ADR NORTHERN IRELAND

Data Insight

Exporting, importing and Northern Ireland firm performance: Which pathway to internationalisation?

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Background

There has been a greater level of attention paid to Northern Ireland's trade patterns and export performance in recent years. This has been sparked both by targets set in successive Programmes for Government since 2011, and then in the wake of the EU Exit vote in 2016.

This project aims to use data from the Business Data for Research initiative to offer a more detailed descriptive analysis of NI export and import performance – by market, sector and geography – over the 2014-2020 period. Importing is included as an important, but often overlooked, area of internationalisation.

The project also aims to analyse the relationship between business characteristics and exporting or importing, and to separately identify whether there is an export premium on business performance.

Summary

The Business Data for Research (BDR) dataset has been created by the Northern Ireland Statistics & Research Agency (NISRA). It links business characteristics from the Northern Ireland Annual Business Inquiry (NIABI) with sales and purchases data from Broad Economy Sales and Exports Statistics (BESES) for the years 2014 to 2020.

The wider context suggests that Northern Ireland (NI)'s export performance has remained poor (following trends relative to other parts of the UK since the early 2000s) and its value peaked in 2018 in some markets, long before any pandemic effects.

This Data Insight seeks to further explore firm-level characteristics underlying these wider trends. Using BDR data we offer both a descriptive analysis and a series of regressions to detail Northern Ireland's export and import performance by markets, business size, sector and sub-regional geography. The analysis also explores questions such as which firms are more or less likely to be exporters, importers, or both, and the characteristics of businesses by the intensity of their exporting performance. The relationships between exporting and productivity and exporting and wages are also analysed.

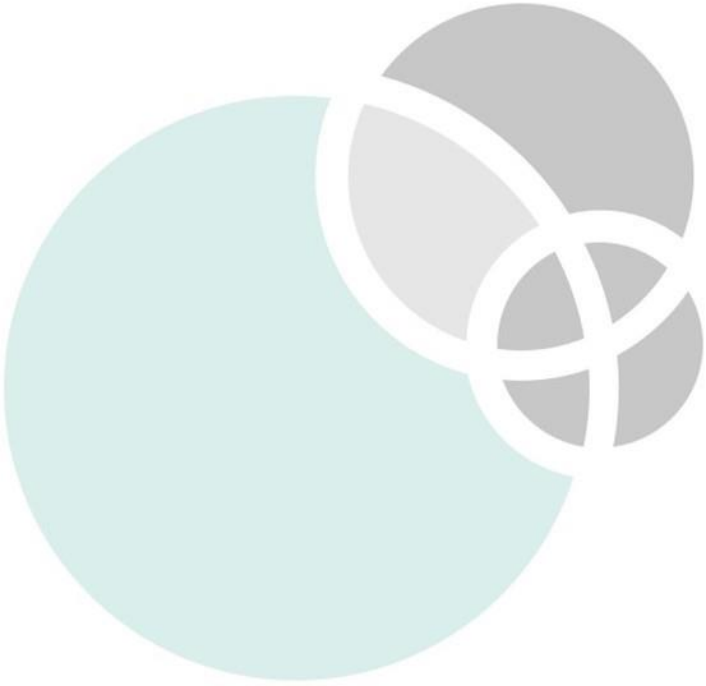
What we did

We undertook a descriptive analysis of the BDR dataset in order to identify the underlying characteristics that help explain annual trends in export and import performance for NI. Variables were created for relevant sectors of interest to policy (the 10X sectors) and geographical areas reflective of the City Deal regions to understand their relevance in terms of broad market orientation. Sales were then analysed in terms of their breakdown by firm size, sector and geographical location over 2014-20.

We undertook regression analysis to examine the relationship between firm level characteristics and exports/imports. This was undertaken at the broad exporter/importer level as well as in relation to the individual broad markets.

Quantile regression – a type of regression analysis used to estimate the conditional median of the response variables – was also undertaken to assess the relationship for firms at differing levels of export intensity.

A panel dataset was also created to analyse trends in export performance over 2014-19 (this period proving a larger sample size) to understand the extent to which the same firms move in and out of export markets and/or increase sales to markets over time. Analysis of this panel data forms a follow-up part of the study.



Context for the work

Data published by NISRA on the value of NI's sales and exports sets the wider context for this work. It shows that over the 2014-20 period, the largest increase in sales was to the Republic of Ireland (ROI) market, with (nominal) sales growing by 20% (Figure 1a). In comparison, sales in NI grew by 6%.

Exports to the Rest of the EU (ROEU) and Rest of World (ROW) peaked in 2018 at 29% and 22% respectively above 2014 levels. By 2020, however, both values were only 3-5% higher than their 2014 values. Notably, only sales to the Great Britain (GB) market declined over the period - this was particularly evident after 2016 (the year of the EU Exit vote). By 2020, sales to GB were 14% lower than they had been in 2014. As a direct result of this, the value of NI's external sales fell marginally between 2014-20 but exports sales increased by 9% (Figure 1b).

Figure 1a: Sales by destination 2014-20 (2014=100)

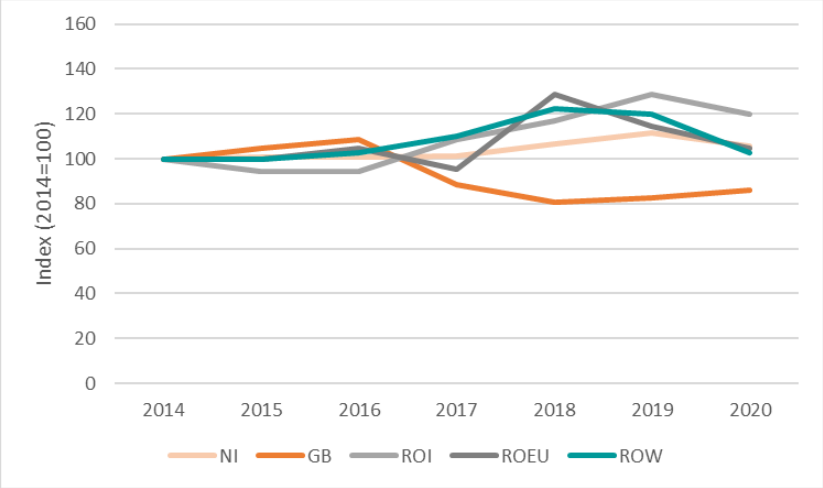
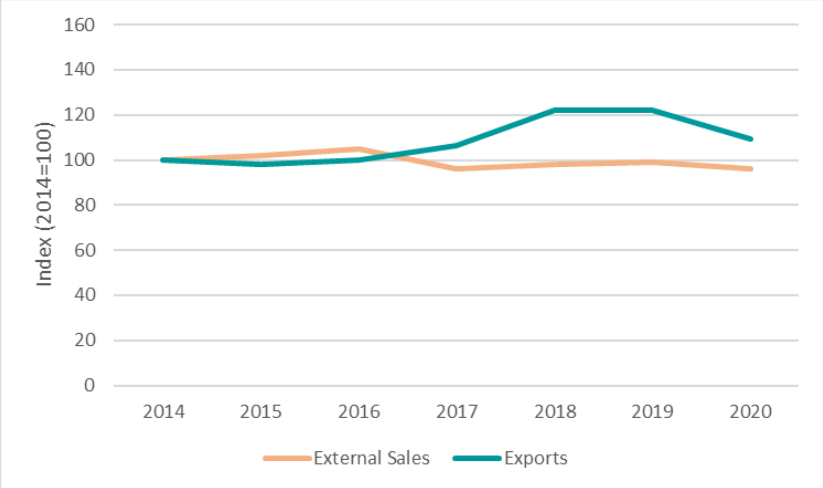


Figure 1b: External and export sales 2014-20 (2014=100)



The above trends do not hold for purchases/imports (Figure 2a). In fact, the largest growth in imports was from the ROEU market, peaking in 2018 with imports almost 60% higher than in 2014. By 2020 this had fallen back considerably but was still almost 20% higher in 2020. Purchases from the ROW had grown at a

more gradual pace and were also just under 20% higher by 2020. The trend was similar for ROI imports. Purchases from the NI and GB markets were almost unchanged from 2014. Due to the flat trend in purchases from GB (and their weight), the value of external purchases increased by only 3% between 2014-20 while imports increased by 12% (Figure 2b).

Figure 2a: Purchases by destination 2014-20

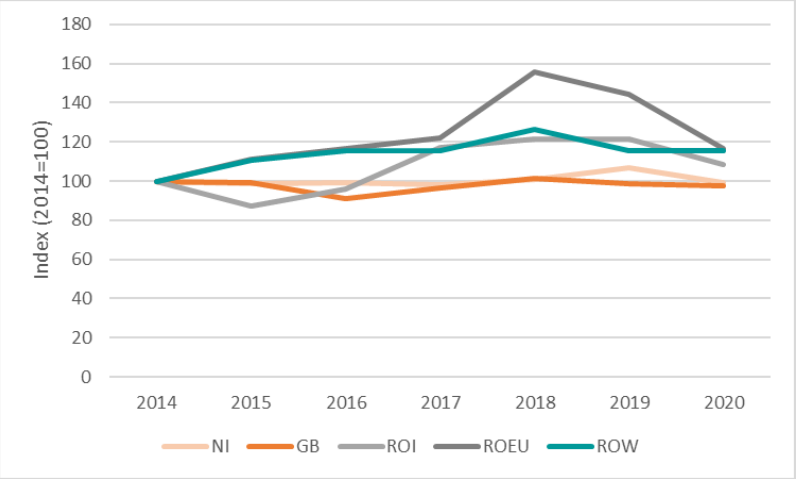
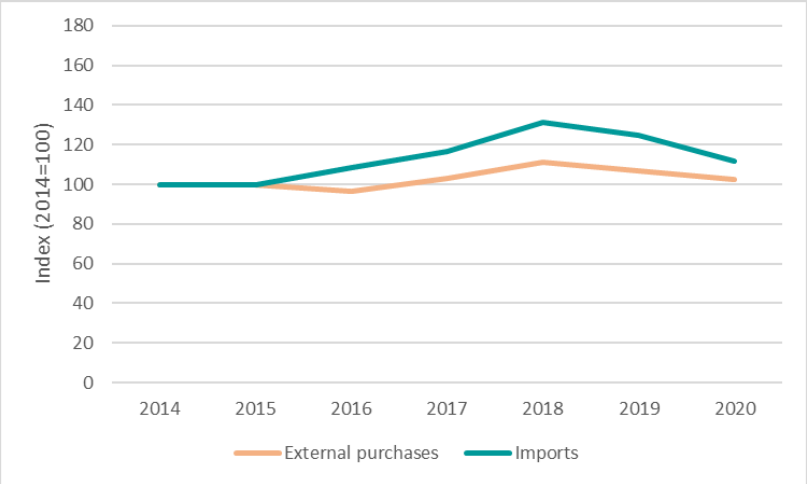


Figure 2b: External purchases and imports 2014-20 (2014=100)



Comparing sales and purchases by broad market (Figure 3) shows that, perhaps unsurprisingly, the highest sales and purchases are made within NI, but the ratio of purchases to sales is lower than in other markets where they are much closer in value.

There are also some contrasting trading trends with the two closest markets of GB and ROI. GB is the most important market for sales and purchases for NI firms but post-2016 purchases from GB have been consistently higher than sales there annually, while throughout the period the opposite is true for the ROI, where sales are higher than purchases. There are also emerging indications of a greater importance for the ROI market, particularly for sales (Figure 4). Post-2016 the value of sales to the GB market has dropped with sales to the ROI market subsequently increasing, although there has not been a like-for-like replacement. The difference in the value of sales between the two markets has dropped from a peak of £11 billion in 2016 to £6 billion in 2019. The same trend is not observed for purchases; those from GB have

been consistently higher than from the ROI market and the gap has remained more consistent over the period.

Figure 3: Sales and purchases by destination 2014-20

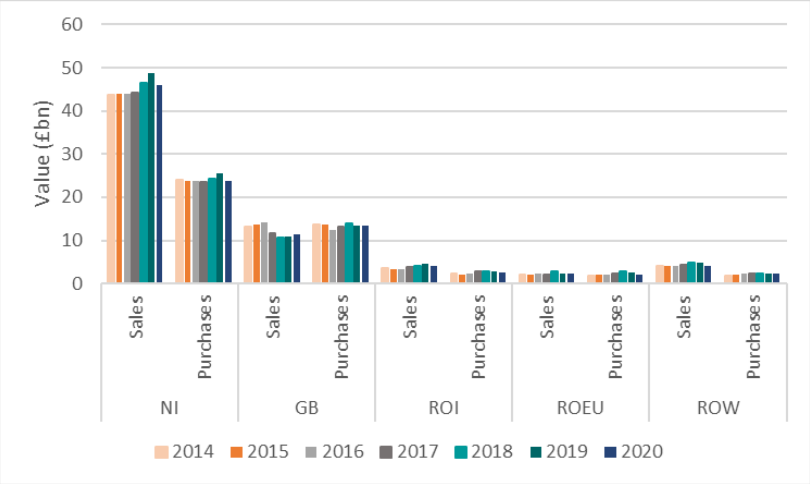
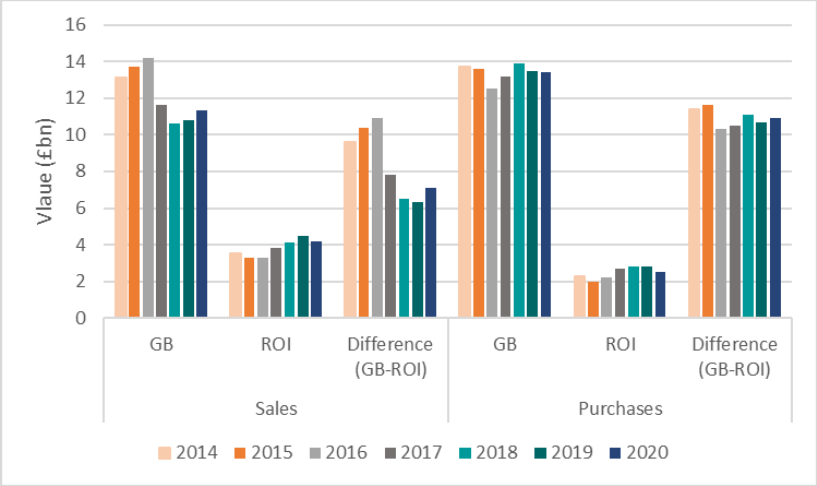


Figure 4: Sales and purchases GB and ROI 2014-20



What we found

Sectoral analysis: The majority of sales in NI are not from 10X sectors but they constitute 80% of external sales in 2020

NI's current economic strategy, "A 10X Economy" (DfE, 2021), is based on prioritising specific strategic clusters, namely: Digital, ICT and Creative; Fintech/Financial services; Life and Health Sciences; Agri-tech; and Advanced Manufacturing. To this end we generated sectoral variables approximating the 10X sectors but, due to risk of disclosure, analysis could largely only be undertaken by combining them. The results, based on unweighted firm-level analysis, showed that the majority of sales in NI in 2020 are not from 10X sectors (Figure 5). They do, however, constitute 80% of external sales in 2020 (Figure 6), with 17% of those from Digital and Creative industries and the remaining 63% from the other 10X sectors.

Figure 5: NI sales by 10X sectors 2020

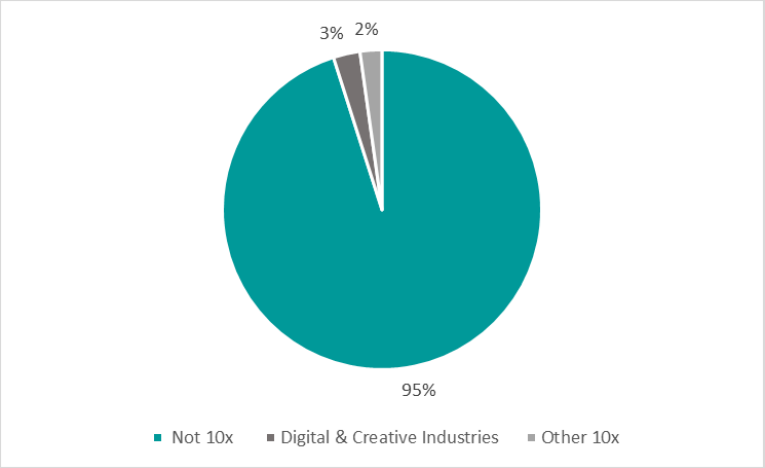
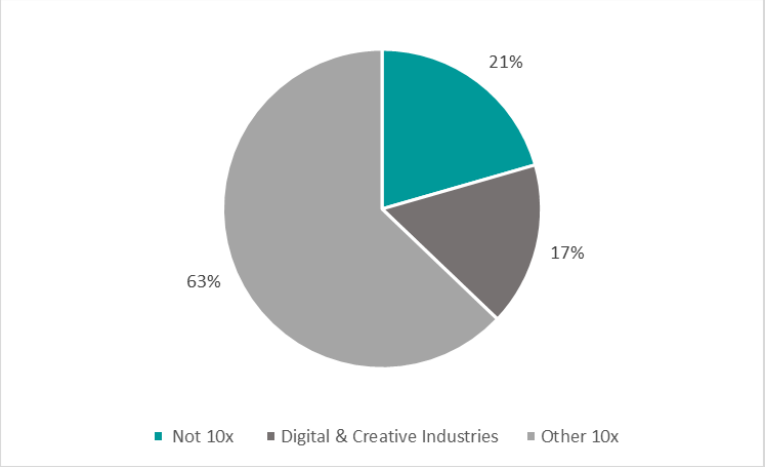


Figure 6: External sales by 10X sectors 2020



As with sales, the majority of purchases in NI are also not from 10X sectors (Figure 7). In contrast to external sales, however, 10X sectors account for around just one quarter of external purchases (Figure 8), indicating that the 10X sectors are primarily outward-focused by sales only.

Figure 7: NI purchases by 10X sectors 2020

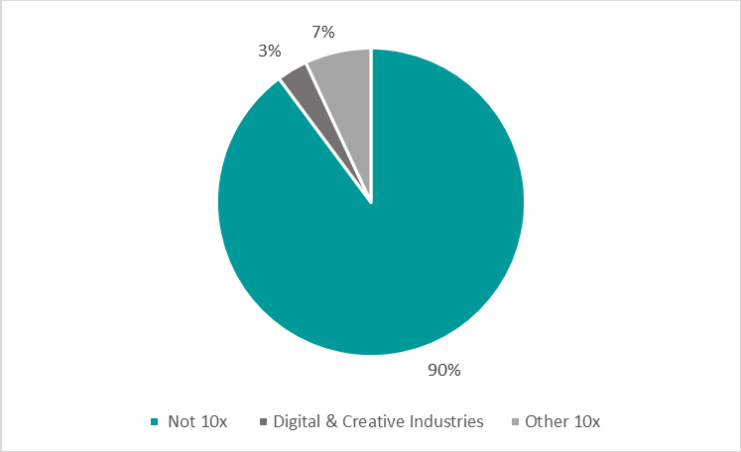
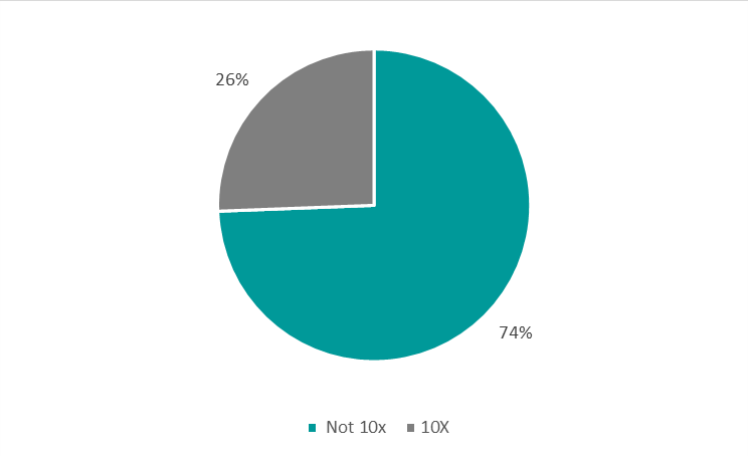


Figure 8: External purchases by 10X sectors 2020

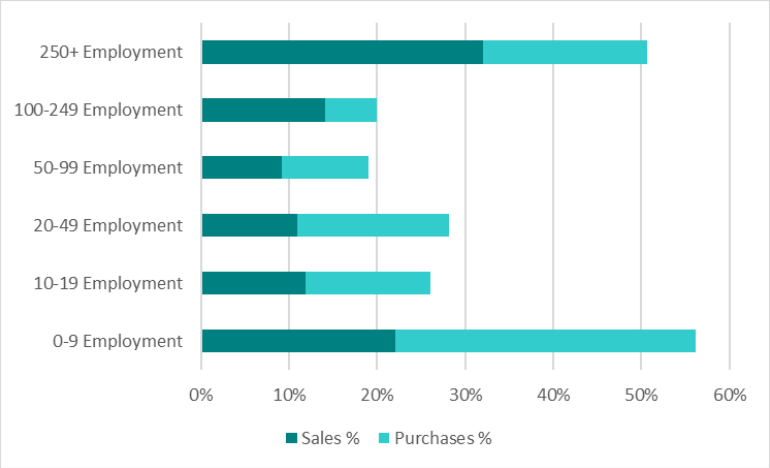


Size analysis: The largest firms make the biggest individual contribution to sales but micro-firms account for the highest share of purchases

Analysis by employment sizeband shows that the largest firms (with 250+ employees) make the biggest individual contribution to NI sales, accounting for around one third. In contrast, micro-firms account for the largest share of purchases from the NI market, at also around one third (Figure 9). When the sizebands are combined into micro (0-9 employees), small/medium (10-249 employees) and large (250+ employees):

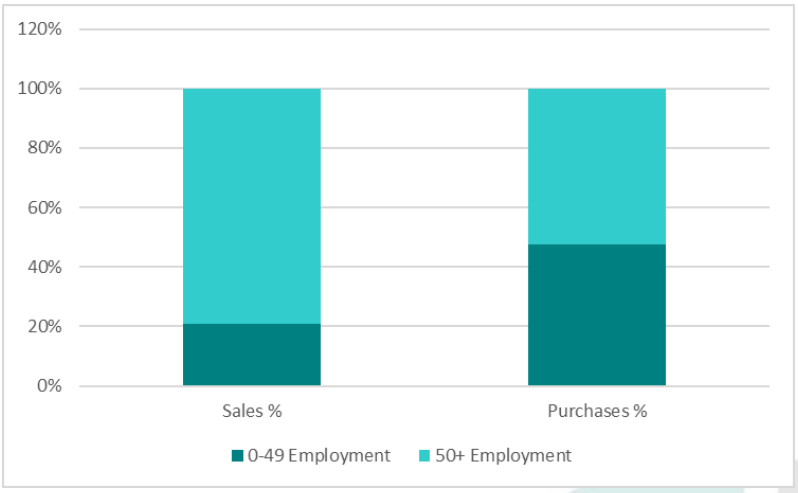
- the small/medium firms account for half of both sales and purchases
- micro-firms account for 20% of sales but 30% of purchases
- large firms account for 30% of sales but 20% of purchases.

Figure 9: NI sales and purchases by employment size-band 2020



Unsurprisingly, medium and large firms (with 50+ employees) account for the majority of external sales from NI, at around four fifths. As identified above, the smallest firms (<50 employees) are again more important in terms of purchases, accounting for just under half of all external purchases. In terms of their respective trade balance for external sales, larger firms have a trade surplus while smaller firms have a trade deficit.

Figure 10: External sales and purchases by employment size-band 2020

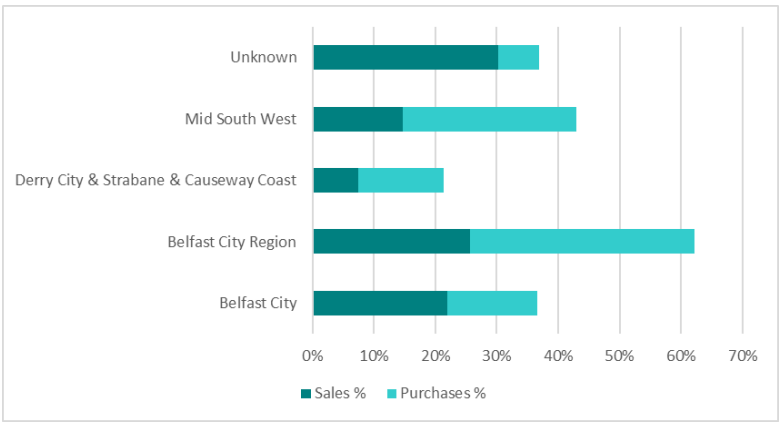


Geographic analysis: The Belfast City region alone accounts for one quarter of all NI sales and 37% of purchases

The 10X Strategy also has an emphasis on place (DfE, 2023) to help determine the best sub-regional economic approach. To this end we have analysed NI sales and purchases by the City Deal region areas (see endnote 1). It shows considerable variation across the regions for both metrics: excluding the unknown category, those in the Belfast City region account for the largest individual shares of both NI sales and NI purchases, at around one quarter of sales and 37% of all NI purchases. In contrast, Derry City and Strabane and Causeway Coast and Glens combined account for the least, at 8% of NI sales and 14% of NI purchases.

For each of the regions, the value of NI sales exceeds that of NI purchases. Due to small counts for some of the City Deal regions it was not possible to replicate the analysis for external sales or exports.

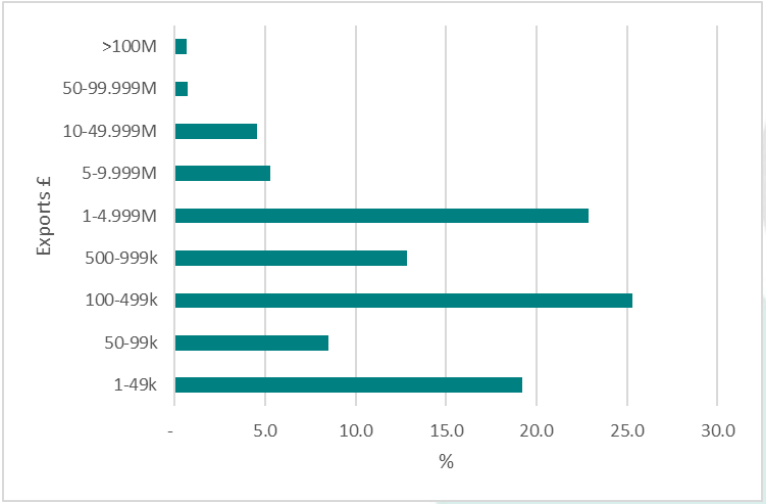
Figure 11: NI sales and purchases by City Deal region 2020



Export intensity: The majority of firms sell less than 30% of sales in export markets. Less than 1% of firms sell £100 million or more to export markets

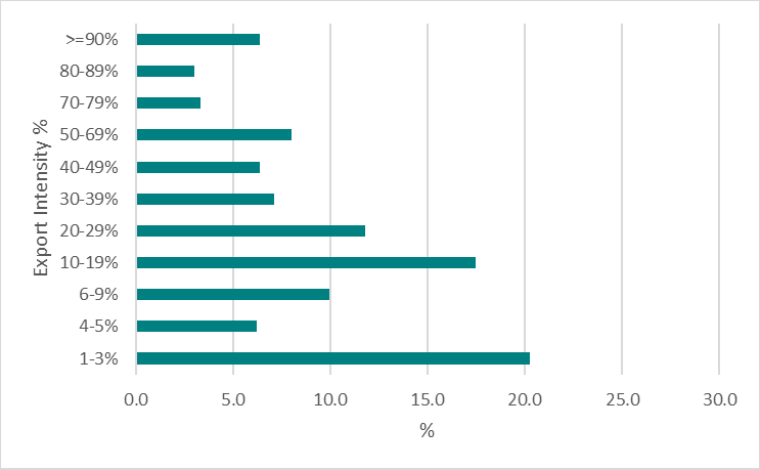
The prevalence of exporting can be measured in terms of the monetary value of export sales and also by measuring these sales as a share of turnover, known as export intensity. The latter controls for turnover size and therefore provides a more standardised analysis of the degree of importance of exporting to the firm. One quarter of those that export sell between £100,000 – £499,000 in export markets, a further 23% sell between £1 million – £4.99 million, and 20% sell between £1,000 – £49,000. It would be expected that the value of export sales would vary across firms, with higher values concentrated in a few firms at the top end. Combining the categories indicates that two thirds of firms export less than £1 million. Of the third selling more than £1 million in export markets, the majority sell less than £5 million. At the very top end, less than 1% of firms sell £100 million or more to export markets.

Figure 12: Export sales by export size-band 2020



As indicated above, measures of export intensity show the degree of importance of export sales to the firm, measured as a share of turnover. Figure 13 shows that for more than one fifth of exporting firms, exports comprise less than 4% of total turnover. In fact, for two thirds of exporting firms, exports comprise less than 30% of turnover. Just one fifth of exporting firms sell more than half of their turnover in export markets. At the top end there is a group of firms whose exports comprise 90% or more of turnover: this small group of highly concentrated exporters account for 6% of all exporters.

Figure 13: Export intensity by export size-band 2020



Regression analysis

Exporting: Smaller firms more likely to export in general but the largest firms are associated with high intensity exporting

The results from the probit analysis on the probability of being an exporter (Table 1: Column 2 - only statistically significant results displayed) showed that the probability was higher for smaller firms. Although perhaps unexpected, this finding may reflect the importance of the ROI market for exporting, particularly among smaller local firms. There was no statistically significant impact from turnover size or productivity.

Of the 10X sectors, those in Digital and Creative and Life and Health Sciences had a higher probability of exporting compared with those in non-10X sectors. Life and Health Sciences in particular was strongly associated with exporting. Of the City Deal regions, only the Mid South West was statistically significant, with firms there less likely to export compared to Belfast City (the base case).

For those with a high export intensity, i.e. export sales>90% of turnover (Table 1: Column 3), the results were quite similar. Although high intensity exporting also had a negative relationship with firm employment size it was positively associated with higher turnover per employee, so essentially the higher productivity firms. Furthermore, when size was disaggregated into discrete categories, high intensity exporting was associated with the largest firms (those with 100-249 employees, and 250+ employees) while at the smaller end, those with 10-19 employees had a lower probability of high intensity exporting compared to micro-firms (those with <10 employees) (Table 1: Column 4). High export intensity was also associated with the Life and Health Sciences sector and Advanced Manufacturing and Engineering.

Running the analysis for micro-firms shows that the larger micro-firms and those with higher productivity (turnover per employee) had a higher probability of being exporters. Those in the Life and Health Sciences sector were also more likely to be exporters than micro-firms in non-10X sectors.

Importing: Lower productivity firms and those in Wholesale and Retail more likely to import

The characteristics associated with the probability of being an importer were quite different to that of exporters (Table 2: Column 2). Although those of a smaller size also had a higher probability of being importers, so did those with lower turnover per employee. Companies and public corporations were more likely to be importers than those of other legal status. Based on the standard industrial sectors, those in Wholesale and Retail were more likely to be importers than Agriculture (the base case). This was the only statistically significant result for sectors. Of the City Deal regions, only those allocated as unknown (due to lack of postcode – see endnote 2) had a higher probability of being an importer than those in Belfast.

The results for high import intensity were similar (Column 3). The key differences were that, again, high intensity was associated with higher productivity firms (turnover per employee). Of the 10X sectors, those in Life and Health Sciences also had a higher probability of high import intensity compared to non-10X sectors.

Exporting and importing: Differences observed depending on whether exporting was undertaken on its own or combined with importing

Similar analysis was run with the dependent variables reflecting the combinations of export and import status. The results in Table 3 provide the signs only for those variables which were statistically significant (no sign indicates it was not significant in that model). Notably, the models for those who both export and import, and those who import only, are quite similar.

Those engaged in both exporting and importing (Column 2) were larger in employment size, had higher turnover per employee and higher wage costs. However, they had lower productivity (Gross Value Added (GVA) per employee). When size was broken down into discrete categories, only those with 10-19 employees had a higher probability of both exporting and importing compared to micro-firms. The other sizebands had a lower probability of being engaged in both activities than micro-firms. Those in three of the 10X categories (Digital and Creative, Advanced Manufacturing and Life and Health Sciences) were more likely to export and import compared to non-10X sectors. Two of the City Deal regions (the combined Derry City and Causeway Coast, and Mid South West) had a higher probability of both exporting and importing compared to those in Belfast City.

As indicated, the model for importers only was similar (Column 4). A key difference was the significance of the company status variables, with companies, public corporations and central and local government more likely to only be involved in importing. Of the 10X sectors, Agri-tech and Advanced Manufacturing were less likely to only be importers compared to the non-10X sectors.

Finally, those who only export (Column 3) were found to have higher productivity (GVA per employee), higher turnover per employee and higher wage costs. They were also more likely to be in Agri-tech.

Sales intensity: Smaller firms and publicly-owned selling to local NI market; Agri-tech associated strongly with exports to the ROI

Analysing sales intensity to the five broad markets provides results broadly in line with expectations, hence results are not shown. Those selling more intensively to the NI market were either smaller firms or government-based (sole proprietors, partnerships, public corporations, central government and non-profits). The 10X sectors all had negative signs, suggesting lower sales to the NI market compared to non-10X sectors.

Those with 10-19 employees had a higher sales intensity to GB than micro-firms. The 10X sectors, except for Life and Health Sciences, all had a higher sales intensity to GB than non-10X sectors.

Those with 10-19 employees also had a higher sales intensity to the ROI than micro-firms. The 10X sectors of Digital and Creative, Agri-tech and Advanced Manufacturing and Engineering all had a higher sales intensity to the ROI than the non-10X sectors, with the strongest effect and significance for Agri-tech. Notably, there was a negative sign for high export intensity, suggesting that those with a high export intensity are not predominantly selling to the ROI market.

Sales to the ROEU and ROW had many similar results to that for the ROI, notably however there was no size impact. Quantile regression was also run on sales intensity by market. This was to understand whether those selling more intensively differed in characteristics to those selling less intensively. Results are not shown, as there was little difference across quantiles in terms of the sign or significance of variables for individual market destinations.

Exporting, productivity and wages: Higher productivity associated with larger firms and also linked to high export intensity

As a final step to analyse the relationship between exporting and productivity, and separately, exporting and wages, analysis was run with productivity and wages as dependent variables. Table 4 (Column 2) shows that exporting is associated with higher productivity (GVA per employee), but only when exporting is done on its own. In fact, exporters who also sell elsewhere (NI and/or GB) have lower productivity, with the exception of micro-firms that export and also sell elsewhere. Higher productivity is also associated with high export intensity and high external sales intensity.

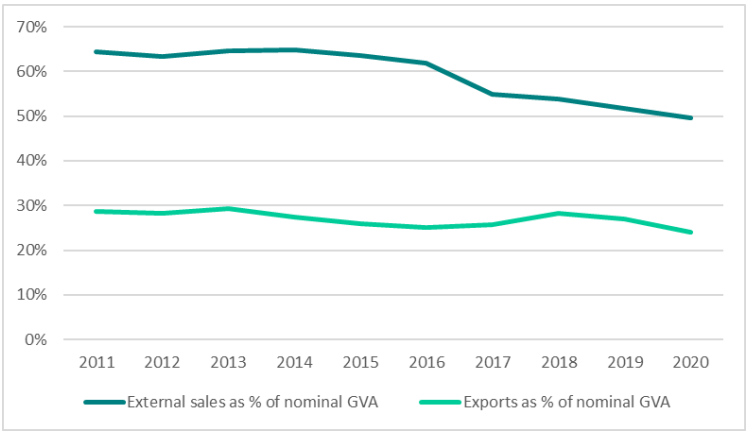
With regards to wages, which are proxied by employment costs per employee (Column 3) there was no relationship between exporting and higher wages. The only statistically significant result (although weak) was found for those with high external sales intensity. Higher wages were associated with three of the 10X sectors, with Agri-tech being the exception. The City Deal regions of Derry City and Causeway Coast combined region and the Mid South West both had lower wages than Belfast City (the base case). Meanwhile higher wages (and productivity) were associated with larger firms.

Why it matters

The type of sales and purchases data offered by the BDR initiative is significant for NI economic policymakers, who have a broad strategic goal to improve the export performance of the local economy. This goes back to the pre-EU exit Exports Matters action plan of 2016 (DETI, 2016). This plan identified little change in the relative performance of the NI economy in goods exporting compared to the other UK devolved regions for 2004-2008, with a subsequent declining performance in 2008-2014. This was attributed to the deep recession in the Republic of Ireland, which is the key export market for NI firms.

Figure 14 shows the total value of exports and external sales as a percentage of GVA for 2011-2020. The total value of export sales (which includes services as well as goods) has increased by £1.2 billion in this period to £10.3 billion. However, this value as a share of GVA has declined by four percentage points to 24%, suggesting growth in exports has fallen behind economic growth more generally. This trend is even more striking for external sales, where the total value has grown from £0.7 billion to £21.2 billion but the share of GVA has fallen by 14 percentage points. This sharper decline, particularly since 2016, highlights difficulties in sales to GB which have fallen by more than £3 billion since 2016.

Figure 14: The total value of exports and external sales as a % of GVA, 2011-2020



Better data resulting from the linking of the NIABI and BESES datasets on external sales and purchases by NI firms matters: this will allow an improved understanding and monitoring of performance by policymakers. At present, doing so is difficult below the aggregate levels of total values and total numbers of firms exporting. Using the BDR initiative, there is potential for understanding what makes a business more likely to export, how this impacts their performance over time, and what pathways might be taken to enhance this performance and persuade others to take similar steps into internationalisation.

What next?

In terms of the authors' analysis, a panel dataset of firms with data from 2014-19 will be further explored to analyse patterns of entry and exit in broad markets. This will enable us to better understand internationalisation strategies.

More generally, the planned enhancement of the dataset to include individual markets would be beneficial to understand patterns of diversification and the concentration of exporting by firms, thus offering further insights into the behaviour of businesses.

A further linking of the BESES data to the business demography data held in the Inter-Departmental Business Register (using the Enterprise Reference number) would allow further analysis by age and life-stage of the businesses. This would enable us to understand the role of exporting and importing in business survival and dynamism.

Appendix

Table 1: Probit for being an exporter, having high export intensity or being a micro-firm exporter

Probit - Exports	Is an exporter	High export intensity (exports >90% of turnover)	Micro-firm exporter
VARIABLES			
log employment size	-0.297**	-0.265**	0.899***
	(0.136)	(0.106)	(0.148)
log turnover per employee	0.005	0.186***	0.462***
	(0.059)	(0.050)	(0.075)
Sole Proprietor	-4.799*	-4.060*	-3.124
	(2.647)	(2.391)	(3.928)
Partnership/Limited Partnership	-5.854**	-4.318*	-2.664
	(2.755)	(2.405)	(3.930)
Non Profit	-7.040**	-5.533**	-3.028
	(2.772)	(2.508)	(3.979)
size = 10-19 Employment	-0.360	-0.396**	-
	(0.251)	(0.189)	-
size = 100-249 Employment	0.748	1.004**	-
	(0.573)	(0.434)	-
size = 250+ Employment	1.128	1.697***	-
	(0.721)	(0.556)	-
tenx = Digital & Creative Industries	0.928**	0.469	0.679
	(0.378)	(0.310)	(0.535)
tenx = Advanced Manufacturing & Engineering	0.460	1.529***	0.414
	(0.376)	(0.304)	(0.260)
tenx = Life & Health Sciences	3.478***	2.800***	3.176***
	(0.715)	(0.564)	(0.638)
city deal region = Mid South West	-0.822***	-0.815***	-0.058
	(0.270)	(0.213)	(0.241)
lnsig2u	2.694***	2.397***	1.710***
	(0.044)	(0.047)	(0.138)
Constant	-2.171	-2.757	-8.749**
	(2.704)	(2.428)	(4.055)
Observations	39,215	39,215	16,165
Number of firms (reporting units)	13,911	13,911	8,766

Table 2: Probit for being an importer and having high import intensity

Probit - Imports	Is an importer	High import intensity (imports >90% of turnover)
VARIABLES		
log employment size	-0.260**	-0.235***
	(0.125)	(0.086)
log turnover per employee	-0.098*	0.110***
	(0.052)	(0.038)
Company/LLP/Joint Venture	1.007**	0.789**
	(0.504)	(0.396)
Public Corporation	2.898***	1.614*
	(1.114)	(0.976)
tenx = Life & Health Sciences	-	0.997*
		(0.522)
sector = Construction	-0.072	-1.030***
	(0.650)	(0.362)
sector = Wholesale and Retail	1.363**	0.612*
	(0.614)	(0.317)
sector = Real Estate	-0.520	-1.439***
	(0.750)	(0.474)
sector = Professional, Scientific and Technical	0.216	-0.746*
	(0.680)	(0.399)
sector = Human Heath and Social Work	0.082	-1.113*
	(0.817)	(0.582)
city deal region = Unknown	0.955***	0.324**
	(0.225)	(0.162)
Insig2u	1.123***	0.987***
	(0.197)	(0.139)
Constant	-5.478***	-4.808***
	(0.920)	(0.587)
Observations	40,178	40,637
Number of firms (reporting units)	14,310	14,420

Table 3: Probit for exporting and importing status

Variables	Both Import and Export	Export but don't import	Import but don't export
log employment size	+		+
log turnover per employee	+	+	+
log gva per employee	-	+	-
log employee costs per employee	+	+	+
company/LLP/Joint Venture			+
public corporation			+
central government			+
local government			+
size = 10-19 Employment	+		+
size = 50-99 Employment	-		-
size = 100-249 Employment	-		-
size = 250+ Employment	-		-
tenx = Digital & Creative Industries	+		+
tenx = Agri-Tech		+	-
tenx = Advanced Manufacturing & Engineering	+		-
tenx = Life & Health Sciences	+		+
city deal region = Derry City & Strabane & Causeway Coast & Glens	+		+
city deal region = Mid South West	+		+
city deal region = Unknown	-		-

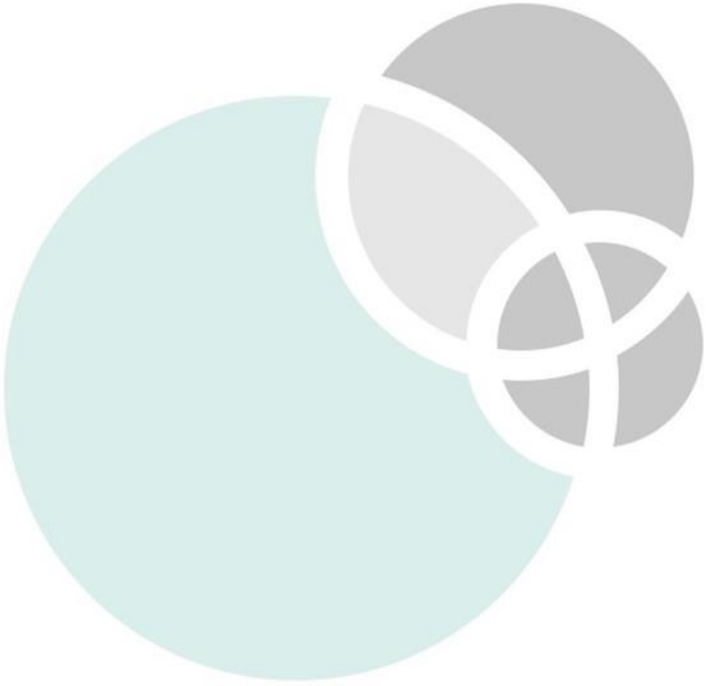


Table 4: OLS for productivity and wages

VARIABLES	GVA per employee	Employment costs per employee
sole proprietor	-0.199	-0.601***
	(0.175)	(0.070)
partnership/limited partnership	-0.170	-0.418***
	(0.144)	(0.057)
public corporation	0.748	0.590***
	(0.462)	(0.200)
central government	-1.409***	0.347*
	(0.462)	(0.200)
non profit	-2.934***	-0.095
	(0.159)	(0.066)
size = 10-19 employment	0.285***	0.144***
	(0.102)	(0.036)
size = 20-49 employment	0.235**	0.196***
	(0.100)	(0.037)
size = 50-99 employment	0.125	0.139***
	(0.105)	(0.039)
size = 100-249 employment	0.324***	0.216***
	(0.115)	(0.042)
size = 250+ employment	0.245*	0.166***
	(0.133)	(0.051)
city deal region = Belfast City Region	0.181**	-0.047
	(0.081)	(0.034)
city deal region = Derry City & Strabane & Causeway Coast & Glens	0.108	-0.105**
	(0.110)	(0.046)
city deal region = Mid South West	0.137	-0.066*
	(0.086)	(0.036)
city deal region = Unknown	0.215**	-0.065
	(0.109)	(0.042)
only export (no NI or GB sales)	1.111*	0.204
	(0.599)	(0.185)
exports (but also may sell elsewhere)	-0.962***	0.067
	(0.266)	(0.087)
has high export intensity (>90%)	0.432***	-0.058
	(0.131)	(0.039)
has high external sales intensity (>90%)	0.146**	0.046*
	(0.074)	(0.025)
exports and imports to all markets	-0.077	-0.054***
	(0.053)	(0.017)
micro-firm that exports and imports to all markets	0.279**	-0.032
	(0.142)	(0.047)
tenx = Digital & Creative Industries	0.158	0.269***
	(0.110)	(0.045)
tenx = Agri-Tech	-0.158	0.037
	(0.120)	(0.050)
tenx = Advanced Manufacturing & Engineering	0.130*	0.174***
	(0.070)	(0.028)
tenx = Life & Health Sciences	-0.870***	0.351***
	(0.240)	(0.096)
Constant	3.671***	3.606***
	(0.136)	(0.049)
Observations	4,605	4,605
Number of firms (reporting units)	2,093	2,093

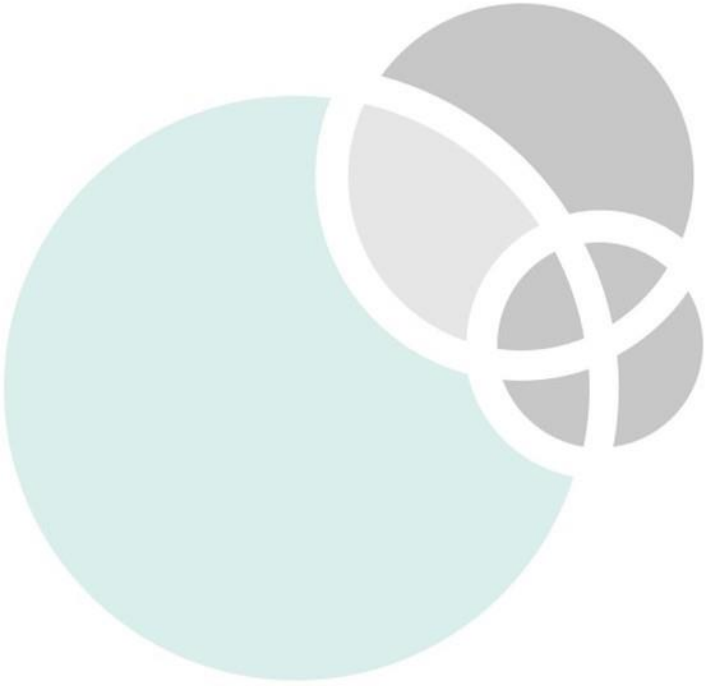
Acknowledgements

Administrative Data Research Northern Ireland (ADR NI) takes privacy protection very seriously. All information that directly identifies individuals will be removed from the datasets by trusted third parties, before researchers get to see it. All researchers are trained and accredited to use sensitive data safely and ethically, they will only access the data via a secure environment, and all of their findings will be vetted to ensure they adhere to the strictest confidentiality standards. The help provided by the staff of Administrative Data Research Centre Northern Ireland (ADRC NI) and the Northern Ireland Statistics and Research Agency (NISRA) Research Support Unit is acknowledged. ADR NI is funded by the Economic and Research Council (ESRC). The authors alone are responsible for the interpretation of the data and any views or opinions presented are solely those of the author and do not necessarily represent those of the ADR NI. NISRA's data has been supplied for the sole purpose of this project.

About ADR UK

ADR UK (Administrative Data Research UK) is a partnership transforming the way researchers access the UK's wealth of public sector data, to enable better informed policy decisions that improve people's lives. By linking together data held by different parts of government and facilitating safe and secure access for accredited researchers to these newly joined-up and de-identified data sets, ADR UK is creating a sustainable body of knowledge about how our society and economy function – tailored to give decision makers the answers they need to solve important policy questions.

ADR UK is made up of four national partnerships (ADR England, ADR Northern Ireland, ADR Scotland and ADR Wales), and the Office for National Statistics (ONS), which ensures data provided by UK Government bodies is accessed by researchers in a safe and secure form with minimal risk to data holders or the public.



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Endnote

1. City Deal regions were constructed from Local Government markers. It should be noted that the data within the BDR are based on reporting unit (i.e. head office) information, which means that all activity is coded based on the classification and location of the reporting unit. However, in reality, a business may have multiple sites or indeed a dedicated transport/logistics site from which goods are transported.

2. In some instances it is not possible to assign a business to a postcode. This is usually because the head office is outside NI. In such cases Local Government Districts are labelled as 'Unknown'.

Contact

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