 unique firms received IGF grants in the period from the inception of the fund (July 2009) to January 2014. All were matched to an SNZ enterprise number.

All but one of these 216 firms were already operating in the March 2012 year. About 60 per cent were members of the Focus 500 population before 31 March 2012, and the other 40 per cent became Focus 500 firms after that date.

A small number of the 216 firms had no employees and/or zero sales in the 2012 year. A few of these firms may have really had no employees in 2012, although it is more likely that a zero employment/sales result is due to data-matching problems. Some businesses appear to have multiple company names and multiple enterprise numbers in the IDI, which means it is difficult to select a single enterprise number, and a link to any one enterprise number will not necessarily capture all of the firm's economic activity. Their employment returns may be linked to one enterprise number in the IDI and their exporting records to another.

Two snapshots of the Focus 500 client population were taken: June 2012 and January 2014. June 2012 is the earliest date when the Focus 500 firms can be identified due to a change in NZTE's administrative systems, and it is closest to the year ended March 2012. The total number of Focus 500 firms was low at that time (around 420) as a result of a review process within NZTE. We also show the profile of firms that made up the Focus 500 group in January 2014 simply to identify how the composition of that population has changed since 2012.

The majority of Focus 500 firms could be matched to an SNZ enterprise number (there were three exceptions).

Results

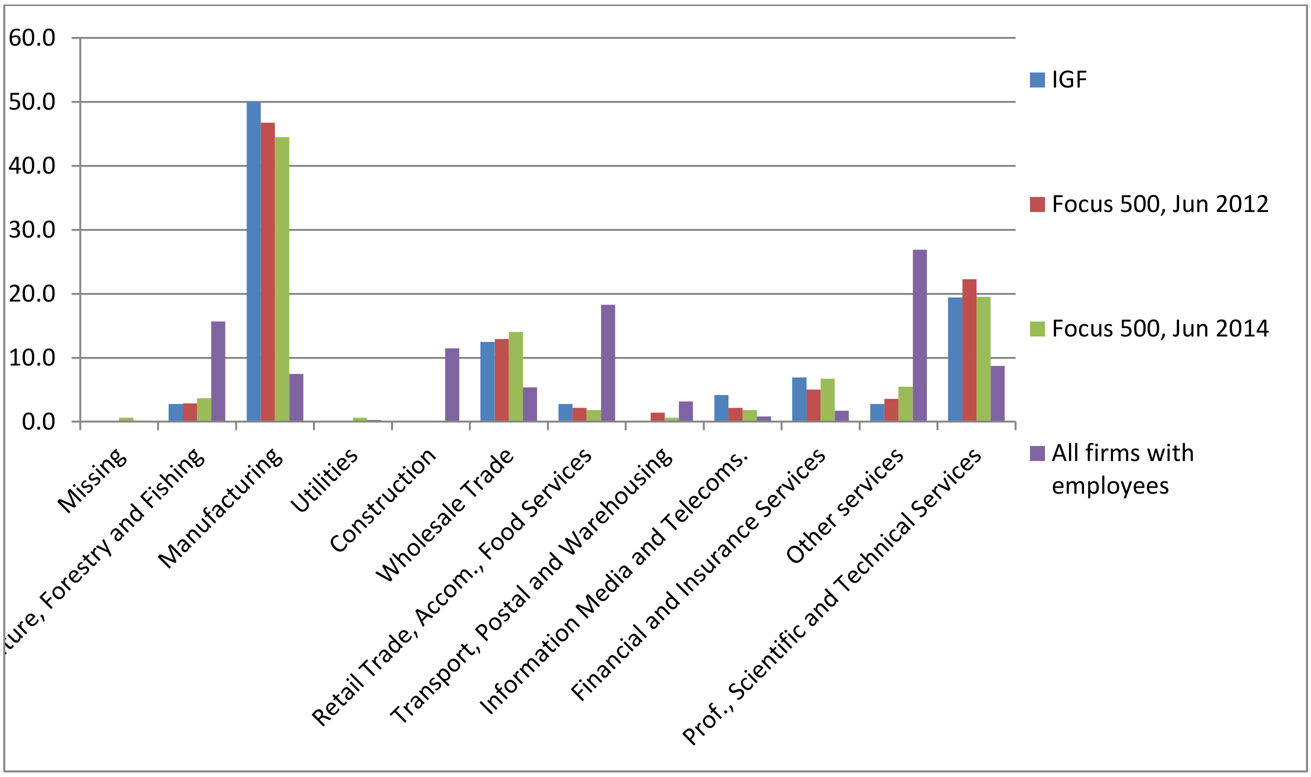
Profile of all IGF firms

The data compared IGF recipients in the interval July 2009–January 2014, firms that were Focus 500 members in June 2012, firms that were Focus 500 members in January 2014 and the population of New Zealand firms with employees in the 2012 financial year.

The data are for the year ended 31 March 2012 or, for some variables, the period from the start of available records until 31 March 2012.

Industry

Figure 13: Industry distribution for IGF firms, firms in Focus 500 in June 2012 and January 2014 and all 2012 firms with employees – in all four cases, data are for the March 2012 year



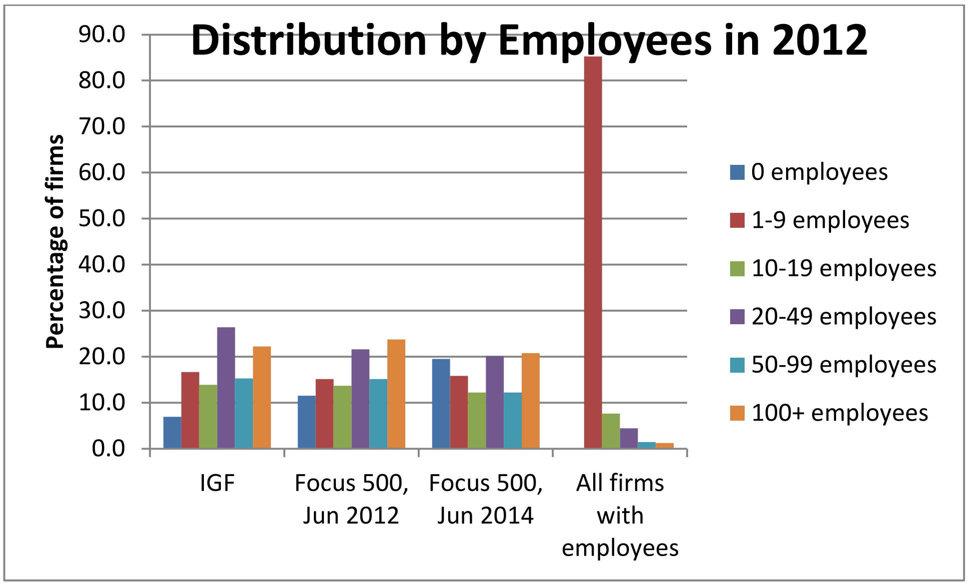
The industry classification indicated that 50 per cent of the IGF firms were in manufacturing. Firms in the wholesale trade industry and the professional, technical and scientific services industry are also large subgroups of the IGF population (about 13 per cent and 19 per cent respectively). The remaining 18 per cent were spread across a large number of different service industries.

Size

IGF firms were well spread across employment size groups, with 37 per cent being small (fewer than 20 employees), 40 per cent medium sized (20–99 employees) and 20 per cent large (100+ employees).

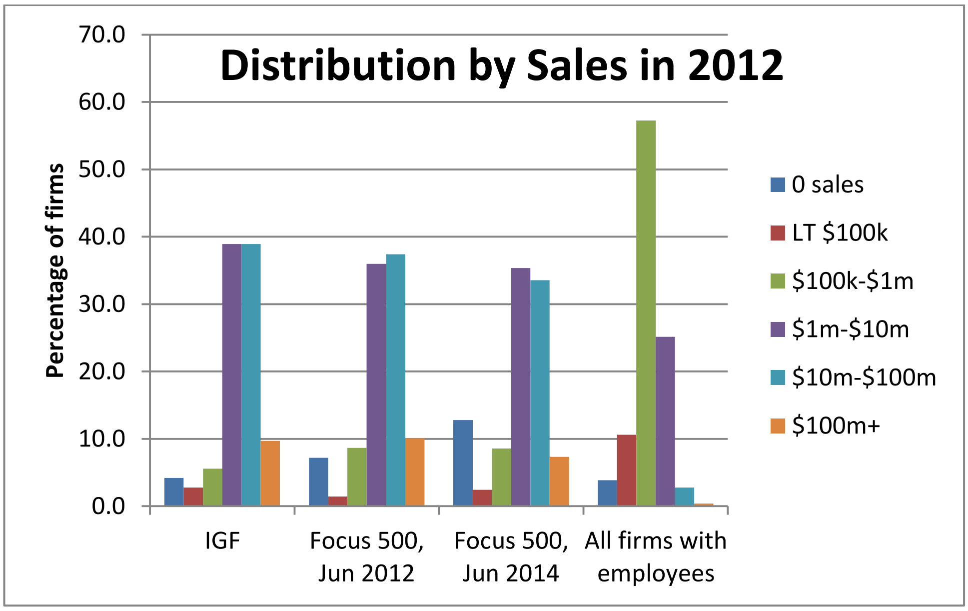
About 6 per cent had no employees in the March 2012 year. As indicated above, these will be a mixture of firms operating without employees in 2012 and firms that were linked to an enterprise number that does not correspond to the IRD number they used to pay their employees.

Figure 14: Employee distribution for IGF firms, firms in Focus 500 in June 2012 and January 2014 and all 2012 firms with employees – in all four cases, data are for the March 2012 year



The sales data suggest a predominance of medium-sized and large firms in the IGF population, with about 80 per cent of firms having sales of between $1 million a year and $100 million a year, and 10 per cent having sales of $100 million per year or more.

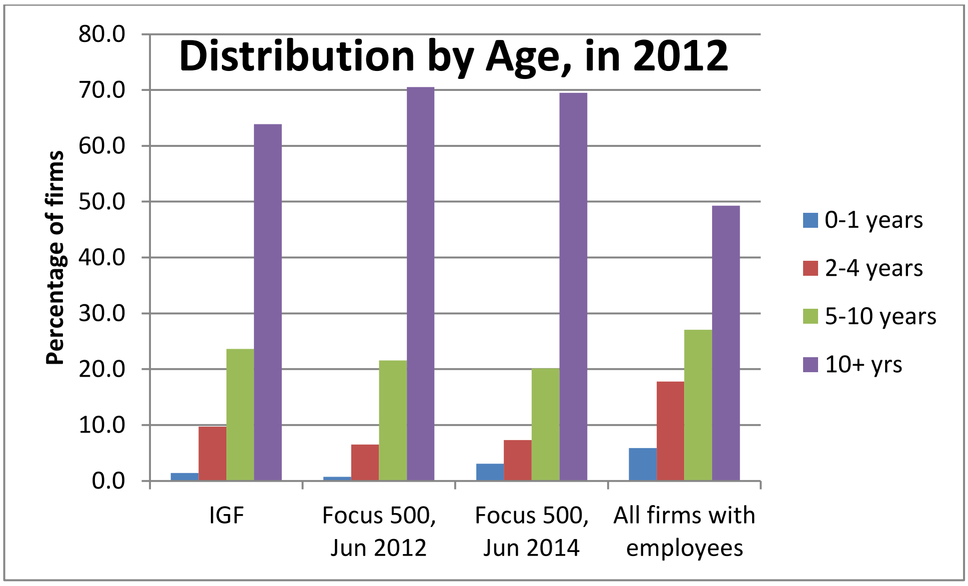
Figure 15: Sales distribution for IGF firms, firms in Focus 500 in June 2012 and January 2014 and all 2012 firms with employees – in all four cases, data are for the March 2012 year



Age

IGF firms were generally well established in 2012. Only 7 per cent were less than 5 years old, and more than two-thirds were more than 10 years old.

Figure 16: Age distribution for IGF firms, firms in Focus 500 in June 2012 and January 2014 and all 2012 firms with employees – in all four cases, data are for the March 2012 year



Ownership

- 17 per cent of IGF firms were partly or wholly foreign owned.
- 19 per cent of Focus 500 firms at July 2012 were partly or wholly foreign owned.
- 16 per cent of Focus 500 firms at January 2014 were partly or wholly foreign owned.

Exporting history

Drawing on the Customs-sourced export data, we find that at least two-thirds of the IGF firms were active commodity exporters in the period from 1990 to 2009, before the creation of the IGF. In total, 75 per cent had commodity exports in at least one year from 1990 to 2012, and 71 per cent exported goods over 2010 to 12. If an IGF firm had exported at least once in the years 1990–2012, they had, on average, exported for 12.1 years over that interval.

These figures probably underestimate the true level of exporting among IGF recipients. They do not cover service exports, and firms that belong to enterprise groups sometimes export through affiliated firms. Firms can also export through intermediaries.

Government assistance

58 per cent of the IGF firms previously received assistance through either an Enterprise Development Grant or a Growth Services Fund grant, the two largest NZTE programmes that preceded the IGF.

53 per cent received an R&D grant from the government at some time between 1994 and 2012.

Comparison with all Focus 500 firms

The profile of all IGF recipients in 2012 is quite similar to that of all Focus 500 firms as at June 2012. They were similar in their industry distribution, size, age distribution, likelihood of being foreign owned and exporting history. The IGF recipients were slightly more likely to be manufacturing firms.

Comparison with all (employing) firms in the economy

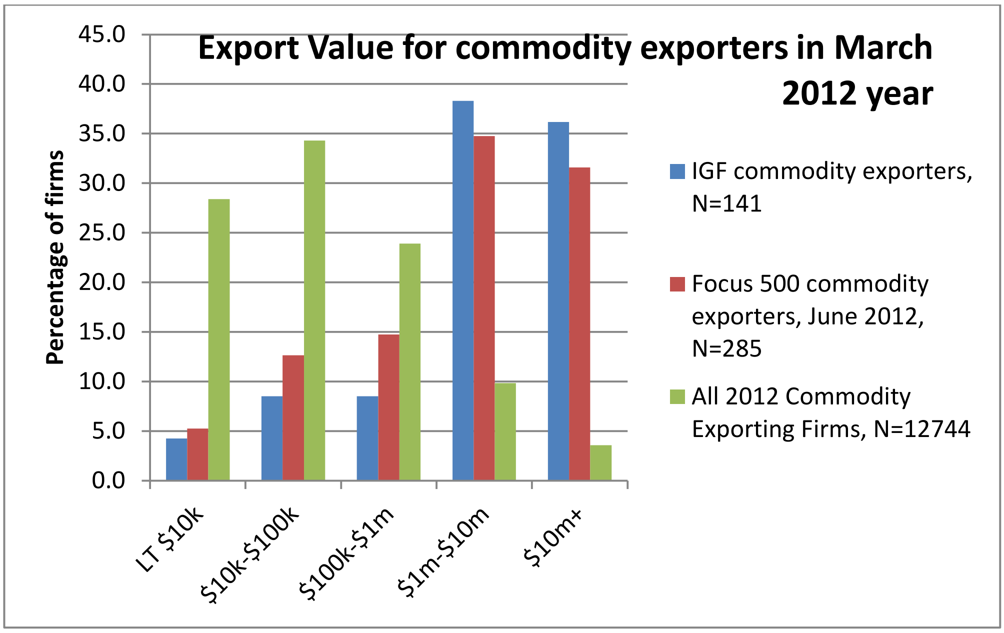
As IGF firms tend to be well established, medium-sized or large operations with prior exporting histories, their profile is very different from that of the firm population as a whole. The latter is dominated by small, domestically owned firms operating solely in the domestic market and includes a much higher proportion of young firms.

Profile of IGF goods exporters

Characteristics of the subgroup of IGF firms that exported goods in the 2012 year, representing 65 per cent of the total, were compared with all Focus 500 goods exporters and with all exporting firms in the same year.

More than a third of the IGF recipients had exports sales exceeding $10 million in 2012, and another third were exporting in the $1 million to $10 million range. For the majority of firms, these export sales were achieved prior to the start of the IGF project.

Figure 17: Export value for commodity exporters in March 2012 year – IGF and Focus 500 commodity exporters had, on average, considerably higher sales than the whole commodity-exporting population



The profile of the IGF recipients is very similar to that of other exporters in the Focus 500 client population that they were drawn from.

NZTE-assisted goods exporters were quite different from the total goods-exporting firm population. They were significantly larger, more likely to be located in the manufacturing industry and responsible for much higher export sales per firm in 2012.

Appendix 3: Survey questions

Introduction

Thank you for agreeing to undertake this survey. If your International Growth Fund (IGF) project consisted of two or more stages with the same objective or milestone, (e.g., entering a new market or marketing a new product) cover all phases in your answers.

No questions are compulsory. This survey should take approximately 10 - 20 minutes to complete.

Impact of IGF Project

1. Have the project activities co-funded by your IGF grant had a material impact on your

international revenues? (Yes/No/Too early to tell/Don't know)

(Comment Box: If no impact can you explain why and if yes estimate the impact?)

2. Have the activities co-funded by your IGF grant had a material impact on other business activities? For example: employment, overall company strategy, competitive advantage in market. (Yes/No/Too early to tell/Don't know)

(Comment Box: Describe most significant examples?)

3. Did your IGF-funded activities achieve your desired outcomes? (For projects in progress: Is your progress as expected and likely to meet your desired outcomes?)

(Yes/ Mostly/ Partially/ Limited/ No) (Comment Box)

2. Impact of IGF Project

IGF project stretch

4. How much has your business invested in your IGF project relative to the NZTE contribution? For example ratio of my investment to NZTE investment of 2:1, or $600,000 to NZTE's $300,000. Please exclude capital expenditure needed to allow project to go ahead (e.g. to increase production capacity).

5. What capital expenditure was required to enable the IGF project to go ahead? ($0–$200,000/ $200,000–$500,000/ $500,000–$1m/ $1m–$5m/ >$5m)

(Comment Box: How was this capital funding obtained?)

6. Did you consider other sources of funding for this project before applying for an IGF grant? (Yes/ No) (Comment Box: What were those other sources and why did you decide against using them?)

7. Would your project have gone ahead without IGF funding? (Yes/No/Partially) (Comments)

8. Would you describe your IGF project as being a stretch for your business? (Yes/ No)

9. Does your IGF project differ significantly from your other international projects? (Yes/ No/ No other international projects) (Comment Box: If yes, how does it differ?)

10. Rate the returns you expect/expected from your IGF project against your other

international projects (if any). Were your IGF project returns: (Significantly higher/ Higher/ Similar/ Less than others/ No other international projects)

11. Have you raised non-Government funding (for example from investors, banks) for other international projects since completing your IGF project? (Yes/ No have not raised funding/ Have not completed IGF project/ Not applicable) (Comment Box: If yes, what are the sources?)

Other Government Services

12. Which of the following New Zealand government services have you engaged with in the execution of your IGF project? (Mark all that apply)

Export Credit Office

Ministry of Foreign Affairs and Trade ambassador or other MFAT services

Callaghan Innovation (or predecessor organisations MSI/FRST)

Ministry of Primary Industries

Intellectual Property Office New Zealand

Other (please specify)

Wider NZ Economy

The next two questions were used in Statistic's New Zealand's 2011 Business Operations Survey. We are interested in how firms receiving IGF grants approach international markets and how they compare with businesses in the general population.

13. In the last 3 financial years, which of the following strategies has your business

used to generate overseas income? (Mark all that apply) (Two columns collected responses 1) In General and 2) In IGF project)

Offering innovative or unique goods and/or services

Customising goods or services to specific customer requirements

Customising advertising and promotion according to market

Adopting a strategy of low prices

Exporting or selling overseas only when external conditions are favourable (eg low exchange rate)

Exporting or selling overseas only when specific opportunities arise (include unexpected and unsolicited orders)

Systems in place to manage exchange rate risks

Entering one market to access another market (eg setting up in Greece to access the rest of European Union)

Using pre-existing contacts or networks in overseas markets

Employing people with specific market knowledge or connections

None of above

14. In the last 3 financial years, which of the following made it difficult for your business to generate overseas income? (Mark all that apply)

Limited experience in expanding beyond New Zealand

Limited knowledge about specific markets

Limited access to finance for expansion beyond New Zealand

Limited access to distribution networks

Exchange rate volatility

Exchange rate level

Distance from markets language and cultural differences

Low market demand or increased competition in overseas markets

Overseas government regulation or tariffs (eg product standards, import duties)

Inability to rapidly increase supply

Other (please specify)

IGF Process

15. Have you seen real evidence of wider benefits for other businesses and the economy from your IGF related activities? (Mark all that apply)

Other NZ businesses are more easily able to enter a new market because your business demonstrated the feasibility of doing so.

Your suppliers have had to improve the quality and timeliness of their goods and services.

Enhanced reputational benefits for other businesses, your industry and New Zealand in general.

Your staff have enhanced their capabilities and this has benefited their colleagues

Your staff have enhanced their capabilities and this has benefited staff of businesses in your supply chain

Your staff have enhanced their capabilities and this has benefited other businesses through, for example, staff moving to those businesses.

You share your experiences with other NZ businesses through business or industry networks and forums

You share your experiences with your NZ customers through business or industry networks and forums

Other

(Comment Box: Can you provide an illustrative example?)

16. What do you see as the most useful aspect/s of the IGF? (Free Text)

IGF Process

17. Are the IGF transaction and compliance costs (e.g. time and effort) justified, given

the size of the grant? (Yes/ No) (Comment Box:)

18. Do you have any other comments about NZTE IGF grant processes and

management? (Free Text)

6. IGF Process

Final Comments

19. Have you any other comments to make about IGF? (Free Text)

20. We would like to obtain more detailed information from some firms and to develop case studies illustrating aspects of the IGF. Would you be prepared to provide further information for this evaluation? (No/ Yes (please provide your name and contact email or phone))

7. Final Comments

Appendix 4: Interview topics

Topics for business interviews

1. Introduction, the business, and their IGF project
2. Capital raising
3. International activities
4. NZTE and other government relationships

Topics for customer manager interviews

1) Background
2) Discovery and interaction with firms
3) NZTE programme synergy
4) Firm capital raising
5) Grant additionality
6) Economy-wide impacts
7) Do you have any other comments in relationship to the IGF Fund? Any closing remarks?

Appendix 5: Previous evaluations in this area

Several evaluations of NZTE programmes supporting internationalisation have been undertaken including the Beachheads Programme (2012) and the IGF precursor programmes: Growth Services Range (2005 and 2009) and Enterprise Development Grants (2009).

NZTE's Growth Services Range (GSR) including client management, the Growth Services Fund and Market Development Services were evaluated in 2005. The evaluation concluded that the GSR was achieving its intermediate outcomes of improving the capabilities of New Zealand businesses in areas identified as critical to increasing firm growth and performance. Due to data limitations and the short time period that the majority of recipients had been receiving assistance from NZTE, the evaluation was not able to establish the impact of the programme on the ultimate objectives (accelerated development of firms with high growth potential – as measured by increased revenue, profits and exports) nor the level of additionality (impact over and above what high-growth participating firms would otherwise achieve).

A robust statistical analysis of the GSR was undertaken in Statistics New Zealand's prototype Longitudinal Business Database[15] (2009). This provided robust quantitative support of the 2005 evaluation findings. It concluded that GSR recipients differed from the average New Zealand firm. GSR assistance had a significant positive impact on the sales of firms receiving the assistance and ranged from 134–203 per cent. The impact on value added and productivity was less conclusive. This statistical analysis corroborated the findings of the 2005 evaluation, where firm perceptions were positive about improvements on their business activities and capabilities.

The evaluation of the Enterprise Development Grants – Market Development (EDG-MD) had some demographic analysis of participant businesses but only qualitative evidence of change in firms' exporting behaviour and performance. The evaluation concluded that spillover benefits from EDG-MD activities were limited. It suggested that 'in addition to supporting market development activities of existing and emerging exporters, policies to support export growth should also focus on key constraints ('market failures') in the development of firm capabilities that were linked to improved productivity. The issues of management capability and firm access to capital may be particularly important in this context.'

The Beachheads programme provided selected New Zealand firms with export mentoring services by in-market experts. The evaluation concluded that the programme was effective. 'The key benefit from the programme was access to the advice and networking assistance of in-market, private-sector executives. This was something that was usually otherwise only available to New Zealand firms at an extremely high cost. The effectiveness of the programme was dependent on its flexibility to cater to differing business needs, the quality of communication, the relevance of private-sector advisors and ensuring that firms' expectations were achievable.'

Over 50 per cent of IGF businesses also receive Beachheads services (see Table 13). It is impossible to unpick different NZTE services. The networking discussed in section 7.5 could be bespoke IGF services,

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[15] Evaluation of the Growth Services Range: Statistical analysis using firm-based performance data, March 2009. Evaluation Team, Ministry of Economic Development.

Beachheads services or NZTE offshore office services. While it is clearly an NZTE service, attribution or partial attribution to the IGF programme is not possible.

Previous evaluations provide context for this work.

Appendix 5: Glossary

Additionality: The net, rather than the gross, impact of an intervention after making allowances for what would have happened in the absence of the intervention.

Attribution: The extent to which an impact or outcome can be directly assigned to the activities undertaken by an agency or agencies.

Counterfactual: The situation or condition that hypothetically may prevail for individuals, organisations or groups were there no intervention.

Econometrics: The application of mathematical and statistical techniques to economics in the study of problems, the analysis of data and the development and testing of theories and models.

Innovation: New/improved products, processes, marketing methods or organisational methods.

Opportunity cost: The value of the best alternative forgone.

Output additionality: An increase in firms' R&D outputs (patents, new products and services, productivity) due to government intervention.

Productivity: A ratio of a volume measure of output to a volume measure of input.

Public good: A good that is non-rival and non-excludable. Non-rivalry means that consumption of the good by one individual does not reduce availability for consumption by others; non-excludability means that no-one can be effectively excluded from using the good.

R&D: Research and development. Creative work undertaken on a systematic basis in order to increase the stock of knowledge. Any activity classified as R&D is characterised by originality. Investigation is a primary objective.

Selection bias: A statistical bias in which there is an error in choosing the individuals or groups to take part in a study.

Social return: The benefits and costs of an activity to society as a whole, including private and spillover benefits and costs.

Spillover (or externality): A cost or benefit, not transmitted through prices, incurred by a party who did not agree to the action causing the cost or benefit.