Research Bulletin 26/1 | Exploring Industry-to-Industry Payment Flows Involving Northern Ireland

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Summary

This Research Bulletin provides an overview of experimental industry-to-industry payment flow data provided by the Office for National Statistics, primarily focusing on transactions involving Northern Ireland registered businesses.

Using anonymised monthly payment data processed through UK payment systems between January 2019 and May 2026, the analysis examines regional and industry-level payment patterns, including intra-regional transactions within Northern Ireland and also payments between Northern Ireland and the 11 regions in Great Britain. The findings demonstrate the analytical potential of high-frequency payments data to shed light on inter-industry linkages; however, the article also emphasises the experimental nature of the dataset and the need for some caution in interpretation.

Introduction

Financial transactions provide insight as to how industries are connected and provides valuable insight into the structure and functioning of a modern economy.

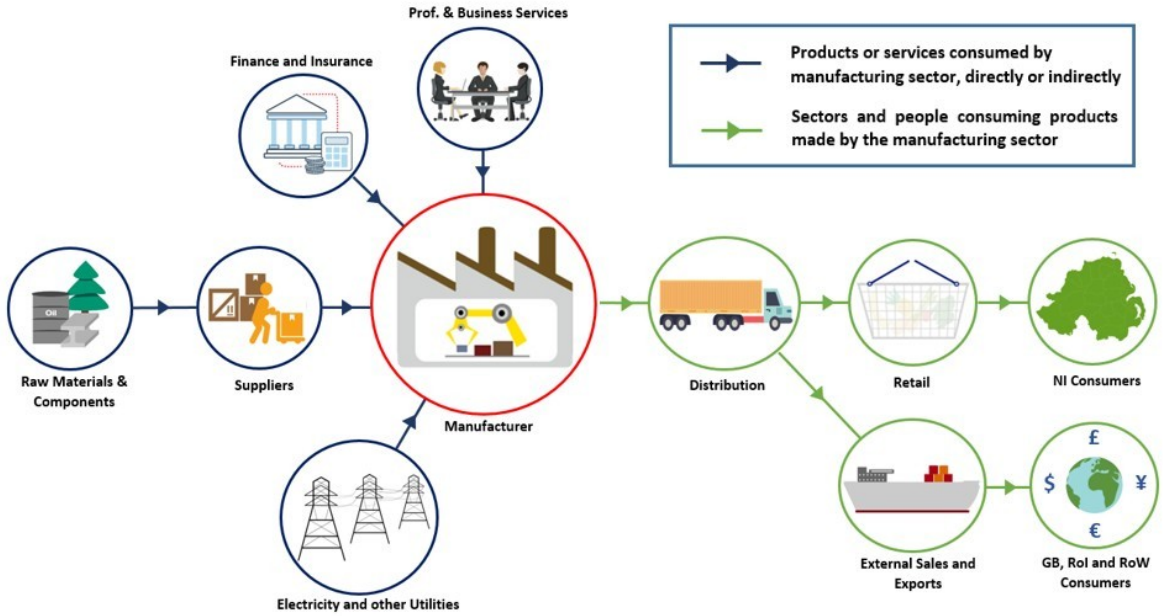
Recent Office for National Statistics (ONS) publications (in 2026) provided a wealth of new information on industry-to-industry money flows in the UK. This Research Bulletin has taken the detailed data from ONS and extracted findings specifically relating to Northern Ireland. Primary focus is on those industry transactions where Northern Ireland firms were recorded as either the payer, or the payee. The analysis therefore compares payment flows within NI, between NI and the 11 regions of Great Britain (GB), and in the reverse direction.

The monthly data from ONS covers the last six years, which experienced a number of major economic disruptions – including Covid-19 and associated restrictions.

Given the experimental nature of the data, results should be interpreted with appropriate caution. Nevertheless, the findings presented in this bulletin provide new and timely evidence on industry-to-industry relationships involving Northern Ireland, helping to inform understanding of the region's economic integration and resilience.

Using the manufacturing sector as an example, Figure 1 below provides a stylised illustration of how a manufacturing firm interacts with other sectors, to manufacture and assemble a product, and then have this item shipped and distributed, either for local customers or customers further afield. Raw materials, components, goods and services flow in a certain direction, with money for these items flowing in the opposite direction, as payment.

Figure 1: Stylised Illustration of Inputs and Outputs for a Manufacturing Firm



Source: Department for the Economy[i]

Economist Wassily Leontief, developed the input-output analysis method, earning him the Nobel Prize in Economics in 1973. Key to this, is the principle that the outputs of one sector flow into another sector as inputs.[ii] A manufacturing firm depends on multiple upstream and downstream sectors, and can trade within its own sector (i.e. with other manufacturing firms). Note that manufacturing has been used above for illustrative purposes, but naturally, each sector will have its own linkages with other industries, including services.[iii]

Data & Methodology

This article makes use of extensive and novel data developed by the Office for National Statistics (ONS), in collaboration with Pay.UK and Vocalink.[iv] Datasets can be found via Nomis, the official census and labour market statistics service and on the ONS website.[v]

The experimental dataset[1] captures anonymised payment flows between industries, classified using two-digit Standard Industrial Classification (SIC) codes, and across UK regions, at International Territorial Level 1 (ITL1). It provides information on the value of payments made between registered organisations over time.

[1] Experimental statistics are official statistics that are in the testing phase and not yet fully developed. See: Guide to experimental statistics - Office for National Statistics

The dataset covers an unweighted, anonymised and aggregated sample of payments processed through the Bankers' Automated Clearing System (BACS) and Faster Payment System (FPS), covering around 3.47 million organisations, including businesses, public bodies and charities.

The ONS designates this dataset as experimental. This reflects ongoing methodological development, rather than deficiencies in data quality. While the data should not be interpreted as precise measures of supply-chain dependencies, they provide a valuable and timely source for exploring inter-industry economic linkages.

While the dataset is extensive, it does not represent a complete ledger of all business transactions within the UK. For the most recent full calendar year, 2025, the sample accounts for more than 40% of total UK businesses.[vi]

A number of important limitations and caveats apply:

- The dataset only includes payments processed through the Bankers' Automated Clearing System (BACS) and the Faster Payments System (FPS), excluding payments involving overseas accounts which are typically processed via Society for Worldwide Interbank Financial Telecommunication (SWIFT) payment system.
- Transactions processed through the Clearing House Automated Payment System (CHAPS) transactions are also excluded. CHAPS, is a Bank of England facilitated system used primarily for high-value, time-critical payments. In 2024 CHAPS accounted for around 0.1 per cent of payments in the UK by volume and 88 per cent (£87.5 trillion) by value.[vii]
- The dataset captures bank transfers only, and excludes cash and cheque payments.
- Accounts linked to individuals have been removed.
- The data are not seasonally adjusted or corrected for inflation. Observed trends may therefore reflect seasonal patterns or price-level increases rather than changes in underlying activity.
- The number of transactions have been rounded to the nearest 100 for individual months, to ensure confidentiality.

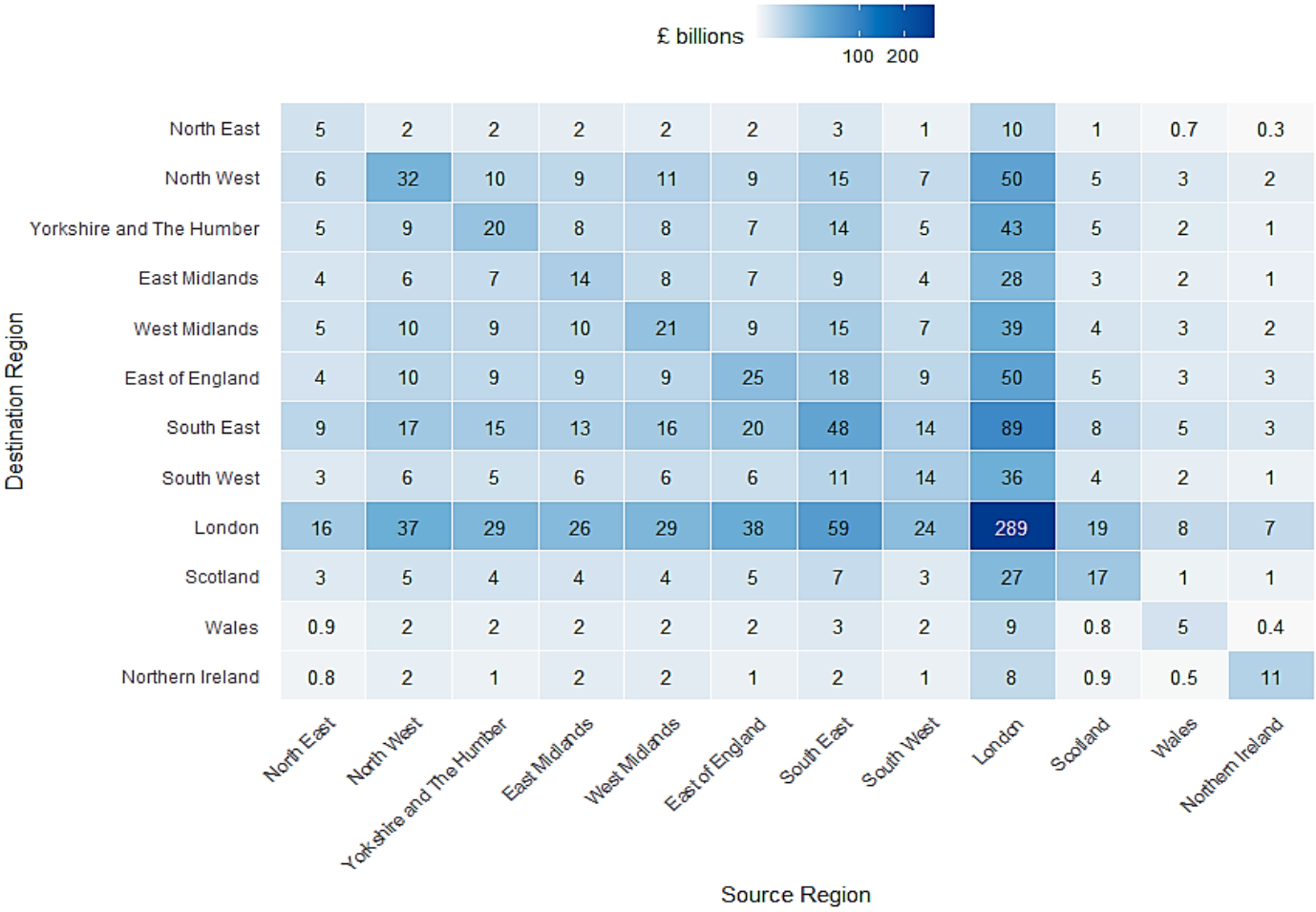
Industrial and regional classifications are assigned using Companies House registration, meaning that the dataset is susceptible to the "headquarter effect"; whereby, a company may be registered to a single address while operating across multiple regions of the UK. This may result in transaction flows being attributed to the registered location of a firm rather than the location where economic activity actually takes place.

Our analysis will focus primarily on Northern Ireland transactions; these being where NI-based industries are noted as either the payer, payee, or both.

Regional Payment Flows

Figure 2 shows a 'heat map' of payment flows between 12 UK ITL regions for the most recent year, January 2025-December 2025, with darker shading indicating higher transaction values. Northern Ireland businesses highest outflow payments in 2025 were to London (£7bn) while their lowest outflow payments were to North East (£0.3bn).

Figure 2: Value of Payments between Organisations in UK Regions (January 2025 - December 2025, £ billions)



Source: ONS, Industry-to-industry payment flows, UK - Office for National Statistics

Note: Payments data are derived by combining BACS Direct Debit, BACS Direct Credit and Faster Payment System payments. Payment flows involving organisations with unclassified or unknown regional information are excluded. Organisations are assigned to a single region based on their registered address, so results may be impacted by the 'headquarter effect'. Region misclassification can exist in the data. Figures are in nominal terms and are not adjusted.

It should be noted payment flows may not represent final traded goods between regions; rather, they reflect a sample of various transactions between industries across the UK (i.e. intermediate goods and services, supply chain linkages, etc). Over half of the value of all [UK] payments (55%) involve London-based organisations. ONS note that this concentration largely reflects the scale and centrality of London's financial services sector.

For all 12 regions, with the exception of Northern Ireland, London is the largest regional counterpart for both payment inflows and outflows. This higher proportion of internal regional spend in Northern Ireland indicates a greater concentration of transactions within the region. That is not to minimise the interconnectedness of NI with other UK regions however, as it's clear that billions of pounds of payments flow between Northern Ireland and the other 11 regions, and vice versa. As noted above, the figures do not represent a complete ledger of all business transactions within the UK, but do provide an indication of regional flows.

Industry Payment Flows

This section presents a selection of time-series charts showing monthly transaction values for a range of specific industry and regional pairings, involving Northern Ireland-registered businesses. The ONS datasets are large, but for the purposes of this article we focus on just a small selection of the payment flows recorded. Results are grouped into three variations, from a Northern Ireland perspective:

1. **Intra-NI payments**: NI→NI payments, where NI businesses transact with other NI businesses.
2. **Outflows**: NI→GB payments, where NI businesses make payments to businesses in GB.
3. **Inflows**: GB→NI payments, where GB businesses make payments to NI businesses.

Together, these charts provide insight into the diversity of payment patterns across different industries and geographic relationships.

In addition to the points set out in the Data & Methodology section above, the points below should also be considered when interpreting the industry level data:

- Statistical disclosure control is applied to protect confidentiality. Where transactions are deemed confidential, both transaction value and volume are denoted as [c].
- Industrial classifications and regional identifiers are assigned using Companies House data. In cases where SIC codes cannot be assigned accurately "00" is used to denote unknown industries.
- A high degree of granularity exists, with information available by two-digit SIC codes and individual months (January 2019 – May 2026) facilitating time-series analysis, involving different sectors and regions.

Across the nine examples below, in Figures 3-11, we can see that payment dynamics vary by industry and geography: some series are more smooth and stable than others, some are volatile with spikes, and others trend upward over time. The observed period of January 2019 to May 2026 is characterised by a series of economic shocks and regulatory changes to the UK's internal market. This includes: the UK's withdrawal from the European Union; Covid-19; impact of the war in Ukraine; the implementation of the Windsor Framework; the introduction of tariffs by the US, and the Iran War. [2]

[2] Some shocks can affect particular regions disproportionately. For example, a cyber incident in Autumn 2025 adversely affected vehicular manufacturing in the UK. ONS therefore specifically analysed the change in outflows from Manufacture of motor vehicles, trailers and semi-trailers industry in the West Midlands (a region where vehicle manufacture is prominent) between January 2019 and December 2025, showing the scale of the drop there, relative to other years. See: Industry-to-industry payment flows, UK - Office for National Statistics.

Figure 3, for example, shows NI→NI payments from Accommodation [SIC55] to Manufacture of food products [SIC10] appear acutely affected by lockdowns during Covid-19, with transaction values dropping dramatically in early 2020, through to summer 2021.

Similarly, Figure 4 shows NI→NI flows from Construction of buildings [SIC41] to Other mining and quarrying [SIC08]. These payments also appear to have been impacted by Covid-19 lockdowns in 2020, and possibly also supply issues relating to materials, in mid-2021.[viii]

Figure 5 shows NI→NI flows from Retail trade; except of motor vehicles & motorcycles [SIC47] to Wholesale trade; except of motor vehicles and motorcycles [SIC46]. The upward trend in transaction value may be partly accounted for by industry specific price rises, as transaction value is not corrected for inflation.[ix] Similarly, the data is not seasonally adjusted, which may account for seasonal variations in industry trends.

For pairings characterised by relatively low transaction values, sharp spikes may reflect large one-off or temporary outgoings, rather than regular payments.

ONS note that Northern Ireland and London have the highest counts of industries retaining most of their outflow value within the region. Northern Ireland records the highest number of industries (58) where more than half of the value of outflows are retained locally, followed by London (52) and Scotland (24). The other regions show much fewer instances. Examples of industries with high retention in Northern Ireland include "Electricity, gas, steam and air conditioning supply" (94% value retained) and "Legal and accounting activities" (89% value retained).[x]

Figures 6 to 8 show a selection of payments from Northern Ireland to various regions in Great Britain. For example, Figure 8 shows NI→London flows from Food & beverage service activities [SIC56] to Financial Service activities except insurance & pension funding [SIC64]. London's financial services sector plays a central role in the UK economy.

Figures 9 to 11 illustrates flows from various regions in Great Britain, to Northern Ireland. For instance, Figure 9 illustrates London→NI payments from Financial service activities; except insurance and pension funding [SIC64] to Computer programming; consultancy and related activities [SIC62]. It is worth noting that a number of leading ICT companies have a presence in Northern Ireland. Invest NI note that the region has become *"a global fintech hub, boasting an impressive ecosystem of specialist university research centres, home-grown innovators and international financial services leaders…. Belfast is a top Western European location for global fintech inward investment. (fDi Markets FT, 2025).*[xi]

NI→NI Industry Payments

Figure 3: NI, Accommodation [SIC55] → NI, Manufacture of food products [SIC10]

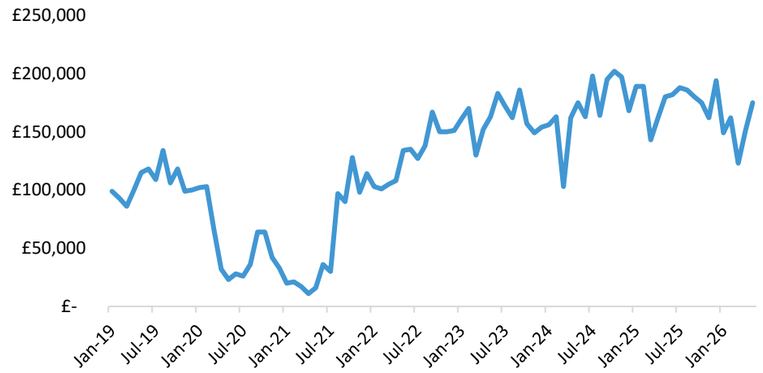


Figure 4: NI, Construction of buildings [SIC41] → NI, Other mining and quarrying [SIC08]

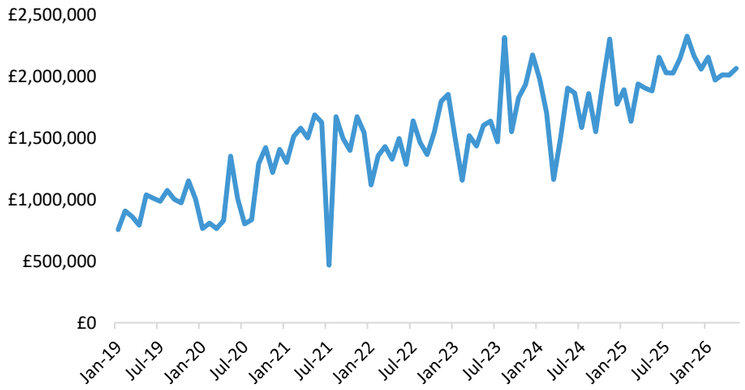
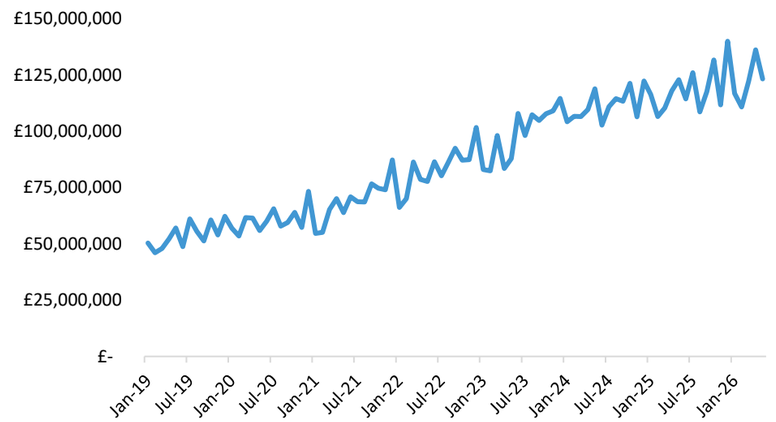


Figure 5: NI, Retail trade; except of motor vehicles & motorcycles [SIC47] → NI, Wholesale trade; except of motor vehicles and motorcycles [SIC46]



NI→GB Industry Payments

Figure 6: NI, Construction of buildings [SIC41] → South East, Specialised construction activities [SIC43]

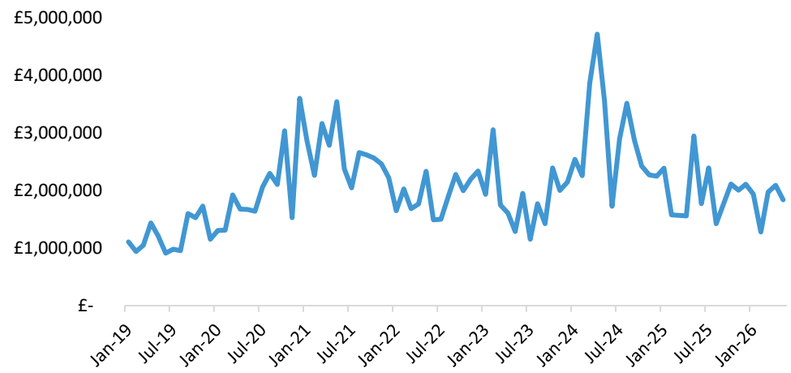


Figure 7: NI, Manufacture of Food Products [SIC10] → North West, Wholesale trade; except of motor vehicles and motorcycles [SIC46]

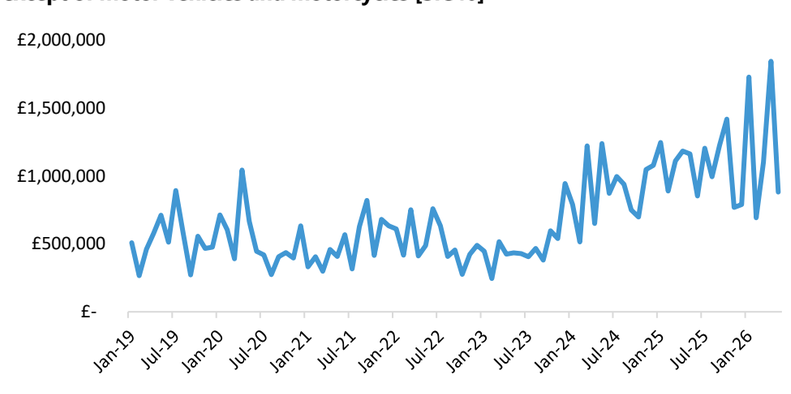
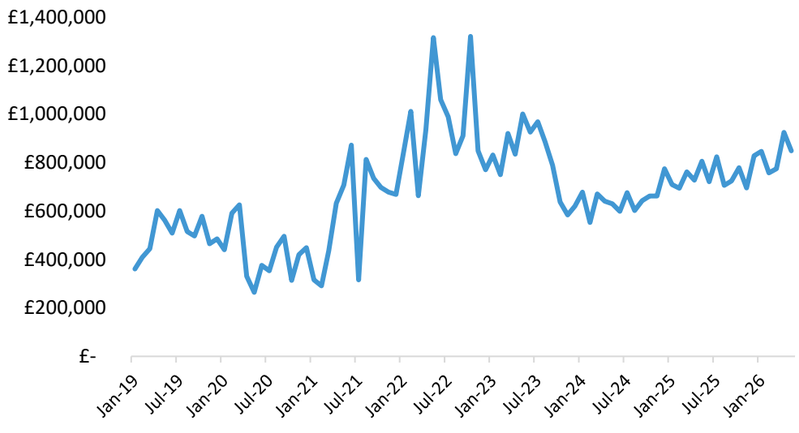


Figure 8: NI, Food & beverage service activities [SIC56] → London, Financial Service activities except insurance & pension funding [SIC64]



GB→NI Industry Payments

Figure 9: London, Financial service activities; except insurance and pension funding [SIC64] → NI, Computer programming; consultancy and related activities [SIC62]

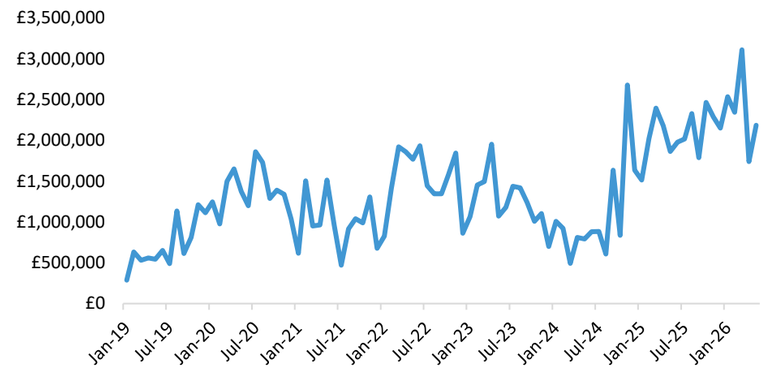


Figure 10: London, Accommodation [55] → NI, Retail trade; except of motor vehicles and motorcycles [47]

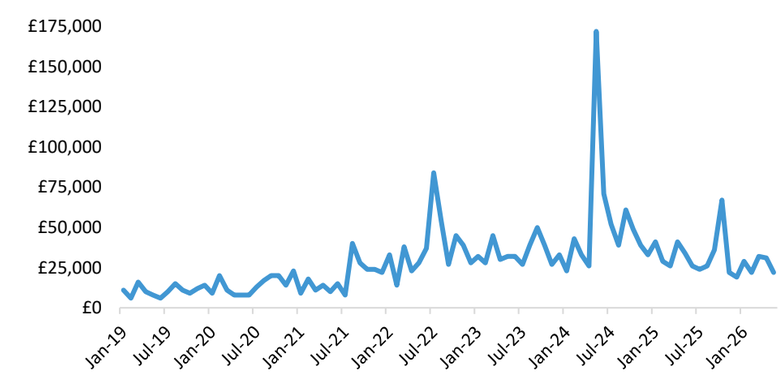
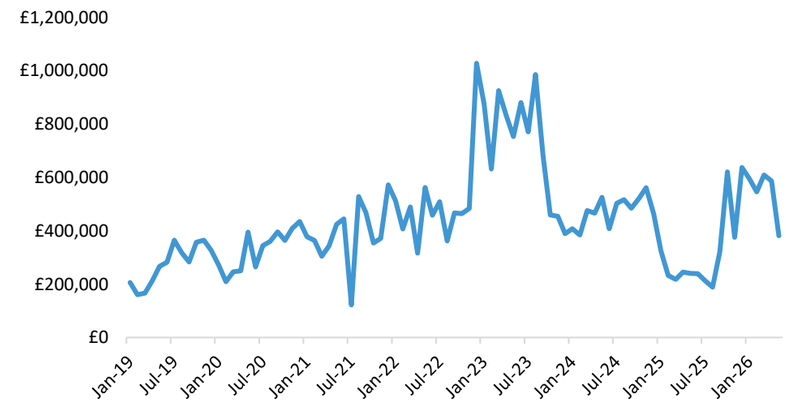


Figure 11: West Midlands, Land transport and transport via pipelines [49] → NI, Land transport and transport via pipelines [49]



Sources: NOMIS, Industry-to-industry payment flows, UK: experimental data - Nomis - Official Census and Labour Market Statistics; ONS, Industry-to-industry payment flows by region, UK - Office for National Statistics (16 July 2026 dataset).

Conclusion

Money acts as the 'lifeblood' of a modern economy, as the flow of payments between businesses supports the interdependent production relationships that underpin economic output.

The recent industry-to-industry flow publication from ONS, while experimental, provides a number of interesting results relating to Northern Ireland. It shows the relative importance of internal NI→NI supply chains, and shines a light on billions of pounds of transactions that Northern Ireland has with other UK regions, with London being dominant.

The industry-level time series data shows how payments from and to Northern Ireland companies were affected by recent economic shocks, including Covid-19 and associated restrictions. It also shows the resilience of the local supply chains, with recoveries taking hold over the time period analysed.

While the focus of this paper is to provide an accessible overview, the dataset may be useful for various applications. ONS have continued to collect and publish this data, which offers the potential to ascertain the impact of emerging economic shocks. The level of industrial and regional detail could assist policymakers in assessing the transmission of shocks and the sectoral reach of policy interventions and support. A regular and sustained release of the data offers scope to monitor and understand payment flows with Great Britain on an ongoing basis, alongside other available data.[xii]

Moreover, it is worthwhile noting the important research that is underway locally, related to supply chains. In November 2025, Ulster University officially launched TRACE (Technological Revolution towards an Agri-Food Circular Economy), a €5.9 million research project set to revolutionise the Products of Animal Origin (POAO) supply chain across Northern Ireland and Ireland. The project partners are University College Dublin, Northern Ireland Food and Drink Association, Donegal 2040 Strategic Development DAC, University of Galway and BioConnect Innovation Centre. Together, the partnership brings together expertise from academia, industry and business support across the Island of Ireland.

The project is focused on improving the Products of Animal Origin supply chain. Now just over one year into delivery, the project has moved from set-up and planning, into early implementation. TRACE is working with companies across the products of animal origin supply chain to explore practical ways that digital technologies, including sensors, data systems, artificial intelligence, blockchain and traceability tools, can help improve supply-chain visibility, reduce waste and support competitiveness. The project remains open to engagement from relevant businesses, particularly those interested in improving traceability, reducing waste or exploring how digital tools could support their operations. [xiii]

In October 2024, Queen's University Belfast secured a £6.25m funding award from UK Research and Innovation (UKRI), as part of its Building a Secure and Resilient World strategic theme, to model and re-imagine supply chains across the UK.[xiv] RiSC+ works closely with the Innovation Center Momentum One Zero, delivered as part of the Belfast

Region City Deal, to deliver research on modelling supply chain complexity for resilience in food, fashion and critical minerals. Updates on the project's work are available here: Risc+ | Reimagining Supply Chains.

The International Conference on Operations and Supply Chain Management (ICOSCM) celebrated its 20th anniversary in July 2026 with the theme 'Reimagining Supply Chains – Global Collaborations and Innovations under Uncertainty'. Queen's University Belfast hosted this milestone event, bringing together academic scholars and industry leaders from around the world.[xv]

NISRA continue to publish experimental results from their NI Economic Accounts Project. Detailed Supply-Use Tables (SUTs) were published in May 2026, including GDP estimates for 2022. Input-Output Analytical Tables and Multipliers for 2022 were published in June 2026.[xvi]

On a final note, for businesses in Northern Ireland, there is a range of advice and support to help them with regard to supply chain management. NI Business Info provides advice on growth through strategic sourcing, including critical factors to consider when choosing and evaluating suppliers, developing supplier relationships and improving supply chain efficiency. See: Growth through strategic sourcing | nibusinessinfo.co.uk and Improve your supply chain efficiency | nibusinessinfo.co.uk.

In June 2026, IntertradeIreland launched the SupplyChain+ programme. This all-island support programme is designed to help SMEs enhance their supply chain capabilities and become supplier-ready and more resilient.

Furthermore, the Invest NI Supply Chain Solutions (SCS) programme helps Northern Ireland manufacturers and internationally traded services businesses strengthen their supply chains and gain a competitive edge. The overall aim of SCS is to build a Northern Ireland supply chain ecosystem by helping companies to enhance value, reduce risk and improve competitiveness. The scheme provides a blend of specialist advice and financial support to help eligible businesses implement sustainable supply chain improvements and opportunities. For further information please see: Supply Chain Solutions | Invest Northern Ireland.

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[i] Charting Course for Economy - Economic Evidence Pack
[ii] CFI - Input-Output Analysis - Definition, Types, Table, Uses
[iii] Input-Output Economics and the Impact of Covid-19 | by Álvaro Corrales Cano
[iv] Industry-to-industry payment flows, UK - Office for National Statistics
[v] Industry-to-industry payment flows, UK: experimental data - Nomis - Official Census and Labour Market Statistics
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[vi] Industry-to-industry monthly payments, UK QMI - Office for National Statistics
[vii] UK Payment Markets 2025 Summary.pdf
[viii] Construction output in Great Britain - Office for National Statistics
Public sector contracts affected by rising building material costs - BBC News NI
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[xi] Northern Ireland for Fintech | Invest Northern Ireland
[xii] Overview of Northern Ireland Trade with Great Britain
[xiii] Agri-Food Supply chains across Ireland and Northern Ireland TRACE | SEUPB
TRACE (Technological Revolution towards an Agri-food Circular Economy) Homepage | Ulster University
[xiv] Queen's Secures £6.25m UKRI Award to Revolutionise UK Supply Chains | Queen's University Belfast
[xv] ICOSCM 2026 | Queen's Business School | Queen's University Belfast
[xvi] NI Economic Accounts Overview | Northern Ireland Statistics and Research Agency