BIS Department for Business Innovation & Skills

TRADE PROMOTION

Trade and Investment Analytical Papers
Topic 8 of 18

DFID Department for International Development

Contents

Summary

Exporting generates a number of benefits for the economy, both directly to exporters and indirectly to non-exporting firms. Exporting has been found to have a positive effect on productivity, even when controlling for the tendency of more productive firms to start exporting. The evidence also shows that exporting is associated with firms having, increased investment in research and development and greater innovation. Firms which export are also more resilient and have better financial performance than non-exporting firms.

However, firms face a number of barriers to entering export markets including dealing with legal or tax regulation or standards, identifying contacts in the market, and obtaining basic information. Government is in a unique position to help firms overcome contacts barrier to market entry through its ability to bridge access to a wide range of networks in both the public and private sectors.

In addition, market failures associated with asymmetric information and externalities can result in lower levels of export participation by firms than would otherwise be the case.

Evaluation evidence indicates that it is cost effective for government to address these issued by providing assistance to firms seeking to internationalise and / or enter new overseas markets.

1 Introduction

The rationale for government support for trade promotion can be assessed by examining the evidence with regard to:

- The benefits of engagement in international trade both to exporters and the wider economy
- The barriers faced by firms seeking to enter overseas markets
- The cost effectiveness of government intervention to address these issues

This helps determine whether there are barriers to trade and whether government intervention in helping firms to overcome these barriers is cost effective.

Nevertheless, these three constituent elements do not alone justify government intervention, as the existence of benefits and barriers to trade could indicate the potential for private sector activity in trade promotion. Market failures associated with trade promotion activity should be taken into account.

2. Market Failure

The primary rationale for government intervention in a market is to resolve market failures, or issues of equity and fairness. Market failures occur when for some reason the market either cannot or will not provide a particular good or service to the level desired by society as a whole.

The presence of market failures does not necessarily mean that only government can provide the services, but rather that some form of government intervention is potentially needed in order to deliver the right outcome. In the UK, Government provides in-country services in conjunction with other service providers. In overseas markets this is somewhat more difficult, as there is a need for a trusted intermediary which bridges public and private sector networks. As outlined below, government is uniquely positioned to provide this service.

2.1 Asymmetric Information

Entering a new market is an inherently more risky and uncertain process for a firm than operating in a market in which it is already established. Accurately gauging how profitable such a move will be, or the extent of any other benefits the firm might derive from doing so is difficult.

As a result of this uncertainty firms may under-estimate the benefits from exporting, and / or over-estimate the barriers they face to doing so. Firms may also underestimate the benefits from investing in assistance when entering into new markets or developing their export capability. This can lead to lower levels of firms engaging in international trade.

Qualitative research suggests that prior to investigating overseas markets some firms underestimate the potential demand for their product or services in overseas markets. For example "*In the case of MANF, it is only when it went out into the international market and interacted with firms in the same industry that it accidently discovered that it had a superior product with worldwide potential*" (Chetty and Campbell-Hunt, 2003 p13) Surveys of UKTI clients suggest that firms tend also to underestimate how exporting can benefit their innovation activity: eg in an initial survey, 35% of a randomly selected sub-sample of respondents indicated that they had increased innovation as a result of the support which they had received. When these firms were re-surveyed 10 months later, this had risen to 48% (OMB 2010c)

Social networks are a key vehicle through which firms gain information about new business opportunities and find buyers, agents and other business partners. However firms' social networks do not always extend to overseas markets into which they seek to expand. This creates a role for a trusted intermediary through whom they can enter new social networks in the overseas market.

Government is in a unique position to address this need through its ability to bridge access to a wide range of networks in both the public and private sectors. Diplomatic activities can facilitate public sector networks in overseas markets, which private sector providers may struggle to provide. This is particularly true in sensitive sectors such as defence. Government will tend to engender more trust than private sector when brokering networks as officials do not have commercial incentives to bridge networks between unsuited parties (i.e. to introduce someone inappropriate into a network). Finally, introduction to networks by government officials may also boost firm reputation or kudos, which could help firms succeed in an overseas market.

2.2 Externalities

Exporting firms may generate spillover effects on other domestic firms. These mostly occur through the movement between domestic firms of staff with knowledge and experience of selling to overseas markets. This knowledge and experience may aid other firms to enter overseas markets. Qualitative survey evidence suggests that firms tend to seek advice from firms in their social networks. Firms which have entered overseas markets may therefore help other firms in their network to enter overseas markets by providing them with relevant information or advice (OMB, 2006).

2.3 Summary

The identified market failures suggest that in the absence of government intervention fewer firms would export since they would be less likely to invest in becoming export-ready, as a result of underestimating the benefits of exporting. They would also have difficulty entering overseas markets as they may not have access to the appropriate social networks. Survey evidence suggests that accessing social networks may be more difficult for UK firms entering high growth than developed markets, (OMB 2010a)

Benefits of Exporting

Exporting benefits both the firm doing so and the wider economy. Firms which export tend to be more productive, more likely to engage in research and development, and more likely to be innovative relative to firms which do not export. Exporting has been found to have a positive effect on productivity, even when controlling for the tendency of more productive firms to start exporting (Harris and Li, 2007).

The econometric evidence suggests this occurs because exporters learn from buyers of their goods or services, while surveys indicate that exporting can enable firms to make greater use of their existing capacity and achieve a level of growth otherwise not possible (OMB, 2010a).

The positive effect of exporting on firm level productivity leads to an increase in economy-wide productivity (exporting firms have been found to contribute to 60% of UK productivity growth). This occurs largely through a 'batting average' effect: exporting firms have higher productivity and faster productivity growth, and are more resilient, while poorer performing firms are more likely to close or reduce in size. Resources from these declining firms are reallocated to higher performers such as exporters, leading to an increase in overall productivity (Harris and Li, 2007).

Firms which engage in research and development and those which are innovative are more likely to engage in international trade. Entering international markets has a positive association with innovation and engagement in research and development (Harris and Li, 2010). This suggests that there may be virtuous cycle between internationalisation and engagement in research and development and innovation. Insights into the mechanisms behind this are found in a recent survey of internationalising firms which found that selling overseas:

1. Helps to generate higher returns on investment in new product or service development;
2. Prompts firms to invest more resources in product or service development and;
3. Increases the amount of money available for new product or service development (OMB, 2010a).

Qualitative surveys suggest that when firms internationalise they can be prompted to innovate or develop their products by becoming more aware of those produced by their competitors in these markets. This can lead them to try to differentiate their offer or to use the best elements of their competitors' products (OMB,2007). Firms may also develop their products in order to meet regulations or standards in an overseas market or to meet customer expectations or requirements in an overseas market (OMB, 2010a).

The positive association between trade and research and development spending is further evidenced by a recent evaluation which found that UKTI trade support generates additional R&D of around £65k per firm. Econometric analysis indicated that innovative and growing firms were most likely to show positive R&D impact. There was clear evidence of UKTI service complementarity, with the impact on R&D stronger with multiple service use (Aston University, 2010)

Surveys of firms which sell into overseas markets suggest that firms which are innovative or which hold intellectual property are more likely to report that they have benefitted from exporting than firms which do not innovate or hold intellectual property (OMB, 2010a). International trade also tends to improve the financial performance of firms so that exporting firms are less likely to close than firms which do not export (Greenaway et al, 2007).

Barriers to Exporting

When selling into overseas markets, firms can face a variety of barriers. Overcoming these barriers requires an investment of time and resources by the firm and thus imposes as real cost on exporting, a fact which has been confirmed by various econometric studies, (Melitz, 2003) Survey evidence on the barriers faced by exporters generally classifies them as being:

a) External to a firm eg legal barriers or;
b) Internal i.e. related to the resources and capabilities of the firm.

A recent survey carried out on behalf of UK Trade and Investment (UKTI) found that around two-fifths of firms face legal and regulatory barriers, while just over a quarter have faced customs or contacts barriers (OMB, 2010a) (Table 1). A survey of European small and medium sized enterprises, carried out in 2009 on behalf of the European Commission, found that firms entering markets outside the EU and European Economic Area were most likely to report information barriers (over 40% of micro firms (i.e. those with 0-9 employees) reported this barrier). The same survey also found that firms faced 'internal barriers' including the price and quality of their products, qualified personnel and language (EIM, 2010). Of the barriers identified, those relating to culture appear to create the greatest impediment to overseas market entry (Kneller, 2006). The more barriers of this type which a firm reports encountering, the less likely they are to enter the market.

Table 1: Barriers to Internationalisation by UKTI Usage

Proportion of firms experiencing significant difficulty (4-5 out of 5) with…	**Total**	**UKTI Users**	**Non-users of UKTI services**
Base: All exporters	858	227	631
Types of Barriers			
Legal & regulatory barriers	41%	53%	36%
Customs barriers	27%	34%	24%
Contacts barriers	27%	37%	24%
Information barriers	16%	21%	14%
Resource barriers	20%	25%	18%
Language & cultural barriers	19%	23%	18%
Bias barriers	17%	20%	17%
Number of Barriers			
At least one significant individual barrier	66%	77%	62%
- *One*	*17%*	*13%*	*19%*
- *Two*	*15%*	*17%*	*15%*
- *Three*	*12%*	*16%*	*10%*
- *Four or more*	*22%*	*32%*	*18%*
No significant barriers	34%	23%	38%

Source: OMB (2010a)

Analysis of survey data indicates that firms of all sizes and experience may face barriers to entering overseas markets. While this is true, firms face both fixed and variable costs to exporting. Fixed costs will result in disproportionate barriers for SMEs where the potential volume of exports from entering a new market is lower.

Although firms which start exporting may be expected to face more `internal' barriers, external barriers tend to persist. One of the reasons for this is that many firms begin exporting by entering the closest or easiest markets and then progressively move to more difficult markets i.e. those which, amongst other things, are culturally and linguistically more distant.

The evidence also suggests that barriers are related to export experience but the relationship is not linear. Some barriers rise after a firm has exported for more than two years but fall after the firm has exported for at least ten years (Kneller, 2008). Barriers vary by market with firms generally experiencing more barriers in fast-growing markets. In these markets legal and regulatory barriers and language and cultural barriers are most commonly encountered (OMB, 2010a).

Firms which are innovative[1] tend to be more likely to report barriers to entering overseas markets. Among innovative firms those most likely to report barriers are those which have internationalised within two years of being established and for which exports account for at least 25% of turnover. This sub group is referred to as 'Born Globals' in academic literature (OMB, 2010a). These firms do not follow the gradual pathway of internationalisation but tend instead to internationalise at, or soon after, inception. Many of these firms serve a global market as their products tend to be niche, resulting in their home market being insufficiently large to sustain them.

Innovative firms tend to face higher barriers to export market entry, because, unlike commodities, information about the good or service, including price and demand, is not readily available in an overseas market. This makes it difficult for a firm to know if it is worthwhile entering a market. Innovative goods or services may also be difficult to demonstrate over a distance or to explain or describe in a foreign language.

Social networks are particularly important in facilitating sales of such goods and services in overseas markets. Networks are channels through which information can flow and may enable producers to locate buyers or increase awareness of the product or service. Networks also act as a means of reducing risk, for example of payment, delivery and quality. This is because within a network of known individuals, information about reliability and

[1] For analysis purposes, innovative firms were defined as those which have more than one employee engaged in R&D activity <u>and</u> more than one employee engaged in new product/service development; <u>or</u>, have commissioned external new product or service development activity in the last year; <u>or</u>, have introduced new products or services in the last 3 years *except firms established in the last 2 years*

trustworthiness of members can be obtained from network members, meaning members who renege on contracts or sell poor quality goods or services can be excluded from the network (Rauch, 2001). The role of government as a trusted intermediary which can bridge networks is therefore particularly important to innovative firms.

Attending trade shows can facilitate the development of social networks, thereby helping firms to enter international markets. Evaluation of UKTI's Tradeshow Access Programme (TAP) used a number of research methodologies including data linking, propensity score matching, surveys and qualitative case studies, and underpinned by a separate literature review on the role of tradeshows in international business. The study found evidence of a positive association between tradeshow attendance and increased innovation and productivity, and an estimated overall benefit cost ratio of £5:£1, measured in terms of additional profit (if firms indicated that they would have achieved similar results without assistance they were not included in this measure).

Internal barriers may be addressed when support is provided to develop firm capability to enable firms to become ready to export.

External barriers can be addressed by government support for internationalisation through its network of staff in embassies and consulates in overseas markets and through its role as trusted intermediary. Government may also lobby at a political level to reduce barriers such as regulations or other standards or requirements.

Small and Medium Sized Enterprises and the Focus of Government Support

Small and Medium Sized Enterprises (SMEs)[2] form the backbone of the UK economy. At the beginning of 2009, there were about 4.8 million SMEs in the UK, accounting for 99.9% of UK businesses (BIS, 2010). However, export participation of SMEs is somewhat lower than that of large firms[3]: estimates suggest that around 20% of UK SMEs export (IFF, 2009, EIM, 2010) compared to over 40% of large firms (Harris and Li, 2010).

This may reflect the fixed costs associated with beginning to export. SMEs may be more likely than larger firms to experience information assymetry, and to lack internal capability to evaluate potential export opportunities. Furthermore, SMEs have fewer employees therefore, they are more likely to lack social networks, or cultural and language skills which can help when entering a foreign market. SMEs have a smaller pool of resources than large firms which can make resource barriers more of an issue (OMB 2010a) and SMEs may perceive entering overseas markets to be riskier than large firms.

[2] SMEs are defined as businesses employing fewer than 250 people.
[3] Large firms are defined as business employing at least 250 people

Not all firms have the potential to export: those which are not internationally competitive are unlikely to be successful exporters. For the UK, a study found that over a five year period around 4% of exporting firms ceased exporting (Harris and Li, 2007a). A second study found that ceasing to export is associated with a decline in productivity in the year in which this occurs, and that this lower productivity level persists (the decline was estimated to be in the order of 7 -8%) (Harris and Li, 2007b). Stopping exporting is associated with firms with relatively lower productivity or profitability: experiencing a financial loss increases the probability of ceasing to export by 39% (Harris and Li, 2007a).

Although exporting is generally associated with a higher probability of firm survival (Kneller et al, 2010, Harris and Li, 2007b), one UK study found a slightly higher risk of firm closure amongst micro firms4 which exported. The study also found that micro firms were more likely to close than SMEs irrespective of whether they exported, however holding intellectual property was associated with a greater chance of survival (Rogers and Helmers, 2010).[5]

This suggests that government should not try to encourage all firms to export, rather that efforts should aim to be focused on SMEs which are more likely to succeed in export markets, namely those which engage in research and development, are innovative or which hold intellectual property.

Cost Effectiveness of Government Support

Although the evidence indicates the presence of market failures and barriers to international market entry, this does not automatically imply that government intervention is appropriate. This requires an assessment of the cost-effectiveness of government action to address these issues.

Some econometric studies have attempted to estimate the cost effectiveness of export promotion agencies around the world. A World Bank study which analysed data for 104 developing and developed countries found that for the median export promotion agency, $1 spent on export promotion generated a $40 increase in its country's exports (Lederman et al, 2007). Separate analysis for the UK, using data from surveyed clients (i.e. firm level data) has estimated that for every £1 spent on export promotion, £19 is generated in additional profit.[6]

[4] Defined as firms with assets of less than £1.35 million
[5] The study was unable to differentiate between firms which closed and firms which exited the dataset due to being merged or acquired by another firm.
[6] Full details as to how this is measured are available in Annex A p70 of the UKTI Resource Accounts 2009-10 available at http://www.ukti.gov.uk/uktihome/aboutukti/item/114708.html
Results of UKTI Performance and Impact Monitoring Surveys are available at http://www.ukti.gov.uk/uktihome/aboutukti/ourperformance/performanceimpactandmonitoringsurvey.html

Trade Promotion Policies

The evidence reviewed in this paper suggests that there are benefits to firms from entering international markets but that they face barriers to doing so and that government intervention to assist firms is both warranted, due to market failure, and is cost effective. The evidence also suggests that support should be targeted towards innovative firms since this group is more likely to report barriers to, and benefits of, entering international markets.

UK policies to support small and medium sized enterprises internationalise can broadly be grouped under two headings:

- ***Policies to help individual firms overcome external barriers to entering new markets.*** This includes the range of commercial services provided by British consulates, embassies and high commissions. Services typically include identifying and facilitating access to specific potential business partners and other important contacts in the market, and tailored information and advice;

- ***Policies to help firms overcome internal barriers by building internationalisation capabilities***. These tend to focus specifically on capabilities related to international business, including advice about what knowledge and information are likely to be needed to evaluate and exploit potential opportunities, and to identify what changes may be required to products or services, or marketing strategy. Services typically involve providing advice to individual firms, including advising firms not to export where appropriate, and providing information or training to groups of firms who are exporting or interested in doing so.

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Trade and Investment Analytical Papers

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	Provisional timetable
1. Global context: how has world trade and investment developed? What's next?	February 2011
2. Economic openness and economic prosperity	February 2011
3. UK trade performance over the past years	February 2011
4. The UK and the Single Market	February 2011
5. Protectionism	February 2011
6. Sources of Growth	February 2011
7. Trade and Regional Integration in Africa	March 2011
8. Trade promotion	March 2011
9. Food Security	April 2011
10. Trade facilitation	April 2011
11. Asia	April 2011
12. Trade finance	May 2011
13. Bilaterals/ plurilaterals - how can we make them better for the world trading system?	May 2011
14. Trade and the environment	June 2011
15. Investment, including the impact of foreign ownership	June 2011
16. Comparative advantage of the UK	June 2011
17. Regulatory cooperation	July 2011
18. Anti-dumping	July 2011

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