CREDIT PASSPORT®

Real-Time SME Credit Scoring: The Case for Systemic Adoption

Why portable, real-time credit assessment is becoming essential infrastructure for the SME economy — and what the evidence shows

2026

UK · Italy · Netherlands · Germany	**Open Banking · Moody's Analytics**	**Aligned with FIDA · PSD3 · Open Finance**

EXECUTIVE SUMMARY

Across the UK, the Netherlands, and Germany, the same structural failure is suppressing SME access to finance: not a shortage of capital, but a shortage of timely, reliable, portable information. Lenders cannot assess asset-light businesses efficiently on annual accounts. SMEs cannot present their creditworthiness to multiple lenders without repeating a slow, paper-heavy process. The result is a market that systematically under-serves the businesses that drive employment and economic growth.

The solution is not a new lending scheme or a further guarantee programme. It is an information infrastructure layer: a real-time, portable, standardised credit profile that any lender can access, any SME can own, and any financial institution, intermediary, or local authority can build services around. Regulators across the UK and EU have named this concept explicitly. The evidence from production deployment shows it works.

This paper sets out the scale of the problem, the evidence base for the solution, and the case for systemic adoption — drawing on data from the Bank of England, ECB, De Nederlandsche Bank, KfW, the British Business Bank, and independent market research.

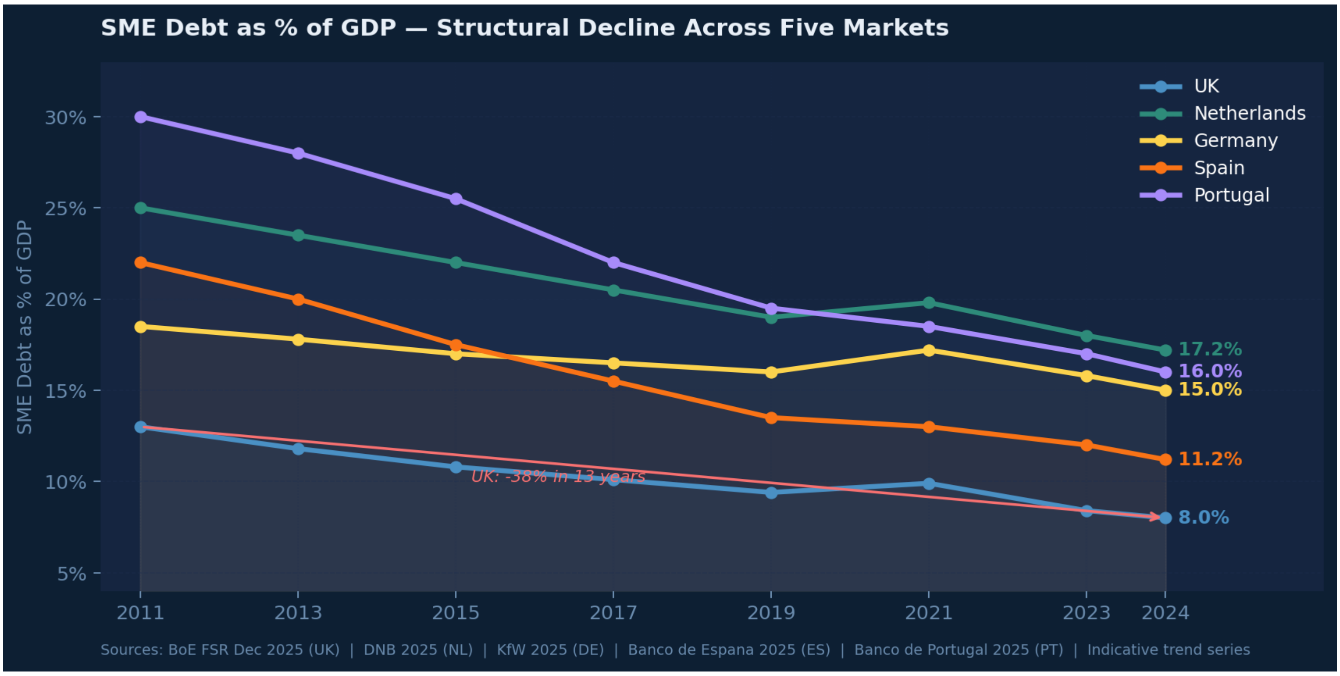
£65bn	**37.8%**	**27%**	**8%**
estimated UK SME credit gap	**German SMEs facing credit restrictions**	**NL fintech SME lending growth**	**UK SME debt as % GDP**
Allica Bank research, 2025	*KfW-ifo record high, Q4 2025*	*as banks retreat — DNB, 2024*	*down from 13% in 2011 — BoE FSR 2025*

Against this backdrop, Credit Passport® operates as a live, production-grade implementation of the portable SME credit file — processing real-time Open Banking data through Moody's Analytics modelling to generate scores, trend indicators, and actionable insights that lenders and SMEs can use immediately. With over 38,800 SMEs scored and 128 lenders actively using reports in the UK, the instrument has moved from concept to infrastructure.

1. The SME Finance Gap: Why Capital Alone Is Not the Answer

Small and medium-sized enterprises account for the majority of private-sector employment and GDP across every major European economy. Yet they remain systematically under-served by formal credit markets — not because lenders lack the capital to lend, but because the cost and difficulty of assessing SME creditworthiness makes small-ticket lending commercially unviable at scale using traditional tools.

The evidence across the UK, Netherlands, Germany, Spain, and Portugal is consistent: this is a structural market failure, deepening over time, and concentrated at the information layer. The following chart illustrates the decline across all five markets before the country-level analysis below.



1.1 United Kingdom

> *The stock of SME debt as a share of UK GDP has fallen over the past 15 years, from 13% in 2011 Q4 to 8% in 2024 Q4, despite the growth of challenger banks. This reflects both the small share of SMEs seeking external finance and historical barriers these firms face in accessing external financing.*
>
> **— Bank of England, Financial Stability Report, December 2025**

The Bank of England's 2024 survey of 2,885 UK SMEs — carried out with the Department for Business and Trade — provides a granular picture of where the market is failing simultaneously on supply and demand:

Demand suppression

- 77% of SMEs prefer to grow slowly rather than borrow to expand (BoE 2024 SME Finance Survey)
- A fifth of surveyed SMEs said they had underinvested in the preceding three years
- Of those who underinvested: 58% cited credit being too expensive; 55% could not borrow at a reasonable rate; 33% lacked sufficient collateral; 29% believed their application would fail
- 60% chose not to invest, prioritising cash reserves over borrowing

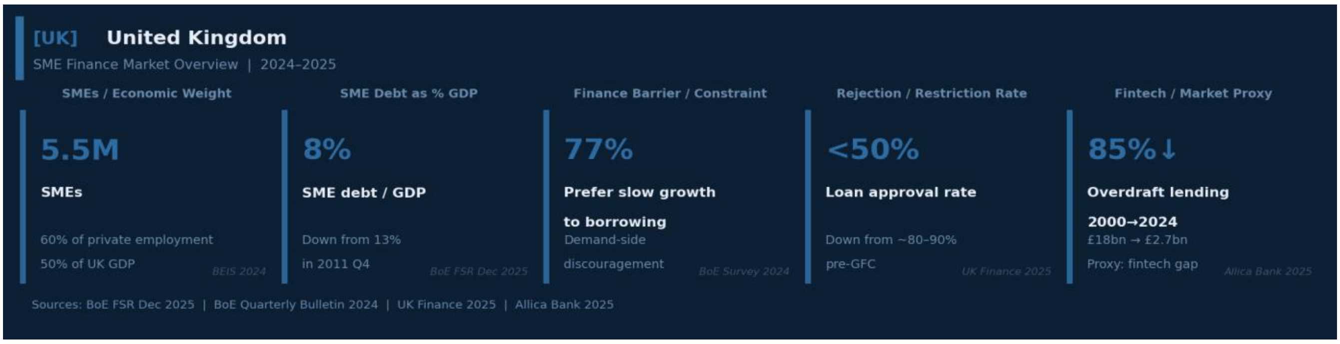
Sources: BoE Quarterly Bulletin 2024; BoE 2024 SME Finance Survey

Supply withdrawal

- SME loan approval rates: below 50% in 2024, down from ~67% in 2018–19, and 80–90% pre-GFC
- Gross bank lending to SMEs still roughly one-third below 2019 levels in real terms
- SME external finance application rate: fallen from 65% of businesses in the late 1980s to just 25% in 2022–24 — the lowest OECD has recorded
- Overdraft lending: collapsed from £18bn in 2000 to £2.7bn in 2024 — an 85% fall

Sources: British Business Bank 2025; Allica Bank 2025; UK Finance 2025

> *The UK now has the second-lowest ratio of business credit to GDP in the G7 — a structural weakness that constrains investment, productivity and long-term growth at the economy-wide level.*



1.2 The Netherlands

The Netherlands has approximately 1.4 million SMEs, accounting for around 70% of private-sector employment. The Dutch market is exhibiting the same structural pattern visible in the UK — traditional banks retreating from smaller loans while alternative providers grow, but cannot yet fill the gap at equivalent cost.

> *Fintech lending platforms grew 27% year-on-year, reaching €4.4 billion in total outstanding SME loans by end-2024. Meanwhile, SME lending by the three major Dutch banks — ING, Rabobank, and ABN AMRO — declined by €0.7 billion (-0.6%) to approximately €110 billion. In the segment of loans under €25,000, fintechs now hold over 8% of market share.*
>
> **— De Nederlandsche Bank (DNB), Statistical News, November 2025**

The DNB data points to a market in structural transition: banks are retreating from smaller SME loans, and fintechs are filling the gap — but only partially, and at significantly higher cost. Research by Oliver Wyman for the Dutch government found that the primary rejection driver for SME loan applications is not a lack of collateral per se, but insufficient standardised financial data to support efficient risk assessment.

The Dutch parliament passed the Wet opheffing verpandingsverboden (Act on the Abolition of Pledge Prohibitions) in 2024 — a reform explicitly targeting the collateral bottleneck by allowing SMEs to pledge commercial receivables more freely. The government has also committed to developing a central SME finance information platform, formally recognising that information fragmentation is itself a structural barrier to credit access.

In the Netherlands, Credit Passport has partnered with IMK (Instituut voor het Midden- en Kleinbedrijf), one of the country's leading SME support organisations, to deliver the instrument to Dutch businesses and the lenders and advisers who serve them. IMK's deep network across Dutch SME communities — including its direct relationships with thousands of businesses seeking finance and the intermediaries who advise them — provides the distribution channel and domain expertise to make the Credit Passport model operationally effective in the Dutch market. The partnership positions Credit Passport as the open finance data layer underpinning IMK's credit preparation and access-to-finance support services.

NL Netherlands: key data points (2024–2025)

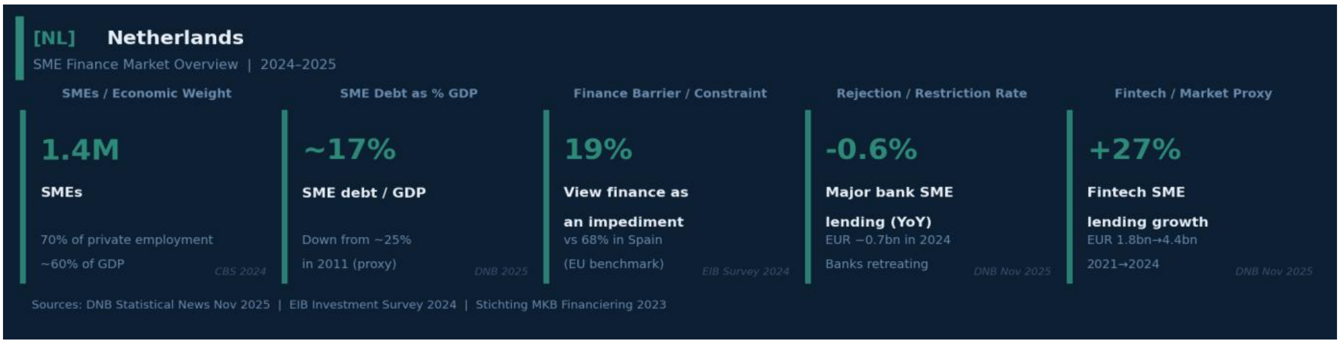
~1.4 million SMEs — ~70% of private-sector employment

Major bank SME lending fell EUR 0.7bn in 2024; corporate lending overall rose 5% (DNB, March 2025)

Non-bank loans under EUR 250k now exceed bank loans in that segment (Stichting MKB Financiering, 2023)

Fintech SME lending grew from EUR 1.8bn (2021) to EUR 4.4bn (2024) — a 2.5x increase in three years

Government committing to a central SME finance information platform — a formal acknowledgement that information infrastructure, not just capital, is the missing link



1.3 Germany

Germany's Mittelstand — around 3.8 million SMEs — is the engine of Europe's largest economy, accounting for approximately 55% of German GDP. Yet credit conditions for German SMEs have deteriorated to historically severe levels, with the KfW-ifo Credit Hurdle survey — one of the most rigorous SME credit access trackers in Europe — recording back-to-back records.

> *In Q4 2025, around 37.8% of German SMEs experienced restrictive bank lending practices — the highest figure since the KfW-ifo Credit Hurdle survey began. New lending in 2024 remained more than 10% below the pre-crisis level of 2019 in real terms. Around 41% of SMEs regard financing conditions and costs as a drag on their investment activity; only 5% describe financing as a driver.*
> **— KfW-ifo Credit Hurdle Survey Q4 2025; KfW SME Panel 2024; KfW Credit Market Outlook 2025**

German policymakers and market analysts have explicitly identified information asymmetry as the core structural problem: assessing SME risk is commercially unattractive for banks because it involves similar fixed costs to larger clients with far less revenue potential, and because SMEs — particularly in services and knowledge-intensive sectors — often lack the hard assets that traditional underwriting models rely on as collateral proxies.

The response of fast-growing alternative lenders in Germany is instructive. Iwoca Germany grew its managed loan portfolio to over €275 million within a single year, disbursing nearly €100 million in the first two months of 2026, by doing one thing differently: assessing creditworthiness from real-time account information rather than waiting for annual financial statements. The market appetite is unambiguous — what is lacking is the information infrastructure to serve it at scale and at mainstream cost.

DE Germany: key data points (2024–2025)

- ~3.8 million SMEs — ~55% of German GDP (the Mittelstand)
- 37.8% of SMEs reported restrictive bank lending in Q4 2025 — record high since survey began (KfW-ifo)
- New SME lending in 2024: >10% below 2019 pre-crisis levels in real terms (KfW, 2025)
- 41% of SMEs cite financing conditions as a drag on investment; only 5% as a driver (KfW Panel 2024)
- SME annual financing need estimated at EUR 70-100bn; current supply significantly short (Iwoca, 2026)
- Information asymmetry explicitly cited by German policymakers as making SME lending commercially unattractive — the central problem real-time credit scoring solves

1.4 Spain

Spain has approximately 3.3 million SMEs, which together account for around 65% of private-sector employment and roughly 60% of total business value added. Despite recent improvements in headline credit availability, structural barriers remain deeply embedded — particularly for microenterprises and firms seeking finance without prior bank relationships.

> *68% of Spanish SMEs identify a lack of available financing as a significant long-term barrier to investment — a figure that contrasts sharply with European peers: in the Netherlands, only 19% of firms view access to finance as an impediment. The gap between small and large firms in Spain is also the widest among comparable European economies: 50% of large firms consider access to finance a barrier, 18 percentage points below the figure for SMEs.*
>
> **— OECD Capital Market Review of Spain 2024 / EIB Investment Survey**

The Banco de España has explicitly identified information asymmetry as a primary cause of SME lending friction, calling for broader use of independent ratings and tools to reduce lender–borrower information gaps. In its October 2025 address on SME financing, the Governor noted that insufficient financial information and the administrative costs associated with small loans actively discourage lending — and that segments without prior bank debt face the greatest difficulty. This is precisely the population real-time Open Banking scoring is designed to serve.

Spain's domestic capital markets remain relatively shallow for SMEs: corporate bond issuance as a share of total corporate debt has hovered at 9–11% since 2015, well below France (25%) or the Netherlands (19%). The resulting over-reliance on bank lending amplifies the impact of any tightening in credit standards — and makes the information layer between lender and borrower even more consequential.

ES Spain: key data points (2024–2025)

~3.3 million SMEs — ~65% of private-sector employment

68% of SMEs cite lack of financing as a significant long-term investment barrier (EIB, 2024)

Net balance of SME credit condition expectations: -17%, vs -2% for large firms (ECB SAFE)

Segments without prior bank debt face the highest rejection rates in the market

Corporate bond share of total debt: 9-11% — well below French (25%) and Dutch (19%) peers

Banco de Espana (Oct 2025): information asymmetry and administrative costs of small loans explicitly named as primary barriers — the exact problem real-time credit scoring solves

1.5 Portugal

Portugal has around 400,000 SMEs, accounting for 77.4% of private-sector employment and 68.3% of non-financial business value added — among the highest SME concentration ratios in Europe. The economy is service-dominated (76.5% of GDP in 2024) and growing above the eurozone average, with GDP expanding 1.9% in 2024. Yet the structural barriers SMEs face in accessing credit remain significant, particularly for smaller firms and those without established banking relationships.

> *Credit standards for loans to firms remained broadly unchanged, although slightly tighter for SMEs. Banks maintained a prudent and selective approach to credit approvals throughout 2024 and the first half of 2025, with no significant loosening of standards for corporate clients. SME demand for working capital and short-term loan financing has continued to increase, particularly in 2025.*
> **— Banco de Portugal, Bank Lending Survey Q1 2025 and Q3 2025; Chambers & Partners Banking & Finance Review 2025**

Portugal ranked last alongside Greece for SME financing conditions in the European Investment Fund's 2024 European Small Business Finance Outlook, which assessed SME financing environments across all EU member states. The EIF analysis noted that Portuguese and Greek SMEs had the least favourable conditions in the EU for bank loan access, while identifying increased bank willingness to provide credit as the one recent positive development. The underlying structural issue remains: most Portuguese SMEs, concentrated in services and micro-scale operations, lack the financial reporting depth and asset base that conventional underwriting requires.

Portugal's fintech ecosystem is growing rapidly — total investment reached EUR 1.16bn in 2024, with Lisbon as the primary hub — but SME lending-focused fintech remains nascent relative to the market's need. The Banco de Portugal's Bank Lending Survey for Q3 2025 noted slight demand increases from SMEs for working capital and short-term loans, with expectations pointing to further demand growth — a signal that viable SME credit appetite exists and is currently underserved.

PT Portugal: key data points (2024–2025)

- ~400,000 SMEs — 77.4% of private-sector employment, 68.3% of non-financial business value added
- Ranked last (alongside Greece) for SME financing conditions in the EU (EIF ESAF Index 2024)
- Credit standards slightly tighter for SMEs than for large firms throughout 2024-2025 (Banco de Portugal)
- Service-dominated economy (76.5% of GDP): asset-light businesses dominate — the profile most poorly served by collateral-based underwriting and most directly served by Open Banking scoring
- SME demand for working capital finance growing in 2025 — appetite exists, supply lags
- Fintech investment: EUR 1.16bn in 2024 — growing ecosystem, nascent SME credit infrastructure

1.6 The common diagnosis: information failure, not capital shortage

Across the UK, Netherlands, Germany, Spain, and Portugal, the same structural conclusion emerges from independent regulatory and research bodies: the SME credit gap is driven primarily by information asymmetry between lender and borrower, not by an absence of lendable capital. Traditional credit assessment tools — annual accounts, hard collateral valuations, bureau files derived from historical proxies — are poorly suited to the asset-light, service-dominated, dynamic businesses that make up the majority of modern European SME economies.

> *In Q4 2025, euro area firms indicated increased needs for bank loans while a net 2% reported a decline in availability — widening the bank loan financing gap indicator to 3%, up from 1% in Q3 2025. SMEs consistently experience tighter conditions than large firms across all major financing instruments.*
>
> **— ECB, Survey on the Access to Finance of Enterprises (SAFE), Q4 2025**

> *The policy implication is clear: improving SME access to finance does not require more capital programmes or further guarantee schemes. It requires better information — faster, more accurate, and portable between lenders. This is the function that real-time Open Banking credit scoring performs.*

2. Why Traditional Credit Assessment Fails SMEs

Understanding why the information gap persists requires examining how conventional credit assessment tools were designed — and for whom. Credit bureaus were built primarily for consumer lending: retail credit, mortgages, and personal finance — contexts where borrowers are broadly homogeneous, data is standardised, and volume justifies investment in statistical models. Large corporate borrowers, by contrast, have always operated in a different ecosystem: rating agencies, relationship banking, and covenant-heavy facilities where dedicated credit teams can justify the cost of deep due diligence.

SMEs fall awkwardly between both worlds. They are too heterogeneous and operationally complex for consumer bureau models, which were never designed to assess business cash flows, trade credit cycles, or sector-specific risk. Yet they are too small and too numerous for the corporate toolkit — the fixed cost of a full credit analysis on a £200,000 loan is commercially prohibitive for most lenders. This structural mismatch is compounded by a well-documented reality: SME accounting is often incomplete, infrequent, or filed with significant delays. Many owner-managed businesses lack dedicated finance functions, and their statutory accounts — where they exist at all — may reflect tax optimisation decisions rather than the true economic performance of the business. The result is a population of millions of businesses for which no existing tool was purpose-built.

2.1 The timing problem

Annual accounts — the primary input for most SME credit decisions — are typically 12 to 18 months old by the time a lender sees them. For a business whose revenue, margins, or cash position may have shifted significantly in that window, this creates a fundamental mismatch between the data used to make the decision and the reality of the business today. The Bank of England's 2024 SME survey found that businesses which perceived themselves to have underinvested were significantly more likely to cite uncertainty and financial constraint as barriers — suggesting that the lag in assessment is itself a cause of adverse selection, not merely a symptom.

2.2 The collateral problem

Traditional underwriting uses hard assets — property, machinery, vehicles — as both collateral and as a proxy for creditworthiness. This worked reasonably well when most SMEs were asset-intensive. Modern economies are services-dominated: in the UK, services now account for 81% of GDP. In Germany, small firms in knowledge-intensive services have the lowest digitalisation index of any company size class — and the greatest difficulty accessing credit. Businesses that lack tangible assets are not necessarily riskier; they simply do not fit the template that standard models were designed around.

2.3 The portability problem

Even where a business has a satisfactory credit relationship with its existing bank, that relationship does not travel. The incumbent lender can observe real-time cash flows and repayment behaviour; any other lender cannot — unless the business goes through a slow, manual process to assemble and share the equivalent information from scratch. This creates a structural advantage for incumbent banks and a structural barrier to competition. The British Business Bank's 2025 research found that fewer than 40% of SMEs consider multiple finance providers when seeking a loan; most approach only their existing bank. The concentrated structure of SME lending is a consequence of information architecture, not commercial preference.

2.4 The feedback problem

When an SME is declined for finance, it rarely receives actionable feedback. CFIT coalition research based on 24,000 declined SME loan applications found that approximately 65% had readily fixable credit profile issues — overdraft overuse, late filings, supplier payment timing — that the borrower was unaware of or did not know how to address. Without a mechanism for SMEs to understand and remediate what drives credit decisions, the same issues recur across multiple applications, deepening the self-reinforcing cycle of discouragement.

Dimension	Traditional Credit Bureau	Real-Time Open Banking Score
Data freshness	Annual / quarterly — 12–18 month lag	**Daily or real-time refresh**
Asset coverage	Requires tangible collateral as proxy	**Captures asset-light and service businesses**
Portability	Tied to incumbent lender relationship	**Portable: any lender, any application**
SME coverage	Thin-file and young firms often excluded	**Scores from first month of trading data**
Monitoring	Point-in-time only	**Continuous portfolio monitoring**
Feedback loop	None — no remediation guidance	**SME-facing explainability and action points**
Explainability	Limited; often proprietary	**Natural language + quantified factor drivers**

> *What the SME credit market has been missing is not more data — it is decision-grade data: information that is current enough, structured enough, and sufficiently tied to actual business behaviour to support a reliable credit decision. Open Banking transaction data is the first data source that meets all three criteria at scale.*

Decision-grade data has four defining properties. It is current — reflecting the state of the business today, not twelve months ago. It is behavioural — derived from what the business actually does with its money, not from how it chooses to report itself. It is continuous — updating daily rather than arriving in annual snapshots. And it is portable — belonging to the SME and shareable with any lender, not locked into a single banking relationship. Open Banking transaction data is the first data source that meets all four criteria simultaneously, at mainstream scale, and with a clear legal and consent framework underpinning access to it.

3. Real-Time Open Banking Credit Scoring: How It Works

A real-time Open Banking credit score is built on decision-grade data — permissioned, direct access to the live transaction record of a business: its cash inflows and outflows, payment patterns, liquidity buffers, overdraft behaviour, and financial trajectory. Unlike annual accounts, which are a retrospective summary shaped by accounting conventions and tax considerations, transaction data is a continuous, unmediated record of actual business activity. It is the closest thing to ground truth available about how an SME operates financially.

This is the data foundation that underpins Credit Passport. The instrument combines Open Banking transaction feeds with verified supplementary sources — Companies House, HMRC filings, filed accounts — and applies Moody's Analytics financial modelling to generate a score and a set of interpretable behavioural indicators. The result is a credit profile that is current, portable, and built from decision-grade data rather than the proxies and lags that traditional tools rely on.

3.1 The data inputs

Open Banking is the infrastructure that makes decision-grade data accessible at scale. In the UK it has reached the point at which it constitutes a genuine financial utility rather than an experimental capability:

Open Banking at scale: UK 2025
13.3 million active Open Banking users (March 2025)
31 million Open Banking payments processed in March 2025 alone
18.4% penetration of people and small businesses with online current-account access
Equivalent to approximately 1 in every 13 Faster Payments
Source: Open Banking Limited Impact Report 7, 2025

Across Europe, equivalent infrastructure is being mandated by regulatory progression: PSD2 established the open data principle; PSD3 and the Financial Data Access (FIDA) regulation now under implementation will extend permissioned data access across all financial products and member states. The structural conditions that enabled the UK deployment are being replicated at scale across the eurozone.

3.2 What the score measures

The behavioural model derived from decision-grade Open Banking transaction data produces four indicators that directly address the limitations of traditional assessment — each grounded in observed behaviour rather than inferred proxies:

Liquidity buffer	Cashflow management	Stress instances	Trend
Actual available headroom *not proxied from assets*	**Payment behaviour & timing** *supplier, payroll, obligations*	**Overdraft & pressure events** *frequency and severity*	**Financial trajectory** *improving, stable, or deteriorating*

Each indicator is time-stamped, auditable, and expressed in both quantitative and natural-language form — making it usable by lender credit teams with existing workflows, not just data scientists. The score refreshes daily as a default, with on-demand refresh available for active decisions or monitoring triggers.

3.3 Governance and lender-grade controls

For an instrument to function as systemic infrastructure, it must meet institutional governance standards. The Credit Passport model is built to these requirements:

- Consent management: permissioned access with full downstream consent visibility
- Audit trail: complete score history and data lineage for regulatory examination
- Explainability: natural language explanations and percentage-impact factor attribution
- Model governance: ongoing performance monitoring, drift detection, and bias assessment
- Data residency: consistent with GDPR and relevant national data sovereignty requirements

4. The Evidence: Does Real-Time Scoring Change Outcomes?

The strongest case for systemic adoption is not theoretical — it is empirical. The following evidence draws on UK production deployment, independent academic research, and ecosystem pilots.

4.1 Production metrics from the UK

Credit Passport has been operating in live UK lending workflows since 2020. Current production figures demonstrate the impact of real-time data integration on the lending process:

38,800+	128	40%	95%
SMEs scored	**lenders using reports**	**higher application completion**	**fields auto-populated**
UK market, live production	*via broker & lender networks*	*vs. traditional funnel baseline*	*in direct-to-lender submission*

The 40% uplift in application completion is particularly significant. It reflects not a change in underwriting criteria but a reduction in friction — fewer forms, less manual documentation, a faster journey. This directly addresses the demand-side discouragement that surveys consistently identify as a primary driver of the SME credit gap.

4.2 Academic evidence: Open Banking and credit access

The Bank of England's Staff Working Paper No. 1,059 (February 2024) provides causal evidence on the impact of Open Banking eligibility on SME lending outcomes. Using a differences-in-differences methodology around the eligibility threshold (SMEs with annual turnover below £25 million), the paper found that SMEs eligible to share data under Open Banking were measurably more likely to form new lending relationships with non-bank lenders — providing rigorous evidence that data portability increases competition and credit access directly, not merely correlatively.

4.3 Ecosystem pilot evidence

CFIT's Open Finance coalition — which includes major UK banks, fintechs, and public bodies — conducted a pilot analysis with HSBC UK examining the impact of Open Finance datasets and automated application population on lending outcomes. The published findings indicate that over a quarter of SMEs in a representative sample who were at risk of missing out on credit were able to access finance when better data and automation were in place. This aligns with the broader CFIT finding that 65% of declined SME applications have readily fixable credit profile issues — suggesting the information gap, not the credit quality of businesses, is the primary driver of declines.

4.4 The remediation effect

A dimension of real-time scoring that traditional bureau models cannot replicate is its capacity to close the feedback loop for SMEs. Because the score reflects live behaviour rather than historical records, businesses that take concrete steps to improve — addressing overdraft patterns, filing on time, managing supplier payments — see their score change within the same month. This creates an active incentive structure for financial improvement that static credit files do not.

> *"As a fast-growing company with ambitious plans, we joined Credit Passport® to ensure our credit risk profile was accurate and fit for purpose. Based on real-time data, Credit Passport® reveals true business performance, maximising the potential for growth."*
> **— Peter Streatfield, CEO, Javelin Broadband — improved from B to A+ rating over five months, accessing a £100,000 term loan**

5. The Case for Systemic Adoption

The evidence from production, academic research, and ecosystem pilots supports a clear conclusion: real-time Open Banking credit scoring works. It reduces friction, improves completion rates, expands access for asset-light businesses, and creates the feedback loop that turns declining SMEs into approvable ones. The question for financial institutions, intermediaries, and policymakers is no longer whether the instrument works — it is whether to adopt it individually, or to make it a shared infrastructure layer that works for the whole market.

5.1 Why shared infrastructure matters

The Bank of England explicitly framed the portable credit file as a systemic solution — not a product for individual lenders to build independently. The economic logic is straightforward: the value of a portable credit profile increases with the number of lenders that accept it. An SME profile that five lenders accept generates more competition and better pricing than one that only one lender can use. The data layer is non-rivalrous: the same score can be presented to multiple lenders without degrading its quality. This is the structural case for treating real-time SME credit scoring as infrastructure rather than a competitive advantage.

5.2 What systemic adoption enables

When real-time portable credit scoring operates as shared infrastructure, the benefits compound across the ecosystem:

For lenders and financial institutions

- Reduce SME onboarding cost through automated data ingestion and pre-populated applications
- Expand the addressable lending market to asset-light and thin-file businesses previously excluded
- Enable AI-powered credit underwriting with current, auditable, structured data inputs
- Implement continuous portfolio monitoring — detecting deterioration before it becomes a credit event
- Meet FIDA and Open Finance compliance requirements with a ready-to-integrate data layer

For SMEs and the wider economy

- Access credit from multiple lenders without repeating a slow, manual documentation process
- Receive actionable feedback on what drives their credit score — and change it
- Build a portable, verifiable credit profile that improves as the business improves
- Access finance from non-bank lenders on competitive terms, increasing choice
- Reduce the discouragement effect that keeps viable businesses from even applying

5.3 For intermediaries and local institutions

For accountants, brokers, local development agencies, chambers of commerce, and local governments — the systemic value lies in the ability to help SMEs become finance-ready, not just to refer them to lenders. A real-time score with an explainability layer transforms the role of a business support organisation: from signposting finance options to actively preparing businesses for credit assessment, tracking improvement, and connecting them to the right lender at the right moment.

Local authorities and regional development bodies in particular can use the infrastructure to identify and support businesses at the margin — those that are viable but currently invisible to conventional credit markets — and to measure the economic impact of support programmes in terms of credit outcomes rather than activity outputs.

5.4 The regulatory tailwind

Regulatory direction across the UK and EU is consistently moving toward mandatory data portability and open finance. The instruments differ in name and timeline, but the direction is identical:

Regulatory alignment: the open finance trajectory

UK — Open Banking (live since 2018); Open Finance Taskforce; Smart Data legislation

EU — PSD2 (in force); PSD3 and FIDA (progressive implementation from 2026)

Netherlands — Wet opheffing verpandingsverboden (2024); government SME finance platform commitment

Germany — KfW calls for digital SME credit assessment infrastructure; ECB SAFE identifying information asymmetry as the primary structural barrier

Across all markets: the direction is toward permissioned, portable, standardised financial data.
Real-time Open Banking scoring is the production implementation of that direction.

6. Credit Passport: Architecture and Capabilities

Credit Passport is the operational implementation of the real-time portable credit file model — live in the UK since 2020, and expanding into European markets through local partnerships. It is designed as infrastructure: open to integration, not proprietary to any single lender or platform, and governed to the standards that institutional adoption requires.

6.1 How it integrates

The instrument operates via API, enabling integration into existing lender workflows, broker platforms, and business support ecosystems without requiring replacement of existing systems. The SME journey is designed to be completed in approximately 40 seconds — a single consent step that generates a standardised data packet containing the score, indicators, trend data, and supporting documentation. The same packet can be presented to multiple lenders, eliminating repeated data entry.

6.2 Geographic deployment model

In each market, Credit Passport connects to local data sources — bank APIs, companies registries, relevant tax authorities — and normalises them into a consistent analytical framework. Scoring models are calibrated to local credit conditions and default histories. Core governance, consent architecture, and explainability standards remain consistent across all markets, providing institutional partners with a predictable, auditable instrument regardless of geography.

Current and active markets
United Kingdom — live at scale since 2020; AISP-authorised by FCA from day one of Open Banking
Italy — live; local data integration and partner distribution
Netherlands — live in partnership with IMK (Instituut voor het Midden- en Kleinbedrijf),
one of the country's leading SME support organisations
Germany — partnership arrangement; aligned with KfW digital credit assessment direction
Spain — active market entry; aligned with Banco de España's information asymmetry agenda
Portugal — active market entry; addressing the EIF-identified SME financing gap

6.3 Continuous monitoring

Beyond origination, Credit Passport provides a daily default refresh across lender portfolios — enabling proactive identification of deterioration before it becomes a credit event. Given that SME commercial loan arrears rose slightly across 2024 in both the UK (BoE FSR July 2025) and the eurozone (ECB SAFE), real-time portfolio monitoring has moved from a differentiating feature to an operational necessity for lenders with material SME exposure.

7. The Interest Margin Layer: Empowering SMEs to Negotiate

Most credit scoring instruments stop at the binary: approved or declined. Credit Passport goes further, providing SMEs with a dimension that is almost entirely absent from the conventional lending market — a quantified estimate of the interest margin they should reasonably expect on their credit facilities, derived from the same risk data that determines their score.

This capability is built on the Vallstein Benchmark methodology, which applies Basel Rules on Regulatory Capital to calculate the theoretical capital buffer a bank is required to hold against a given credit exposure. From that capital requirement, the minimum interest margin a bank needs to earn to generate a reasonable return on regulatory capital can be derived — giving the SME a reference point anchored in banking economics, not in negotiating instinct.

7.1 How the Interest Margin Reference Calculation works

Once a Credit Passport score is generated, the Interest Margin Reference Calculation takes the assigned Probability of Default and the SME's credit profile as inputs, and produces three outputs:

Interest Margin Reference Calculation: outputs

Estimated Banking Revenues — the annual revenue a bank generates from the credit relationship, broken into interest on credit facilities and other banking revenues (cash management, payments, etc.)

Capital Requirements — the Basel-compliant regulatory capital buffer the bank must hold against the exposure, calculated from the Probability of Default

Interest Margin Results — the fair interest margin over the reference rate (libor) the SME should expect: separately stated for short-term and long-term facilities

Vallstein Benchmark — the relationship's total revenue as a percentage of the SME's annual turnover, providing a cross-sectional reference against companies of similar profile

The calculation works as follows: once a Credit Passport score is generated, the Interest Margin Reference Calculation takes the assigned Probability of Default and the SME's credit relationship profile as inputs — including the estimated size of credit facilities and other banking revenues such as cash management — and derives the minimum interest margin required for the bank to earn a reasonable return on its Basel-mandated regulatory capital. The output is expressed as a margin over the reference rate (libor), stated separately for short-term and long-term facilities.

Critically, the interest margin is not fixed by rating band. Two businesses with the same A+ Credit Passport score may face different reference margins depending on the total value of their banking relationship. An SME that also generates meaningful cash management, payment, or other non-credit revenues for its bank will see those revenues credited against the capital cost — reducing the interest margin required. This is how bank pricing actually works, and it is a dimension of the conversation that SMEs are rarely equipped to have. The Vallstein Benchmark makes it explicit.

7.2 Why this matters systemically

The interest margin layer addresses one of the least-discussed dimensions of the SME finance gap: pricing asymmetry. Most SMEs accept whatever interest rate they are offered, because they lack any independent reference point for what a fair margin looks like given their risk profile. This opacity benefits lenders and disadvantages borrowers — and it disproportionately affects smaller businesses, which have neither the financial sophistication nor the negotiating leverage of larger corporates.

> *Insufficient financial information or the administrative costs associated with small loans may discourage lending — and in contexts of uncertainty, these barriers tend to be more evident. To continue to improve, we must work to reduce these information asymmetries.*
>
> **— Banco de España, Governor's address on SME Financing, October 2025**

By providing an independent, Basel-grounded reference for fair pricing, the Interest Margin Calculation creates a more level playing field. SMEs that understand their risk profile and know what margin is commercially justified are better-equipped to negotiate with multiple lenders, to push back on terms that exceed the benchmark, and to understand the full cost of their banking relationship rather than just the headline rate.

For financial intermediaries — brokers, advisers, chambers of commerce, local development agencies — the Interest Margin tool provides a concrete, numbers-based conversation starter with the lenders they introduce clients to. Rather than presenting an SME as simply seeking credit, an intermediary can present a quantified credit profile with a defensible expected pricing range. This professionalises the SME's approach to borrowing and materially improves the quality of the commercial dialogue.

7.3 Practical guidance embedded in the report

The Credit Passport Full Report includes a section of practical negotiation guidance alongside the Interest Margin Calculation — advising SMEs to negotiate with more than one bank (but not too many), to prepare for discussions on obligor risk differences, and to consider the full banking relationship rather than focusing solely on the loan rate. This guidance is grounded in the Basel framework outputs: the SME is being coached to negotiate with the same analytical framework the bank uses to price the relationship.

> *A credit score that tells an SME where they stand is useful. A credit score that tells them what rate they should be paying — and why — is transformative. The Interest Margin layer is what turns Credit Passport from a risk assessment tool into a genuine economic empowerment instrument for SMEs.*

8. Conclusion: Infrastructure for the SME Economy

The SME credit gap is not a problem waiting for a solution. The solution exists, is proven in production, and is aligned with the regulatory direction of travel in both the UK and European markets. What the evidence consistently shows — from the Bank of England's quarterly surveys, the ECB's SAFE data, DNB's fintech lending statistics, and KfW's credit hurdle tracking — is that the constraint is information, and the instrument that addresses it is a real-time, portable, standardised credit profile.

The systemic case for adoption rests on three pillars. First, the scale of the problem: tens of billions of euros in foregone SME credit annually across the three markets examined in this paper, driven by a fixable information failure. Second, the evidence that the solution works: production metrics showing higher completion rates and faster decisioning; academic evidence showing increased non-bank lending relationships; ecosystem pilots showing material uplift in credit access for at-risk SMEs. Third, the regulatory direction: across the UK and EU, policymakers are mandating the data portability that makes the portable credit file possible — and the question for institutions is whether to be ready for that world or to catch up to it.

> *For lenders, the case is operational efficiency and expanded addressable market. For SMEs, it is transparency and agency over their own creditworthiness. For intermediaries and local institutions, it is the ability to actively improve business finance-readiness rather than merely signpost options. For the economy, it is the difference between capital that sits in banking system buffers and capital that reaches the businesses that create employment and growth.*

To learn more or explore integration

For lenders and financial institutions: API integration documentation and pilot programme enquiries

For brokers and intermediaries: partnership and distribution arrangements

For local authorities and development agencies: economic impact and business support applications

For policy and regulatory stakeholders: evidence submissions and ecosystem engagement

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APPENDIX: DATA SOURCES AND METHODOLOGY

A1. Principles

- Institutional and regulatory sources are used for market-level statistics; Credit Passport operational metrics are stated separately and clearly attributed
- Where a figure could be interpreted in more than one way, the definition and basis are stated
- Confidence levels are stated — where a figure is from partner feedback rather than a controlled study, the paper says so
- No figures from reports older than 2024 are used as primary data; older foundational research is referenced contextually only

A2. Primary institutional sources

Bank of England — Financial Stability Report, December 2025

SME debt as share of UK GDP: 13% (2011 Q4) to 8% (2024 Q4). SME arrears below 1.5%. Analysis of high-growth firm access to finance constraints.

Bank of England — Financial Stability Report, July 2025

SME commercial loan arrears rising slightly in 2024. SME lending described as having limited systemic implications in aggregate while noting access challenges for firms with fewer financing options.

Bank of England — Quarterly Bulletin 2024

2,885-SME survey (with DBT, 2023): underinvestment rates, barriers to finance (58%/55%/33%/29%), financial constraint as primary drag. Published March 2024.

Bank of England — 2024 SME Finance Survey (via British Business Bank 2025)

77% of SMEs preferring slow growth to borrowing. 60% not investing due to cash reserve preference.

Bank of England — Staff Working Paper No. 1,059, February 2024

Causal evidence that Open Banking eligibility increases SME formation of non-bank lending relationships, using differences-in-differences design around the £25m turnover threshold.

British Business Bank — Small Business Finance Markets Report 2025

Gross bank lending £62bn in 2024; challenger banks at 60% of total; fewer than 40% of SMEs considering multiple providers; AI and digital technology as a primary shaping force for the next decade.

British Business Bank — SME Intermediary Survey 2024 (Oct–Dec 2024, 758 respondents)

69% of SME advisers citing lack of awareness as primary barrier; 72% of SMEs deferring growth plans when unable to obtain finance via traditional routes.

Allica Bank — 'Rebooting SME Finance to Unlock Growth', 2025

SME finance application rate: 65% in late 1980s to 25% in 2022–24. Overdraft lending: £18bn (2000) to £2.7bn (2024). Approval rates: below 50% in 2024. Estimated UK SME credit gap: up to £65bn.

UK Government — 'Small Business Access to Finance' Call for Evidence, December 2025

CCDS and Bank Referral Scheme update signals; ethnic minority business rejection statistics (2.5x average decline rate).

ECB — Survey on the Access to Finance of Enterprises (SAFE), Q4 2025 / Q1 2026

Euro area bank loan financing gap: widened to net 3% in Q4 2025. SMEs reporting increased needs and reduced availability. Conducted quarterly since 2024 across all eurozone countries.

De Nederlandsche Bank (DNB) — Statistical News, November 2025

Fintech SME lending: €4.4bn outstanding (2024), up 27% YoY, from €1.8bn in 2021. Major bank SME lending fell €0.7bn. Fintechs hold >8% of loans under €25,000. Dutch corporate lending: €277bn outstanding (March 2025, up 5% YoY).

KfW-ifo Credit Hurdle Survey — Q4 2025 and Q1 2025

37.8% of German SMEs reporting restrictive lending (Q4 2025, record high). 34% of medium-sized firms (Q1 2025, also record). Annual financing need estimate: €70–100bn (Iwoca Germany, 2026).

KfW SME Panel 2024

41% of German SMEs cite financing conditions as a drag on investment; 5% as a driver. Representative annual survey of ~9,500 businesses.

KfW Credit Market Outlook 2025

New SME lending in Germany in 2024: >10% below 2019 pre-crisis levels in real terms.

Stichting MKB Financiering — Non-Bank Financing Research, Netherlands (via Xolv, December 2024)

Non-bank loans under €250,000 now exceed bank loans in that segment — the first time this threshold has been crossed.

CFIT — Open Finance Coalition Research

24,000 declined SME applications: 65% had readily fixable credit profile issues; £5bn estimated in accessible financing left unused annually. HSBC UK pilot: over a quarter of at-risk SMEs could access finance with better data.

OECD Capital Market Review of Spain 2024

Source for: 68% of Spanish SMEs citing lack of financing as a significant long-term investment barrier; -17% net balance in SME credit condition expectations vs -2% for large firms; corporate bond share of total corporate debt at 9–11%, well below French (25%) and Dutch (19%) peers.

Banco de España — Governor's address on SME Financing, October 2025

Source for: insufficient financial information and administrative costs of small loans explicitly named as primary barriers to SME credit access; segments without prior bank debt face the greatest difficulty; Banco de España working to broaden use of independent ratings to address information asymmetry.

EIF — European Small Business Finance Outlook 2024 (Working Paper 2024/101)

Source for: Portugal and Greece ranked last (least favourable) for SME financing conditions among all EU member states in the ESAF Index 2024; Germany and Sweden experienced the most significant declines in ESAF index in the 2023 update.

EC — SME Fact Sheet 2025, Portugal (JRC estimates)

Source for: Portuguese SMEs accounting for 77.4% of private-sector employment and 68.3% of non-financial business value added in 2024. SME employment grew 1.7% in 2024, with 2025 forecast at 2.6%.

Banco de Portugal — Bank Lending Surveys, Q1 2025 and Q3 2025

Source for: credit standards slightly tighter for SMEs than for large firms in Q4 2024 and Q1 2025; SME demand for short-term and working capital loans increasing in 2025 with further growth expected.

Chambers & Partners — Banking & Finance Review 2025, Portugal

Source for: prudent and selective bank approach to credit approvals throughout 2024–H1 2025; no significant loosening of standards; Portuguese fintech total investment €1.16bn in 2024.

Vallstein Benchmark — Interest Margin Reference Calculation methodology

The Vallstein Benchmark is an independent methodology for calculating the fair interest margin on SME credit facilities based on Basel Rules on Regulatory Capital. It derives the minimum margin a bank requires to generate a reasonable return on the regulatory capital it must hold against a given credit exposure, using the Probability of Default as the primary input. The benchmark is expressed as a margin over the reference funding rate (libor) for short-term and long-term facilities, and as total banking revenue as a percentage of the SME's annual turnover — enabling cross-sectional comparison against businesses of similar risk profile. Credit Passport embeds this calculation into the Full Report, alongside practical negotiation guidance for SMEs.

Open Banking Limited — Impact Report 7, 2025

13.3m active users; 31m payments in March 2025; 18.4% penetration of people and small businesses with online current-account access.

A3. Credit Passport operational metrics

All metrics are derived from Credit Passport production analytics and partner operational reporting within Credit Passport-enabled lending journeys.

- **38,800+ SMEs scored:** Live production count, UK market.
- **128 lenders using reports:** Via broker and direct lender networks.
- **40% higher application completion:** Proportion of applications started then fully submitted, relative to a market baseline. Reflects reduced manual data entry and fewer friction points.
- **95% auto-population:** Proportion of fields required for direct-to-lender submission automatically populated via the Credit Passport data packet.
- **~40 seconds typical SME completion time:** Time to complete the consent flow and generate the data packet.
- **Initial response under five minutes:** Operational time from API receipt to initial decision response; depends on lender system design. Publicly referenceable example: iwoca.

A4. Limitations

- Credit Passport production metrics reflect performance within Credit Passport-enabled journeys; they should not be interpreted as controlled-trial evidence of market-wide impact
- CFIT and ecosystem pilot findings validate the directional case; they are not direct measurements of Credit Passport outcomes unless explicitly stated

- Country-level statistics reflect the most recently published data available as of Q2 2026; figures are updated in line with institutional publication schedules