

Article

Industry-to-industry payment flows, UK: 2017 to 2024, experimental data

An updated experimental UK industry-to-industry payment flows dataset based on anonymised and aggregated Bacs Payment System (Bacs) Direct Debit, Bacs Direct Credit and Faster Payment System payments.

Contact:
Card Payments team
card.payments.team@ons.gov.
uk
+442071120131

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1 . Main points

- Using Bacs Payment System (Bacs) Direct Debit, Bacs Direct Credit and Faster Payment Systems (FPS) payments data between January 2017 and November 2024, we derived a new experimental dataset of industry-to-industry payment flows within the UK that has the potential to provide granular insights about UK supply chains.
- This experimental dataset is an improvement to the initial article published in December 2023; the main improvements are the inclusion of FPS transactions and an increase in the sample of identified organisations from 117,000 to over 3 million, capturing over half of all organisations in the UK.
- Increased granularity allows us to publish granular industry payment flows at the 5-digit Standard Industrial Classification (SIC) level in addition to the original 2-digit SIC level.
- Insights from the experimental dataset show that the industries that have the highest proportion of water payments out of total payments, and therefore may be more affected by rising water prices than others, include those in the water industry, renting and leasing of other household and personal goods, and washing and cleaning of textile and fur products.
- Bacs and FPS payments are part of the larger UK payment methods landscape and the data used in the article are not exhaustive of all UK industry-to-industry payment flows.
- We invite user feedback on the experimental data, which remain under development, with further improvements expected over the next 12 months on data quality and sample coverage.

Results presented in this article are experimental and may be subject to revision. The dataset is in development and future releases might differ from the current version.

2 . Overview of industry-to-industry payments data

In the UK, payments between individuals and organisations can be made using one of the following methods: cash, cheques, payment cards and interbank transfers.

Interbank transfers can take place via one of the three UK payment systems, which cater for different transaction needs.

The first system is the Bacs Payment System (Bacs), which processes Bacs Direct Credits, widely used to pay salaries, benefits, dividends and supplier payments directly into bank accounts, and Bacs Direct Debits, which automate the collection of regular payments such as utilities and other bills.

The second system is the Faster Payment System (FPS), which allows real-time payments between UK bank accounts up to a certain limit.

The third system is the Clearing House Automated Payment System (CHAPS), which is the sterling high-value payments system operated by the Bank of England.

In December 2023, the Office for National Statistics collaborated with Pay.UK and Vocalink, respectively the operator of and infrastructure provider to the UK's retail interbank payment systems including Bacs and FPS, to publish [industry-to-industry payment flows data](#) for the first time. That data represented inter-industry transfers between 117,000 Bacs Service Users made on Bacs.

This article follows up on the initial publication and presents an improved dataset that includes transactions made on Bacs and, for the first time, FPS. The full sample of anonymised and aggregated organisations, including companies, charities and government organisations, is expanded to approximately 3,142,000 across the whole data time series. This is the number of distinct organisations we have identified by matching accounts names with publicly available data sources, primarily Companies House.

According to [business population estimates published by the Department for Business and Trade \(DBT\)](#), the number of organisations, including private businesses, central and local government, charities and other non-profit organisations, in the UK at the start of 2023 was 5,656,000 (see [Table 2 of the detailed tables](#)), indicating we have identified over half of all UK organisations within the payments data. This improvement in sample size allows us to substantially increase the granularity of industry information, with payment flows between [Standard Industrial Classification \(SIC\)](#) published at the 5-digit level now in addition to the original 2-digit level.

To increase the sample of organisations, we use a combination of deterministic and probabilistic data science techniques to identify and determine accounts on Bacs and FPS as belonging to organisations (as opposed to individuals) and their industry information. This process is discussed more thoroughly in the accompanying [Quality and Methodology Information report on industry-to-industry monthly payments](#).

Suppression because of [statistical disclosure control](#) is present in the data and reduces the number of interactions available. Nonetheless, across all industries, the published data represent over 93% of the available value at the 5-digit level and over 99% of the available value at the 2-digit level. The impact of disclosure control was similar for 3- and 4-digit levels, so we recommend aggregating from the 5-digit level to obtain these additional groups.

The sample is not an exhaustive list of all organisations making payments in the UK on FPS and Bacs. Payments involving overseas accounts are explicitly excluded, given they are processed via a completely different payment system, Swift. Every endeavour has been made to exclude personal accounts.

We intend to continue collaborating with Pay.UK and Vocalink to develop the data further, to further improve our methodology for identifying organisations and their industries, and by introducing a regional breakdown. We invite users' feedback over this experimental dataset and its development.

3 . Total payment flows

The experimental dataset in this article is based on the anonymised and aggregated interactions of approximately 3,142,000 organisations, including businesses, charities and government bodies. This allows for a granular exploration of the network of industries within the UK and the extent to which they interact.

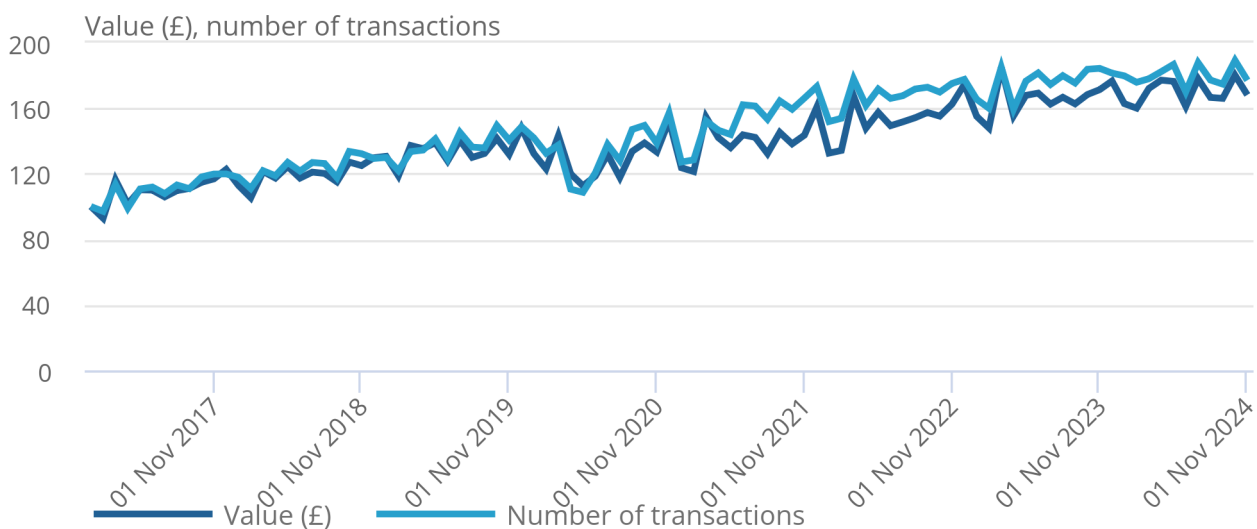
Inter-industry payments across the Bacs Payment System (Bacs) and Faster Payment System (FPS) between the in-sample organisations have increased in general over time, as shown in Figure 1. In Quarter 3 (July to Sept) 2024, the total value and number of Bacs and FPS industry-to-industry payments are, respectively, 67% and 65% (non-seasonally adjusted) higher than Quarter 3 2017.

Figure 1: Total value and number of transactions have been increasing over time

Total indexed value and number of Bacs Payment System (Bacs) and Faster Payment Systems (FPS) payments between industries, non-seasonally adjusted, UK, January 2017 to November 2024, January 2017=100

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Total indexed value and number of Bacs Payment System (Bacs) and Faster Payment Systems (FPS) payments between industries, non-seasonally adjusted, UK, January 2017 to November 2024, January 2017=100



Source: Office for National Statistics, Vocalink, Pay.UK

Notes:

1. Payments data are derived by adding Bacs Direct Debit, Bacs Direct Credit and FPS payments.
2. Figures are not seasonally adjusted and are in nominal terms.
3. Changes to payment preferences and entry and exit of organisations from the Bacs Payment System and Faster Payment System can influence long-term trends.

Before the start of the first coronavirus (COVID-19) lockdown in March 2020, the change in both the value and number of monthly transactions is relatively similar. However, after this point, the count of transactions increases marginally more than the value, indicating average payment has fallen. This contrasts with what the Bacs-only data published last year showed, likely reflecting the introduction of the lower-value FPS payments into the data and its rising use over time. Total [payment statistics for both payment systems \(PDF, 223KB\)](#) published by Pay. UK indicate the average value across individuals and firms of a Bacs transaction in 2022 was £1,252, and for an FPS transaction was £552.

Figure 1 shows the value and count of transactions falls substantially between March and April 2020, the period of the first lockdown. However, while slightly less pronounced, similar falls between March and April, which coincide with the end of the current and start of the new financial years, happen in other years. There are also relatively substantial drops between December and January every year, indicating seasonal trends in the data.

4 . Industry-to-industry payment flows

The industry codes in the dataset align with the [Standard Industrial Classification \(SIC\)](#). Aggregated payments data are published at the 2-digit SIC (SIC2) and 5-digit SIC (SIC5) level. A comparison of the new SIC2 data with the original December 2023 data shows broadly similar patterns, with the main differences arising from the inclusion of more organisations.

There remain some organisations that we have been unable to classify the industry of; these are grouped within the "Unknown" category and indicated by "00" and "00000" at the SIC2 and SIC5 level, respectively. See the [Quality and Methodology Information report on industry-to-industry monthly payments](#) for more information.

Figure 2 provides aggregated and anonymised SIC2 totals summed to the section level.

Figure 2: Wholesale and retail trade; repair of motor vehicles and motorcycles, and financial and insurance activities are the two biggest industries for payments made and received

Industry-to-industry Bacs Payment System (Bacs) and Faster Payment Systems (FPS) payments, non-seasonally adjusted, UK

Notes

1. Payments data are derived by adding Bacs Direct Debit, Bacs Direct Credit and FPS payments.
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The main development with this update to the industry-to-industry payment flows is the introduction of SIC5 data, which allows for the payments matrix in Figure 2 to be compiled for over 800 different industries identifiable at that level. This granular payments data could potentially be incorporated into wider national accounts processes, which is something the Office for National Statistics is exploring.

5 . Sectoral insights: water payments across industries in 2024

There has been substantial public interest recently in the water industry and the cost of water bills. Rising water costs may affect business operations and subsequently consumers.

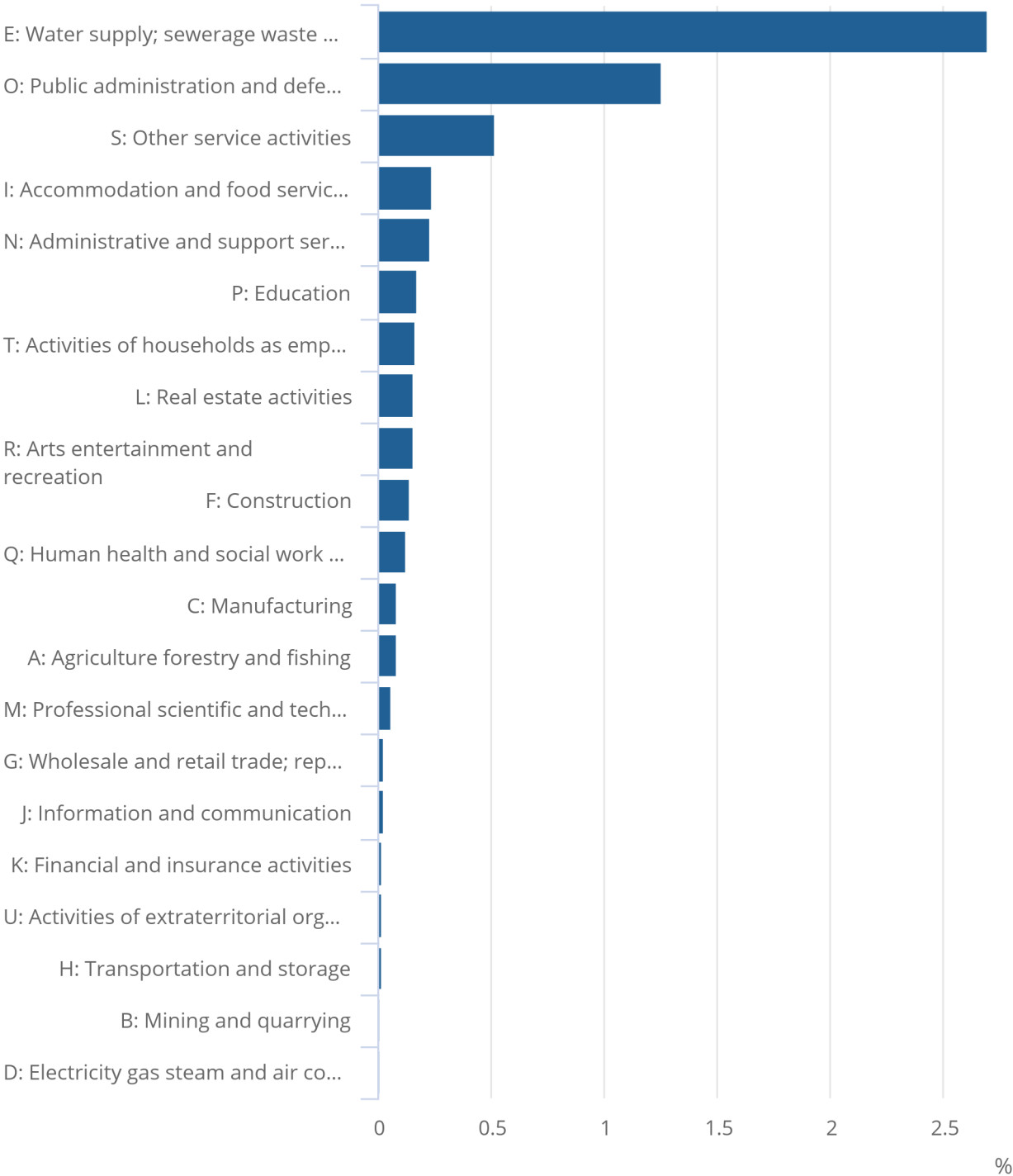
To show the potential and granularity of the data, we examine industries that may be the most affected by higher water prices by deriving a proxy for “water intensity” of different industries. To do this, for each Standard Industrial Classification (SIC) section, we calculate the share of payments made to the water industry excluding waste (defined as SIC5 codes 36000 and 37000) as a proportion of their total value of outgoing payments.

Figure 3: The most water-intensive SIC section in 2024 is water supply; sewerage, waste management and remediation activities

Total water intensity in 2024 by Standard Industrial Classification (SIC) sections, defined by the share of payments to water collection, treatment and supply, and sewerage (36000 and 37000 5-digit SIC codes) out of total payments, UK

Figure 3: The most water-intensive SIC section in 2024 is water supply; sewerage, waste management and remediation activities

Total water intensity in 2024 by Standard Industrial Classification (SIC) sections, defined by the share of payments to water collection, treatment and supply, and sewerage (36000 and 37000 5-digit SIC codes) out of total payments, UK



Notes:

1. The water intensity measure is calculated as the share of payments made to the water industry divided by total Bacs and FPS payments.
2. The water industry is defined as water collection, treatment and supply, and sewerage industries (5-digit SIC codes 36000 and 37000, respectively) rather than the entire water supply; sewerage, waste management and remediation activities industry (SIC section E), which includes additional waste and remediation activities.
3. Payments data are derived by adding Bacs Direct Debit, Bacs Direct Credit and FPS payments.
4. Industry misclassification can exist in the data.
5. Figures are not seasonally adjusted and are in nominal terms.
6. Changes to payment preferences and entry and exit of organisations from the Bacs Payment System and Faster Payment System can influence long-term trends.

Figure 3 shows that water, sewerage, waste, is identified as the most water-intensive industry in 2024. This is likely because of substantial within-sector payments, such as water utilities paying for water treatment and waste management services, reflecting operational interdependencies within the sector.

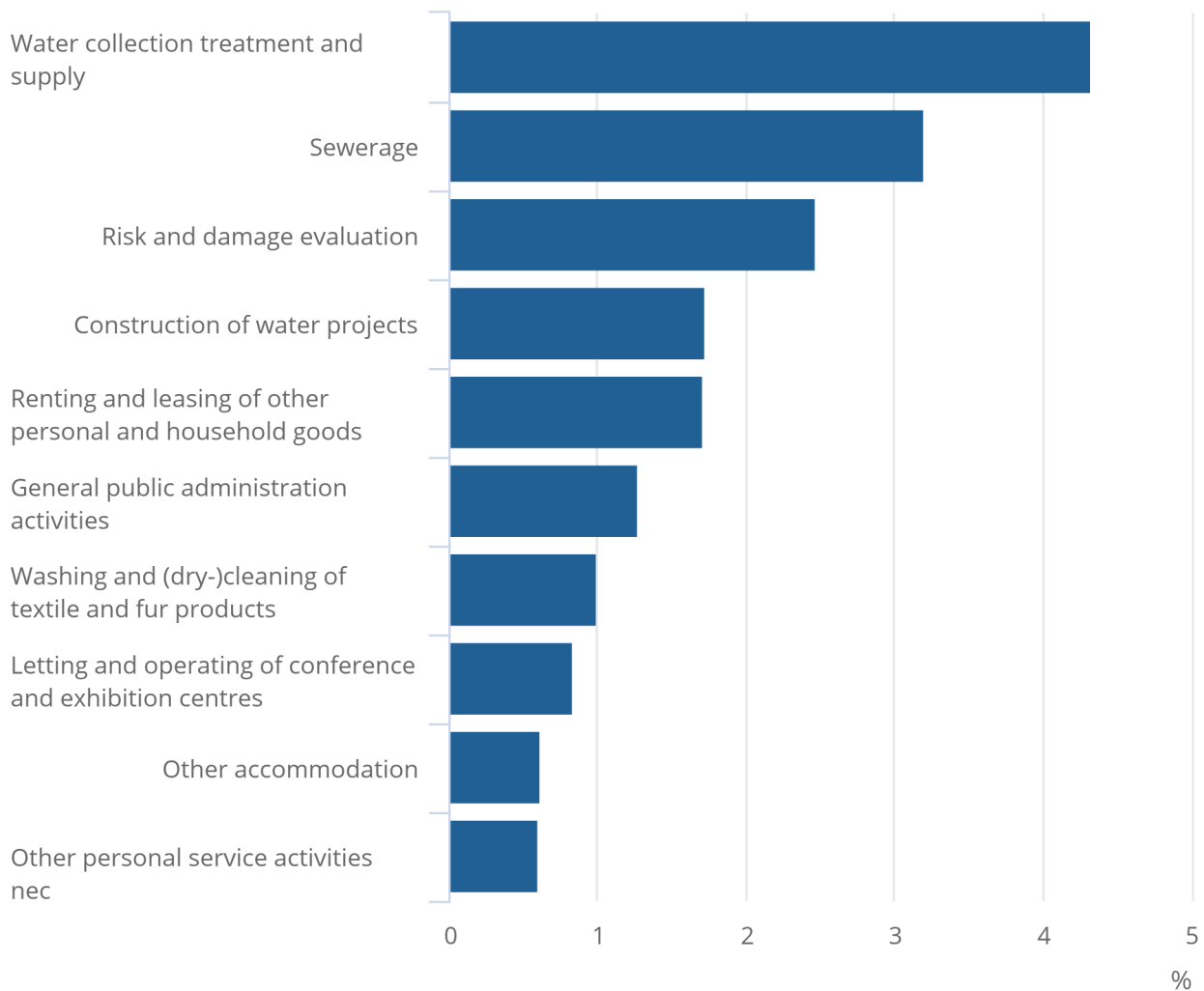
Public administration also appears to have high water payments, but this may reflect infrastructure investments and subsidies in addition to public sector water expenditure. Other services, accommodation and food, and administrative and support also rank highly in the proportion of payments made to the water sector. This suggests greater reliance on water usage within these industries, potentially driven by their operational or environmental requirements.

Figure 4: The most water intensive SIC5 industries include some outside the water industry

Total water intensity in 2024 by top Standard Industrial Classification (SIC5) industries, defined by the share of payments to water collection, treatment and supply, and sewerage (36000 and 37000 5-digit SIC codes) out of total payments, UK

Figure 4: The most water intensive SIC5 industries include some outside the the water industry

Total water intensity in 2024 by top Standard Industrial Classification (SIC5) industries, defined by the share of payments to water collection, treatment and supply, and sewerage (36000 and 37000 5-digit SIC codes) out of total payments, UK



Source: Office for National Statistics, Vocalink, Pay.UK

Notes:

1. The water intensity measure is calculated as the share of payments made to the water industry divided by total Bacs and FPS payments.
2. The water industry is defined as water collection, treatment and supply, and sewerage industries (5-digit SIC codes 36000 and 37000, respectively) rather than the entire water supply; sewerage, waste management and remediation activities industry (SIC section E), which includes additional waste and remediation activities.
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One particularly valuable feature of these data is their potential to provide insights at the most granular level. For instance, Figure 4 shows that the most water-intensive SIC5 industries are water collection, treatment and supply, and sewerage, with water payments accounting for 4.3% and 3.2% of their total payments, respectively, reflecting strong intra-industry dependencies.

Industries involved in water maintenance and investment such as risk and damage evaluation, and construction of water projects are also among the most water intensive. Furthermore, industries such as renting and leasing of other personal and household goods, and washing and (dry-)cleaning of textile and fur products transfer between 1% to 2% of their total payments to the water sector, indicating a notable reliance on water for their operations.

6 . Data on monthly industry-to-industry payments

[Industry-to-industry payment flows, UK, experimental data \(SIC2 only\)](#)

Dataset | Released 13 January 2025

The 2-digit Standard Industrial Classification (SIC) level datasets published alongside the UK industry-to-industry payment flows, 2017 to 2024: experimental data article.

[Industry-to-industry payment flows, UK, experimental data \(SIC5 only\)](#)

Dataset | Released 13 January 2025

The 5-digit Standard Industrial Classification (SIC) level dataset published alongside the UK industry-to-industry payment flows, 2017 to 2024: experimental data article can be accessed at the Nomis website.

7 . Glossary

Bacs Direct Credit

Bacs Direct Credit allows organisations to make payments by electronic transfer directly into payment services provider (PSP) accounts.

Bacs Direct Debit

Bacs Direct Debit allows organisations to electronically collect payments from their customers (both business customers and consumers) directly from their payment service provider (PSP) account for agreed amounts and on agreed dates.

Bacs payments data

Aggregated and anonymised Bacs Direct Debit and Bacs Direct Credit data.

Bacs Service User

A company, group of companies, charity, and so on, that uses one or more Bacs services for the clearing and settlement of Direct Debit and Direct Credit.

Faster Payment System

FPS is a payment system that allows for payments of up to £1,000,000, and can be used for individual payments, standing orders, forwarded dated payments and direct corporate access payments.

Payment service provider

An institution that offers payment services to customers, whether they are businesses or retail consumers, such as banks and building societies.

8 . Data sources and quality

We are developing an industry-to-industry flow of funds monthly indicator derived from aggregated and anonymised Bacs Payment System (Bacs) Direct Debits, Bacs Direct Credits and Faster Payment System (FPS) payments data between organisations.

Industry classification used in our indicator is consistent with the Standard Industrial Classification (SIC) 2007. This has been derived by applying a combination of deterministic and probabilistic approaches to match account names to Companies House and other information, meaning that some misclassification might be present in the current data. An "unknown" industry captures payments involving organisations for which it is not possible to assign a valid SIC code under our current approach.

We do not apply weights to the data and they are not directly comparable with other industry-to-industry statistics, macroeconomic indicators and payment statistics.

Figures presented in the dataset are not seasonally adjusted and are in nominal terms. This means that regular monthly patterns in payments are not adjusted for and trends in total value are not adjusted for price increases over time. It is possible that long-term trends are affected by changes in payment preferences, and sample composition can change over time because of entry and exit of organisations from the Bacs Payment System and use of interbank payments in general.

For more information on data sources and quality, see our [Industry-to-industry monthly payments Quality and Methodology Information \(QMI\)](#).

User feedback is invited on the experimental dataset and its development, please email card.payments.team@ons.gov.uk

9 . Future developments

The dataset used in this article is under development and in the next 12 months we aim to improve the quality of the experimental data by, where possible, increasing the sample size to include all Bacs and FPS payments between organisations, and developing regional breakdown.

10 . Related links

[Industry-to-industry monthly payments, UK QMI](#)

Methodology | Updated 13 January 2025

Quality and methodology information for UK industry-to-industry monthly payments, non-seasonally adjusted dataset, detailing the strengths and limitations of the data, and the methods used.

11 . Cite this article

Office for National Statistics (ONS), released 13 January 2025, ONS website, article, [Industry-to-industry payment flows, UK: 2017 to 2024, experimental data](#)