

Reappraising Scotland's exports and their geographies: Brexit and beyond

Ronald V. Kalafsky, University of Tennessee and Ross Brown, University of St Andrews

Abstract

Firms internationalise to expand and diversify their sales, while policymakers see exports as a means of promoting productivity and economic growth. Exports therefore receive an increasing amount of attention given these positive attributes. Within this context, this paper presents data on the geographies and dynamics of Scotland's export patterns. It shows that Scottish exports are highly concentrated within a small number of global markets, with Scottish firms exhibiting a decreasing reliance on exports to the European Union. Only a small minority of Scottish SMEs export and the majority of these firms derive less than a quarter of their sales from international markets. These lines of enquiry are presented within the context of the impending departure of the UK from the European Union and what this might mean for Scotland's exporters. The paper ends with some indicative policy recommendations.

I Introduction

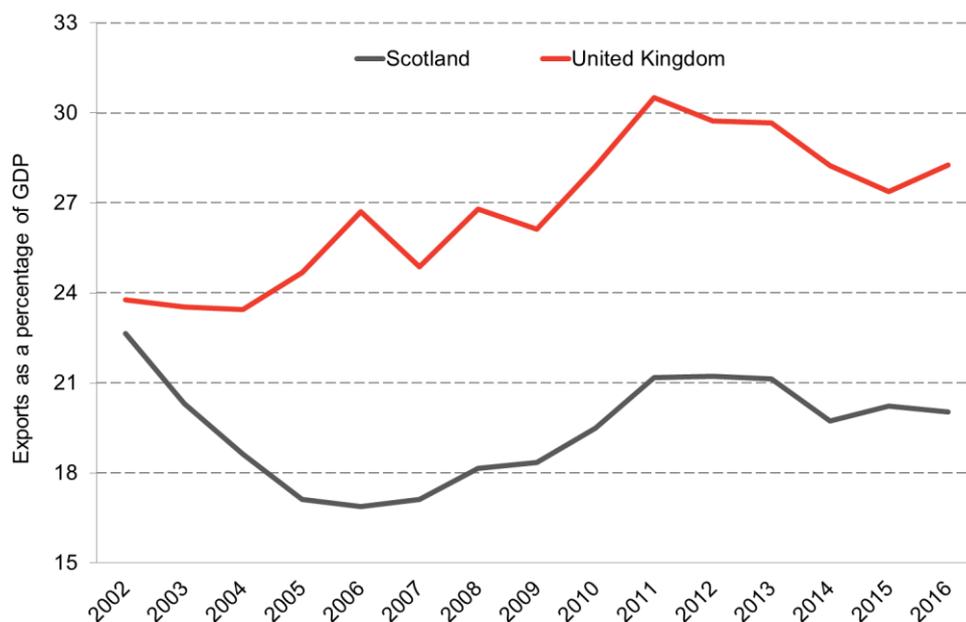
Policymakers understandably direct a fair amount of attention to exporting, given its potential for jobs, innovation and economic growth (Wright et al, 2007; Love and Roper, 2015). Underscoring this interest, a seminal paper on firm-level exporting motivations suggests that the policy-led support for exports, regardless of location, stems from the understanding that, "exports are good, and exporters are good firms; thus helping domestic firms export is good policy" (Bernard and Jensen, 2004, p. 561). Understandably therefore, trade policy has often been at the centrepiece of industrial policies within modern economies (Rodrik et al, 2004).

Accordingly, a healthy amount of attention is paid to exporters and their dynamics at various scales. From a firm-level perspective, exporting offers the potential to expand beyond domestic or regional markets – markets that, in some cases, which may be in decline or offer diminished growth prospects. From a national perspective, exporting offers countries the ability to enhance their growth prospects. That said, the relationship between exporting and economic growth are

far from unequivocal (Mookerjee, 2006). The effects of exporting are often dependent on the national *milieu* in which trade takes place and includes the composition of exports in terms of individual products and services and even the destinations to which exports are sent. Clearly, the topic merits more attention and study.

This topic is particularly salient to Scotland, as a small, open economy with a limited domestic market. Accordingly, recent policy papers have examined the export dynamics of Scotland, finding that exports are critically important especially for some key sectors (Slow et al, 2015; Hamilton and Richmond, 2017). What these studies also suggest is that Scotland often lags much of the rest of the United Kingdom in key measures such as the number of firms engaging in exporting. This is reflected by fact that just 70 firms account for some 50% of Scotland’s total exports¹.

Figure 1 Export intensities for Scotland and the United Kingdom (exports as a percentage of GDP)



Source: Scottish Government 2018a; Scottish Government 2018b; World Bank 2018a. Calculations by Authors

As a starting point in this analysis, Figure 1 provides export intensities for Scotland since 2002 relative to the UK as a whole. Exports as a percentage of GDP are approximately a third lower in Scotland compared to the UK. Note the drop in exporting from 2002 to 2006, attributable to the

¹ <https://www.insider.co.uk/news/nicola-sturgeon-government-economy-programme-13191792>

winding down of the predominantly foreign-owned, export-intensive ('Silicon Glen') electronics sector during this period. And while Scotland's export intensity has rebounded since this and the ensuing global financial crisis, it has not returned to the levels seen in 2002.

At the outset, then, this suggests there is a significant and continuous "export gap" between Scotland and the rest of the UK. This weak export performance may in turn be partly attributable to the country's weaker growth and productivity performance relative to the UK as a whole. It also raises questions about the international markets that Scottish exporters are serving and what insights such patterns might provide on the future export trajectories of Scotland. In line with this, the next section provides an examination of these export geographies.

II Scotland's export geographies

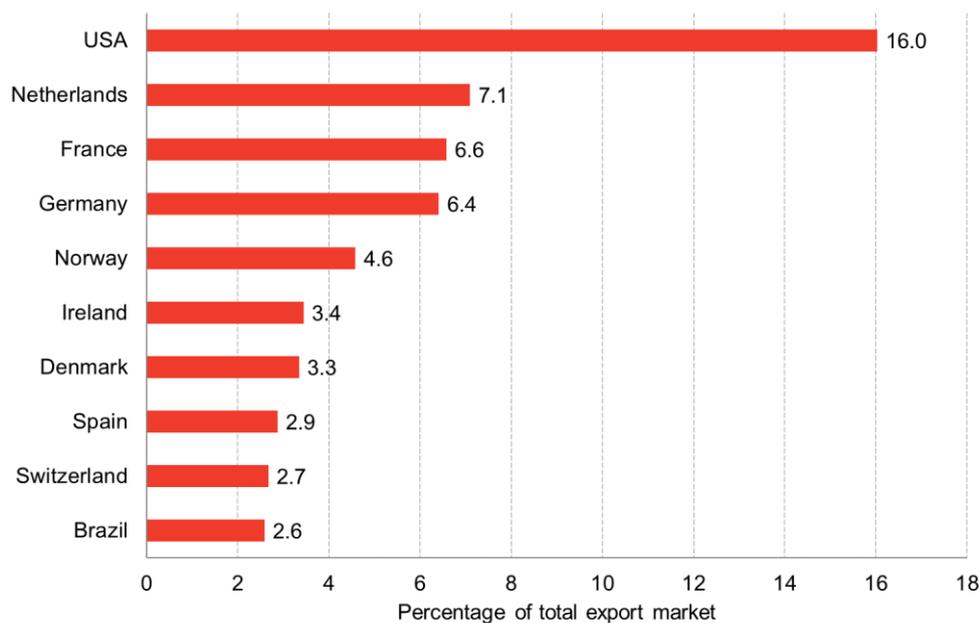
There is a growing amount of research on the markets to which firms export and how these are selected, largely because of how these geographies might help to provide an understanding of export strategies and innovation. A large body of evidence points to firms exporting to nearby, familiar, or long-time markets – a pattern that is especially salient for small-and-medium-sized firms (SMEs) (Bernard, et al, 2007; Defever, et al, 2015). That is, exporters tend to minimize risks and costs by accessing geographically proximate markets or those markets with which they or associated firms have some familiarity or affinity. Indeed, this is reflected in the famous "Uppsala model" which is used to depict how firms select geographically proximate foreign markets with low levels of "psychic distance" (Johanson and Vahlne, 2007).

Within this context, what is considered to be a nearby, or for that matter, a distant market? Ghemawat (2001) neatly categorised distance (in terms of international business) into four distinct categories: geographical, cultural, administrative, and economic. The reason that these types of factors are mentioned is that in many ways, they are germane to Scotland's export performance and to understanding its export geographies. What these frameworks suggest is that Scottish firms, especially less resourceful SMEs, typically favour neighbouring markets with low levels of geographical and psychic distance.

Figure 2 provides an examination of the leading destinations for Scottish exports in 2016. Note that the United States is far and away the leading destination, accounting for 16% of total Scottish exports. Notably, the second leading export destination, the Netherlands, accounts for less than half of that (i.e. 7.1%). The reasons why firms choose (or do not choose) specific

markets are numerous. Many researchers attribute the volume of trade to the various forms of distance referenced earlier. In line with this, note that eight of Scotland's top-ten export markets are either in the European Union (EU) or part of the European Economic Area (EEA). In this sense, these leading export destinations reflect not only a sort of reduced geographical distance (i.e. relative proximity) but also, a form of administrative and psychic proximity. In other words, being within the same trade bloc brings economies closer together. The other two, top-10 export destinations, the US and Brazil, are large markets in their own right. With respect to the US, it has longstanding ties with Scotland, a point which also factors into a sort of cultural and economic proximity. Socio-economic and cultural affinities undoubtedly reduce the spatial distance between the Scotland and the US.

Figure 2 Scotland's top-ten export markets by percentage of total Scottish exports, 2018

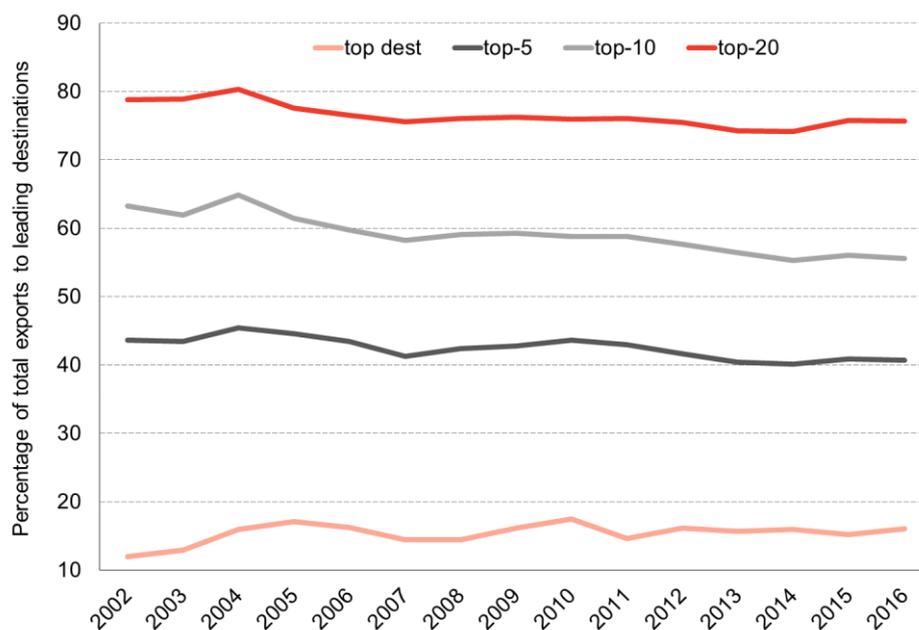


Source: Scottish Government 2018a

It is worth exploring whether Scotland is dependent on a comparatively select number of foreign markets. Figure 3 illustrates the export composition over time for leading, top-five, top-ten, and top-20 export markets. As discussed above, the leading market has remained the US and has accounted for approximately a sixth of total Scottish exports for some considerable time. There are somewhat noteworthy trends in the remaining three export groupings. Overall, there is a

trend towards increased foreign market diversification by Scotland’s exporters. Note that the top-five, ten, and 20 markets reflect a slight decline over time in overall market concentrations. In essence, exports are not as concentrated among leading markets - bar the relative strength of the US as a leading export destination - and perhaps show some sign of export market diversification. One note of caution should, however, be provided with these findings. Exports to countries beyond the top-five to ten markets represent a comparatively small base on which to build. Brazil, for example, accounts for only 2.6% of total exports while the 20th-ranked market (South Korea), accounts for roughly 1.5%. So, although the apparent geographical diffusion of export markets is encouraging, exports to these new and emerging markets remain very small (see Slow et al, 2015). This point will be addressed later in the paper.

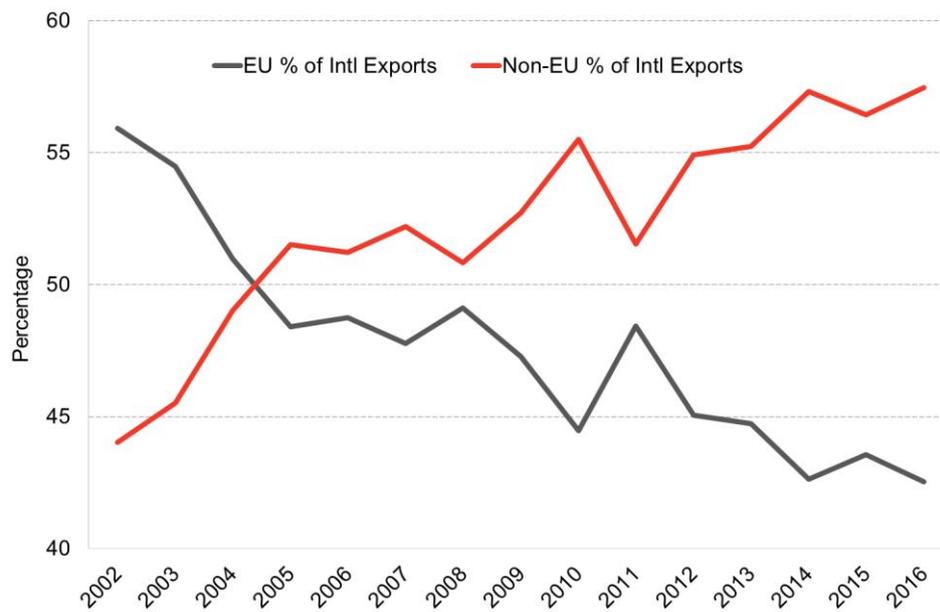
Figure 3 Composition of exports: percentage of total exports by leading destinations



Related to what was discussed regarding Figure 2, many of the leading markets for Scotland’s exports are located within the EU. The UK’s forthcoming departure from the EU is expected to have some negative impact on this, barring some sort of free trade area being created. While this separation is a topic that has already been discussed at length, its full effect on exports remain to be seen (Brown et al, 2018). As such, Figure 4 presents a comparison of EU versus non-EU export composition. Note that well over a decade ago, non-EU exports surpassed those

destined to the EU. There are numerous reasons for this changing spatial pattern, some of which can be attributed to the aforementioned decline of Scotland's electronics sectors and their connections to European supply chains. Indeed, much of the foreign-owned electronics sector specifically located in Scotland to target exports to the EU (Raines et al, 2001).

Figure 4 Composition of exports: EU versus non-EU



Source: Scottish Government 2018a; Calculations by Authors

With the decline of the electronics industry the trends clearly illustrate that there is a decreasing dependence on European markets for Scotland's exports. These findings are not presented to diminish the importance of EU markets to Scottish exporters, but rather to further illustrate a changing geography of exports from Scotland. And, far from providing conclusions, this raises additional questions about the strategies that firms are using to enter these new markets.

How do the geographies of Scottish exports fare as a whole? Table 1 shows the world's largest economies in terms of how these relate to Scottish exports. As mentioned in the discussions from Figures 2 and 4, the US remains the world's largest economy as well as the largest single destination for exports from Scotland. Additionally, Germany and France are the fourth and fifth leading export destinations, respectively. All three of these examples follow some sort of logic

in terms of export geography. In the case of the US, historic trading links and the size of the market are natural draws. In the case of Germany and France, geographical proximity and EU membership are conducive to trade.

Table 1 World’s largest economies* in terms of Scottish export destinations

| Country | Export Destination Rank 2016 | Percentage of Exports 2016 |
|---------------|------------------------------|----------------------------|
| United States | 1 | 16.0 |
| China | 17 | 1.9 |
| Japan | 19 | 1.5 |
| Germany | 4 | 6.4 |
| France | 3 | 6.6 |
| India | 26 | 0.9 |
| Brazil | 10 | 2.6 |
| Italy | 12 | 2.4 |
| Canada | 15 | 2.1 |
| South Korea | 20 | 1.5 |

* Excluding the United Kingdom

Source: Scottish Government 2018a; World Bank 2018b; Calculations by Authors

Beyond these examples, however, the list does not match as well. The world’s second and third-largest economies, China and Japan, rank as only the 17th and 19th largest as Scottish export destinations, with India ranking at 26th and accounting for less than one percent of Scottish exports. While each of the large (and relatively un-accessed) economies is unique in terms of export suitability, the point remains that there are a number of large and rapidly growing markets open to development by Scottish firms. Moreover, locations such as South Korea and Japan are well-developed markets with affluent consumer and industrial bases and both China and India have experienced rapid economic growth with the emergence of sizeable middle classes. The challenge then is to determine what barriers – in other words, what forms of ‘distance’ – prevent Scottish exporters from accessing and potentially benefitting from such large and/or growing markets.

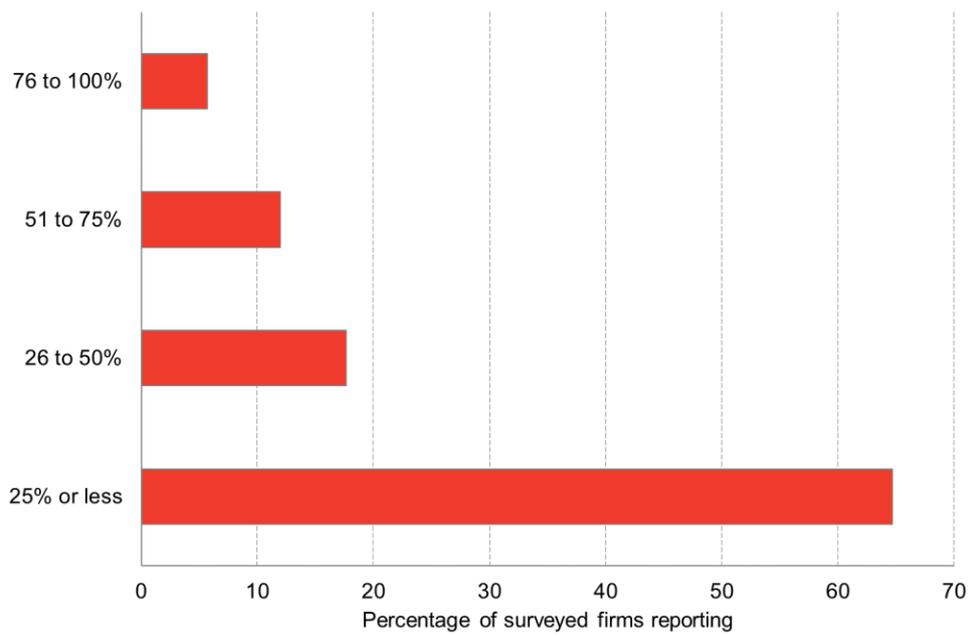
III Scottish SMEs and exports

The data presented above referred to Scottish exporters as a whole. We now turn to the export patterns of a particularly important cohort of firms: small and medium sized enterprises (SMEs). Smaller firms and their export dynamics have been at the centre of much academic and policy-led research over the past three decades, with much of this centring on the difficulties that SMEs face in international markets (vis-à-vis larger firms) and the resulting export performance of these firms (Wright et al, 2007). Nonetheless, with SMEs accounting for more 99% of all firms in Scotland, the export performance of such firms is a highly topical issue (Nesta, 2017). This section takes a brief look at SME export performance in Scotland, based on 2015-2017 survey data from BDRC Continental's *Small- and Medium-Sized Enterprise Finance Monitor* (2018). Notably, just under 10% of the 3,841 SMEs based in Scotland indicated that they exported. While the export-related questions in this survey were somewhat limited (as the study focused largely on finance-related issues), the remainder of the analyses will look at the export performance of these 375 internationally-engaged Scottish SMEs.

As seen in Figure 5, over 60% of the surveyed SME exporters derive less than a quarter of their total sales from international markets. This is set against less than 20% of these SMEs earning more than half of their total turnover from exports. This export performance (or as some would posit, underperformance) is in line with all UK SMEs participating in the same survey. While these data are not surprising, they do suggest that there is room to grow in terms of export expansion for Scottish SMEs. As usual, however, the relevant issue is how to stimulate such export growth.

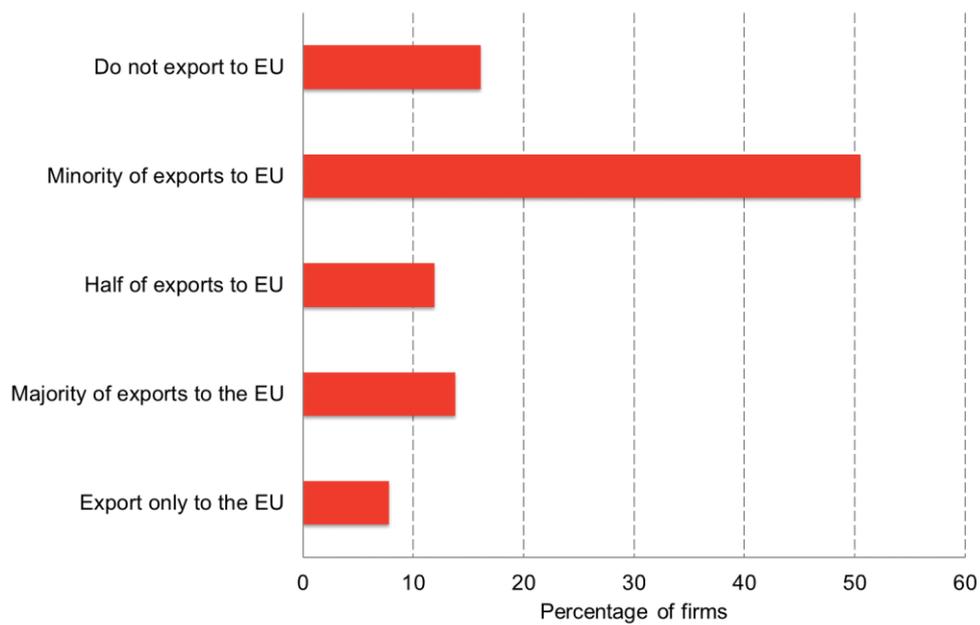
Related to this export performance and the need to grow markets is the forthcoming UK withdrawal from the EU. In light of this, Figure 6 offers results of the survey questions concerning a firm's approximate export composition concerning the EU. At this point, roughly 65% of the firms either do not export to the EU or derive less than half of their export sales from this market. So, while some SMEs could be negatively impacted by any loss of barrier-free access to the EU, the data suggest that a number of firms are also actively engaging markets outside of this trade area.

Figure 5 SME export intensity by percentage of total sales by surveyed firms



Source: BDRG Continental (2018)

Figure 6 Breakdown of Scottish SME exports to European Union



Source: BDRG Continental (2018)

Although the above data are useful, it is also informative to look at the breakdowns within these trade metrics. Table 2 offers a classification of export intensities within the EU export metrics discussed in Figure 6. While the results are mixed, a number of noteworthy findings emerge. First, SMEs exporting exclusively to the EU also tend to be among those deriving less than a quarter of their revenue from exports. Conversely, firms receiving half of their sales from EU exports tend to be much more export intensive. Recall that in Figure 6, over 60% of these SMEs earned a small portion of their export revenue from the EU or did not engage with this market. This group of the firms also tended to be far more export intensive overall, lending some support to previous findings that firms which engage more distant markets also tend to be better overall export performers.

Table 2 EU breakdown of exports by firm export intensity, percentage of firms

| Destination | 25% or less | 26 to 50% | 51 to 75% | 76 to 100% |
|-------------------------------|-------------|-----------|-----------|------------|
| Export only to the EU | 88.2 | 11.8 | 0.0 | 0.0 |
| Majority of exports to the EU | 66.7 | 18.5 | 7.4 | 7.4 |
| Half of exports to EU | 41.7 | 37.5 | 20.8 | 0.0 |
| Minority of exports to EU | 71.0 | 14.0 | 8.4 | 6.5 |
| Do not export to EU | 80.6 | 3.2 | 12.9 | 3.2 |

Source: BDRC Continental (2018). Calculations by authors

Table 3 International market expansion and export intensity, percentage of firms

| Export intensity | Planning to move into new markets abroad? | |
|------------------|---|------|
| | Yes | No |
| 25% or less | 21.5 | 78.5 |
| 26 to 50% | 40.9 | 59.1 |
| 51 to 75% | 47.8 | 52.2 |
| 76 to 100% | 43.8 | 56.3 |
| All firms | 29.0 | 71.0 |

Source: BDRC Continental (2018). Calculations by authors

Table 4 International market expansion and European Union export breakdown (percentage of firms)

| Export Composition | Planning to move into new markets abroad? | |
|-------------------------------|---|------|
| | Yes | No |
| Export only to the EU | 25.0 | 75.0 |
| Majority of exports to the EU | 40.9 | 59.1 |
| Half of exports to EU | 36.8 | 63.2 |
| Minority of exports to EU | 23.2 | 76.8 |
| Do not export to EU | 29.2 | 70.8 |

Source: BDRC Continental (2018). Calculations by authors

An additional survey question asked whether these firms planned to engage new markets in the upcoming year in either the UK or abroad. Table 3 provides a look at the overseas component of this question, couched in terms of the export intensities. Perhaps the most interesting and somewhat alarming result is that overall, only 29% of the SMEs planned to move into a new international market in the next year. In a sense, this does not bode well for the expansion of Scottish exports. However, given that over 60% of these firms have export intensities less than 25%, the results are somewhat skewed by this group of SMEs. On the other hand, firms that are more export-intensive (i.e. greater than 25% exports) also tend to be among those showing a higher propensity to engage with a new international market. In each export grouping, note that at least 40% indicated that they would do so. The ‘new market’ question was also juxtaposed with the EU export market question, as seen in Table 4. While the results are somewhat varied, it is important to note that for firms with a majority of exports destined to the EU, fully two-fifths intend to engage with a new international market – the highest number among these groupings. This would suggest that such firms are looking to diversify their export market portfolio in a time of relative economic uncertainty.

IV Looking ahead: increasing trade development in the post-Brexit era

This paper has shown that Scotland faces an export deficit compared to the rest of the UK as a whole. Scottish SMEs seem especially internally focused: only a small minority export and the

majority derive less than a quarter of their total sales from international markets. Addressing these complex challenges is exacerbated by the complex operating environment confronting firms at the present time, especially related to Brexit-induced uncertainty and the wider hostile international trading environment since the election of the Trump administration in the US.

What this suggests is that policymakers may have to become much more proactive to alleviate these challenges if Scotland is to overcome this export deficit and stimulate export expansion among SMEs. To achieve this, the Scottish Government may wish to further prioritise overseas internationalisation over other (often more resource-intensive) economic development initiatives such as infrastructure or flagship higher education commercialization efforts (Brown et al, 2016). The key benefit from concentrating support towards SME internationalisation owes to the fact that many externally-focused SMEs are often the most growth-focused firms which generate substantial economic benefits for local economies, most notably “jobs” (Mason and Brown, 2013).

While Scotland underperforms in terms of exporting, there also seems to be a strong recognition that the UK’s export performance as a whole underperforms relative to its European peers. In terms of longer-term strategic forms of assistance to encourage SME internationalisation, policy makers may have to implement a much more expansive and well-resourced overarching export strategy for Scotland. Indeed, the UK government is currently developing a new export strategy to build on the recent economic strategy “Building our Industrial Strategy” (BEIS, 2017). A key starting point within this work is the acknowledgement that while less than one in ten UK SMEs currently exports, almost the same number (an estimated 300,000 SMEs) have the capacity to internationalise. This would suggest that roughly 30,000 Scottish SMEs may have some kind of capacity to become internationalised. Targeting such dormant or “discouraged” exporters seems to be a highly worthwhile policy objective.

In view of the need for more firms to engage with international markets, what type of initiatives could (or should) be developed to encourage exporting, especially among SMEs? The first policy task is to motivate non-exporters (or infrequent exporters) to explore international markets. This may be easier said than done. The export challenge is especially salient for SMEs, due to challenges such as limited capital for exploring international markets (whether in terms of onsite visits or trade fairs), obtaining export market intelligence, or even securing the capital to expand production for export sales. Organisations such as Scottish Development International have been developing programmes for years on this front. Perhaps more could be done to encourage

SMEs to take the initial foray into global markets. Export initiatives such as the *TR&DE* program by the former UKTI have worked in various locations to provide seed funding for SMEs to explore international markets (Kalafsky, 2017). Other development-trade organisations have encouraged (and helped to fund) SMEs to attend trade fairs as vehicles to access a wider international customer base. Regardless, taking the initial leap into international markets is an important first step.

Just as important is the need to encourage SMEs to persevere when export markets do not work out well the first time. Many firms become discouraged after initial export explorations do not turn out as planned. So in addition to helping non-exporters to export, policymakers and trade development officials could look for ways in which to support SMEs that have lower export intensities or have pulled back from international markets altogether due to previous negative experiences.

A second equally important policy challenge concerns the geographies of export markets. Simply put, are there policy-led means to catalyse firms to explore new and/or emerging markets that are not currently served by most Scottish exporters? As discussed earlier in this paper, almost one-sixth of Scottish exports are destined for the US alone, with concentrations in nearby European markets. Moreover, the data in this paper suggests that many large and/or emerging global markets receive relatively little attention from Scottish exporters. Beyond the initial jump to exporting discussed above, how do firms engage with new markets? This again is a question of supporting firms (especially SMEs) in terms of obtaining intelligence of international markets. Beyond standard prescriptions and information sources such as these, again it may entail actively motivating promising exporters to go to faraway locations. Firms can attend trade fairs located domestically or internationally to find these customers. While the trade fair solution is a possibility, it is not always within the realm of possibilities for many firms. Indeed, SMEs have cited the costs of participating in trade fairs as an impediment to exporting (Kalafsky and Duggan, 2016). While trade fairs and the like may indeed be the ‘cost of doing business’ in international space, perhaps greater levels of incentives could be offered to help leverage access into new and emerging markets.

Of course, a critical factor shaping the current exporting environment is the indeterminate nature of Brexit. Brexit is so polyvalent, pervasive, and entrenched across so many sectors it is difficult to exaggerate its potential impact. Research strongly shows that Scottish firms, especially Scottish SMEs, are deeply concerned about the potential negative impact of Brexit. Compared

to other parts of the UK, Scottish and Northern Irish SMEs note particularly strong concerns about Brexit (Brown et al, 2018). While examining the policy implications of Brexit is well beyond the scope of this paper, what seems certain is that Brexit is likely to have a profound impact on the trading environment facing Scottish firms for years to come.

Taken in one sense, it can be (and for the most part has been) viewed as an existential threat for Scotland's exporters in view of the fact SMEs typically engage with comparatively nearby or adjacent EU markets. In this regard, this could be problematic as there is often a considerable lead time needed to successfully engage international markets, especially those in which the firm has little or no experience. On the other hand, viewed more optimistically, it could be an opportunity for Scottish exporters. If indeed the UK is no longer joined in some sort of common market or free trade area (which is still in flux), then firms may be compelled to find new and in most cases, distant, markets. At the same time, the 'distance' of such markets might be manifested in various ways: cultural, regulatory, and other ways beyond mere geography. In particular, this is an area in which policy-led support could help the most in terms of gathering market intelligence and easing the difficulties of entering a market.

That said, irrespective of the outcome of the Brexit process, neighbouring EU markets will remain critical for the Scottish economy. Therefore, alleviating the negative impact of Brexit is crucial for enhancing the long-term competitiveness of many export-oriented Scottish SMEs. Positively, this has been recognised by the Scottish Government who have been one of the first devolved administrations to proactively offer a bespoke Brexit-related subsidy to SMEs exporters to the EU2.

Commendably, the Scottish Government recently created a new bespoke ministerial portfolio specifically designed to assist the development of Scotland's wider trade-related efforts and to cultivate associated political and commercial interests overseas. This is an important step in the right direction towards nurturing a stronger policy focus on improving Scotland's weak export performance. However, part of the problem facing policy makers is a lack of concrete evidence on how best to develop international trade. Therefore, undertaking an enquiry (similar to the famous 1990s Business Birth Rate Enquiry) around exports might be a useful step towards enhancing the evidence base around the underlying causal factors contributing to Scotland's

²The pilot scheme launched in Scotland enables eligible SMEs a subsidy of £4,000 to assist with exporting to EU markets. Details of the scheme appear at: <https://news.gov.scot/news/preparing-business-for-brexit>

historical export underperformance. More immediately, what seems certain is that policymakers are likely to have to provide an important cushion against the arduous Brexit headwinds facing Scottish exporters, especially if the country's weak export performance is to be improved in the years to come.

References

- BDRC Continental. (2018). *Small- and Medium-Sized Enterprise Finance Monitor, 2011-2017*. [data collection]. 19th Edition. UK Data Service. SN: 6888, <http://doi.org/10.5255/UKDA-SN-6888-20>
- BEIS (2017) Building Our Industrial Strategy, HMSO, London.
- Bernard, A.B. & Jensen, J.B. (2004). Why some firms export. *Review of Economics and Statistics*, 86(2), 561–569.
- Bernard, A.B., Jensen, J.B., Redding, S.J., & Schott, P.K. (2007). *Firms in International Trade: Working Paper 13054*. Cambridge, MA: National Bureau of Economic Research.
- Brown, R., Gregson, G., & Mason, C. (2016). A post-mortem of regional innovation policy failure: Scotland's Intermediate Technology Initiative (ITI). *Regional Studies*, 50(7), 1260-1272.
- Brown, R., Linares-Zegarra, J., & Wilson, J. (2018) The (Potential) Impact of Brexit on UK SMEs: Regional Evidence and Public Policy Implications, Centre for Responsible Banking & Finance, University of St Andrews, Working Paper, 18-016. https://www.st-andrews.ac.uk/business/rbf/workingpapers/RBF18_016.pdf
- Defever, F., Heid, B. & Larch, B. (2015). Spatial exporters. *Journal of International Economics*, 95(1), 145-156.
- Ghemawat, P. (2001). Distance still matters: the hard reality of global expansion. *Harvard Business Review*, 79(8): 137-147.
- Hamilton, N. & Richmond, K. (2017). Performance of Scotland's small and medium sized businesses: insights from the Small Business Survey 2016. *Fraser of Allander Institute Economic Commentary*, 41(3), 44-52.
- Johanson, J., & Vahlne, J. E. (1977). The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8(1), 23-32.
- Kalafsky, R.V. (2017). Export programs and SME market choice: evidence from North West England. *GeoJournal*, 82(6), 1135-1144.
- Kalafsky, R.V. & Duggan, D.T. (2016). Overcoming trade impediments: considering SME exporters from Nova Scotia. *Professional Geographer*, 68(4): 613-623.
- Love, J. H., & Roper, S. (2015). SME innovation, exporting and growth: A review of existing evidence. *International Small Business Journal*, 33(1), 28-48.
- Mason, C., & Brown, R. (2013). Creating good public policy to support high-growth firms. *Small Business Economics*, 40(2), 211-225.
- Mookerjee, R. (2006). A meta-analysis of the export growth hypothesis. *Economics letters*, 91(3), 395-401.
- Nesta (2017). 'The State of Small Business: Putting UK Entrepreneurs on the Map.' London: Nesta.
- Raines, P., Turok, I., & Brown, R. (2001). Growing global: foreign direct investment and the internationalization of local suppliers in Scotland. *European Planning Studies*, 9(8), 965-978.
- Rodrik, D., Subramanian, A., & Trebbi, F. (2004). Institutions rule: the primacy of institutions over geography and integration in economic development. *Journal of economic growth*, 9(2), 131-165.
- Scottish Government. (2018a). Export Statistics Scotland. <<https://www.gov.scot/Topics/Statistics/Browse/Economy/Exports/ESSPublication>> Accessed 20-June-2018.

Scottish Government. (2018b). *Quarterly National Accounts Scotland*.
<<http://www.gov.scot/Topics/Statistics/Browse/Economy/QNA2017Q2>> Accessed 20-June-2018.

Slow, J., Turner, S., & Richmond, K. (2015). Scotland's international export performance: some recent evidence. *Fraser of Allander Institute Economic Commentary*, 39(2), 91-100.

World Bank. (2018a). *Exports of goods and services (% of GDP)*.

<<https://data.worldbank.org/indicator/NE.EXP.GNFS.ZS?locations=GB>>. Accessed 21-June-2018.

World Bank. (2018b). *GDP (current US\$)*.

<<https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>>. Accessed 11-June-2018.

Wright, M., Westhead, P., & Ucbasaran, D. (2007). Internationalization of small and medium-sized enterprises (SMEs) and international entrepreneurship: A critique and policy implications. *Regional Studies*, 41(7), 1013-1030.

Author details

Ronald V. Kalafsky
Department of Geography
University of Tennessee, Knoxville, TN, 37919 USA
E-mail: kalafsky@utk.edu

Ross Brown
Centre for Responsible Banking & Finance
School of Management
University of St Andrews, Scotland, KY16 9RJ
Email: Ross.Brown@st-andrews.ac.uk

