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# Consumers at the Heart of Innovation: Financial Health Evaluation in the UK Regulatory Landscape

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**Consumers at the Heart of Innovation:**
**Financial Health Evaluation in the UK Regulatory Landscape**

Kal Bukovski, Aurelija Cepkauskaite, Sarfaraz Shaikh
Sopra Steria

Prof John Finch, Chuks Otioma
Adam Smith Business School, University of Glasgow, and Financial Regulation Innovation Lab

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Corresponding authors: Kal Bukovski, Aurelija Cepkauskaite, Sarfaraz Shaikh, Prof John Finch, Chuks Otioma

**Sopra Steria UK HQ:**
Three Cherry Trees Lane, Hemel Hempstead, HP2 7AH, UK

**University of Glasgow, Adam Smith Business School:**
Adam Smith Building, 2 Discovery Place, Glasgow, G11 6EY, UK

Email: kal.bukovski@soprasteria.com
Email: aurelija.cepkauskaite@soprasteria.com
Email: sarfaraz.shaikh@soprasteria.com
Email: john.finch@glasgow.ac.uk
Email: chuks.otioma@glasgow.ac.uk

# Financial Regulation Innovation Lab

## Who are We?

The Financial Regulation Innovation Lab (FRIL) is an industry-led collaborative research and innovation programme focused on leveraging new technologies to respond to, shape, and help evolve the future regulatory landscape in the UK and globally, helping to create new employment and business opportunities, and enabling the future talent.

FRIL provides an environment for participants to engage and collaborate on the dynamic demands of financial regulation, explore, test and experiment with new technologies, build confidence in solutions and demonstrate their ability to meet regulatory standards worldwide.

## What is Actionable Research?

FRIL will integrate academic research with an industry relevant agenda, focused on enabling knowledge on cutting-edge topics such as generative and explainable AI, advanced analytics, advanced computing, and earth-intelligent data as applied to financial regulation. The approach fosters cross sector learning to produce a series of papers, actionable recommendations and strategic plans that can be tested in the innovation environment, in collaboration across industry and regulators.

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FRIL White Paper Series

# Consumers in the Heart of Innovation:

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Kal Bukovski* Aurelija Cepkauskaite* Sarfaraz Shaikh*

Prof John Finch** Chuks Otioma**

** Sopra Steria*

*** University of Glasgow*

May 2025

**Abstract:** This whitepaper examines the evolving landscape of financial services in the UK, with a focus on consumer-centric innovation and the regulatory framework supporting financial health. Against a backdrop of rising household debt and consumer vulnerabilities, we explore how innovative fintech solutions, enabled by emerging technologies, are reshaping the evaluation of financial health beyond traditional credit scoring methods.

The paper provides an in-depth analysis of the current regulatory environment, including the Financial Conduct Authority's (FCA) Consumer Duty and other initiatives aimed at enhancing financial wellbeing. A case study demonstrates an AI-driven framework for intelligent credit scoring, illustrating the potential for more holistic financial health assessments.

We discuss the critical role of Open Banking and Open Finance as enabling infrastructures for innovation, while emphasising the importance of data protection and digital ethics. The paper also outlines key directions for fintech innovation that prioritise consumer needs.

Looking to the future, we examine emerging trends in consumer innovation, potential regulatory developments, and the long-term impact on the financial services industry. The paper concludes that by placing consumers at the heart of innovation, the UK financial sector can build a more resilient, inclusive, and sustainable future, setting a global benchmark for fostering financial health in an era of rapid technological change.

FRIL White Paper

# Consumers at the Heart of Innovation: Financial Health Evaluation in the UK Regulatory Landscape

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## Introduction

The UK has experienced unprecedented economic turbulence in recent years, creating a perfect storm of financial challenges for consumers. Rising inflation and increasing interest rates, have combined to place extraordinary pressure on household finances, generating significant volatility in personal financial management across the nation.

The impact of these economic pressures on UK households has been profound and far-reaching. According to the most recent data from NimbleFins, the average UK household consumer debt (excluding mortgages) has reached £17,076 heading into 2025 - representing an alarming 82% increase over the past decade [1]. This debt burden encompasses various financial products, with credit card balances averaging £2,486 per household, personal loans at £5,533, and student loans adding another £9,056.

### Debt profile of UK households

The comprehensive debt landscape reveals concerning trends across multiple financial products:

| Debt Category | | 2024-2025 Value | 10-Year Change |
|---|---|---|---|
| **Average household credit card balances** | | £2,486 | +8% since 2014 |
| **Average personal loans per household** | | £5,533 | +32.7% since 2015 |
| **Average student loans per household** | | £9,056 | +212.7% since 2015 |
| **Average mortgage debt (households with mortgage)** | | £193,867 | +25.3% since 2015 |

*Table 1: 10-year debt change in the UK*

These statistics paint a worrying picture of growing indebtedness across UK society. The FCA's Financial Lives Survey, which tracks financial product ownership and financial vulnerability across the UK population through approximately 19,000 individual records, further confirms these troubling trends [2].

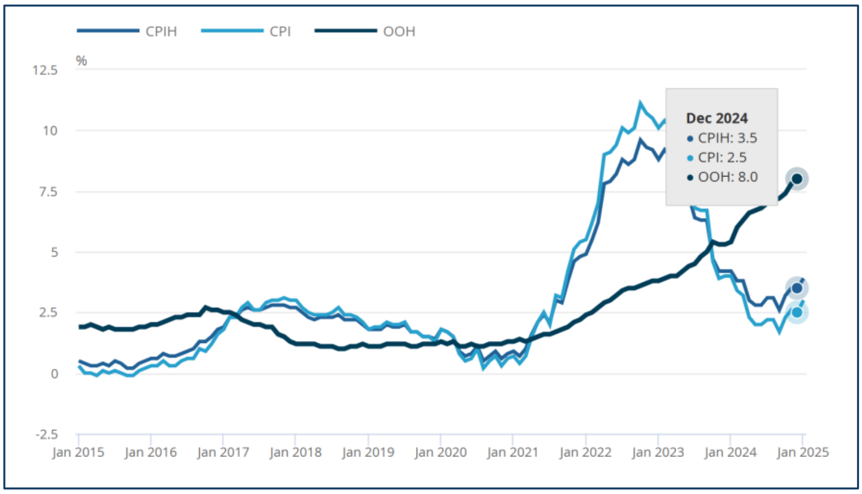


*Figure 1: CPIH (Consumer Prices Index including owner occupiers' housing costs), OOH (owner occupiers' housing) costs component and CPI (Consumer Price Index) annual inflation rates, UK, January 2015 to January 2025. Source: ONS ([Consumer price inflation, UK - Office for National Statistics](#))*

## Growing financial vulnerability

Recent analysis [3] paints an even more concerning picture for the immediate future. Their research indicates that financial vulnerability is now a systemic issue affecting 6.4 million households – equivalent to 22% of all UK households. More alarmingly, 423,000 more households are likely to fall into the 'extremely financially vulnerable' category in 2025.

Financial vulnerability is not evenly distributed across the UK population. Significant disparities exist based on geography, family structure, and ethnic background. The same research reveals that financial vulnerability is particularly concentrated in London, Western England, and Northern Ireland, with these regions experiencing above-average vulnerability levels. Working-age households with children face the greatest challenges, especially single-earner families [3].

The aforementioned 'Financial Lives 2022 Survey' report paints a stark picture of the current financial landscape in the UK [4]. The data reveals a concerning trend of increasing financial vulnerability among consumers, with significant implications for both individuals and the financial services industry as a whole.

This extreme vulnerability is characterised by:

- Extremely low discretionary income,
- Minimal savings buffers,
- Living at or below subsistence levels and/or,
- Higher risk of late payments and defaults, especially on essential household costs.

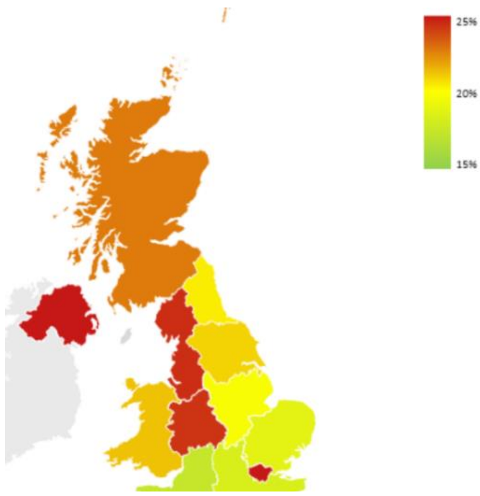


*Figure 2: Vulnerability as a % of the regional population. Source: Baringa*

## Financial Lives Survey – key findings

| Metric | Value | Change |
|---|---|---|
| **Adults with increased unsecured debt (6 months to Jan 2023)** | >15 million | N/A |
| **Adults missing bills/credit commitments for 3+ months** | 5.6 million | +1.4 million from May 2022 |
| **Adults with low financial resilience (May 2022)** | 1 in 4 (25%) | +1 million from Feb 2020 |
| **Over-indebted adults (May 2022)** | 9.6 million (18%) | +2.5 million from Feb 2020 |
| **Adults in financial difficulty (Jan 2023)** | 5.6 million (11%) | +1.4 million from May 2022 |
| **Adults unable to pay bills/loan repayments on time (Jan 2023)** | 10.9 million (21%) | +3.1 million from May 2022 |
| **Adults in financial difficulty or feeling overwhelmed (Jan 2023)** | 12.8 million (24%) | +3.2 million from May 2022 |

*Table 2: Key metrics in the FCA's 'Financial Lives 2022 Survey'*

These statistics underscore the growing importance of tracking consumers' personal finances and assessing their repayment capabilities, particularly for those with short-term borrowing balances such as overdrafts, credit cards and short-term loans.

## Policy approaches and regulatory response

The growing recognition of financial vulnerability has prompted renewed focus on regulatory and policy solutions. The government's plan for financial services explicitly prioritises "reinforcing consumer protection and financial inclusion" as one of its six policy priorities. This includes exploring alternative models for increasing financial resilience, developing longer-term fixed-rate mortgages, creating a national financial inclusion strategy, and implementing stronger regulation for emerging financial products like Buy Now Pay Later services.

## Beyond preventing mis-selling

Contemporary research suggests the need for more paternalistic forms of regulation for retail investment markets, going beyond simply preventing mis-selling practices. As citizens increasingly become responsible for their own financial welfare provision, financial health is no longer merely an individual concern but a social need with potential for widespread adverse consequences [6].

The regulatory approach is evolving to recognise that post-sale welfare – what happens to consumers after they have made financial decisions – requires greater attention, particularly for savings and investment products. This represents a shift toward considering both private sector duties and the provision of public goods to address standardised baseline needs for retail investors.

## The need for innovative solutions

As the financial landscape continues to evolve, understanding and addressing consumers' financial health and vulnerabilities has become increasingly crucial. The statistics presented above, coupled with the subsequent regulatory measures being implemented, highlight the urgent need for innovative approaches to safeguard consumer financial health amid ongoing economic uncertainty.

Bridging this gap requires a fundamental shift from retrospective assessments to forward-looking, intelligent methodologies that leverage Artificial Intelligence (AI) and data science. Research has demonstrated the potential of machine learning (ML) techniques, e.g. conducting a clustering analysis to identify homogeneous clusters of financially vulnerable householdsfn4. These advanced analytical approaches can help predict vulnerability before it manifests in missed payments or financial distress [7].

This whitepaper will explore a robust framework for scoring and evaluating financial health, demonstrating how cutting-edge technologies can empower financial institutions to identify and support vulnerable customers proactively. By fostering resilience and inclusivity in alignment with the UK's regulatory priorities, these innovative approaches hold promise for addressing the systemic challenges of financial vulnerability facing UK consumers today.

## Current regulatory landscape

The FCA has, and continues to, introduce policies and guidance within the UK financial services sector to improve outcomes for consumers and ensure their fair treatment. From simplifying specific product pricing (e.g. overdrafts' repeat use remedies through the **PS19/16 High-Cost-Credit Review** [8]) to industry-wide regulations spanning all products (**PS22/9 Consumer Duty** [9] and **PS21/1 Breathing Space** [10]) the FCA uses a variety of approaches to ensure that firms put the needs of the consumer first ensuring that they are being treated fairly.

Focus and attention have been placed on customers in financial difficulty with a suite of regulations created to support these customers. For example, the **PS21/1 Breathing Space regulation** in England and Wales gives people struggling with debt repayment the right to legal protections from creditor actions for 60 days (or longer, if the request is linked to mental health challenges). The intention is to give these customers time to receive advice and potentially enter an appropriate scheme to resolve their debts. **The Scottish Statutory Moratorium** is a similar mechanism available to residents of Scotland, with its own criteria and benefits.

In March 2021, the FCA introduced the **Borrowers in Financial Difficulty (BiFD)** project to ensure firms continued to support consumers in financial difficulty due to COVID-19 [11]. The regulator reiterated their expectations for fair treatment of customers. These intentions were also detailed in the **Tailored Support Guidance (TSG)** for mortgages, consumer credit and overdrafts, issued in the same year [12]. Part of the intentions covered the Payment Deferral Guidance whereby firms were obliged to offer temporary payment holidays for customers facing payment difficulties due to circumstances arising from the COVID-19 pandemic. This was subsequently replaced in April 2024 by the **PS24/2: Strengthening protections for borrowers in financial difficulty: Consumer credit and mortgages** [13].

It is broadly recognised that the FCA requires credit markets that are innovative, competitive, and strategically aligned with positive customer outcomes. Given the critical role of credit in enabling consumers to effectively manage their finances and navigate periods of economic difficulty, it is imperative that these markets prioritise consumer needs and financial resilience. In June 2022, the FCA set out its expectations for supporting customers affected by the rising cost of living and sent the **'Dear CEO letter'** to over 3,500 lenders [14]. This once again emphasised the importance for financial services firms to be diligent and cautious by focussing on their customers' needs and being ready to respond to them.

These and other regulatory initiatives from the FCA underscore a commitment to protecting consumers, particularly those in vulnerable situations. By introducing such measures, the FCA aims to ensure that firms adopt a consumer-first approach, offering tailored support to those in financial difficulty. These efforts reflect the UK financial sector's broader mission of creating a fair and resilient environment, adaptable to emerging challenges and focused on consumer resilience. This is stated as one of the four key themes in the FCA's 5-year strategy, outlined by the FCA's Chief Operating Officer Emily Shepherd in November 2024 [15] and officially published in March 2025 [16].

## FCA's Consumer Duty: tick-box exercise or purpose-driven banking?

In July 2022, the FCA set out the rules and guidance for a new Consumer Duty. Its aim is to set higher and clearer standards of consumer protection, requiring financial services to act on delivering good outcomes for customers [17]. A key question is whether these rules will lead banks to adopt a more customer-centric approach or if they view it as another regulatory implementation project without intent to change their strategic goals.


*Figure 3: Consumer Duty Objectives – source: [New Consumer Duty | FCA]*

The increased level of customers' financial distress and common scepticism towards trusting banks suggests that banks need to reconsider their role and responsibilities in society [18], [19]. There is a need for a transformative cultural drive towards new banking strategies that place the customer at the centre of operations, aligning financial interests with broader social and ethical principles [20].

The rules in the new Consumer Duty mean that customers must receive clear communications, get support when they need it, understand and make informed decisions on products and services, feel that their needs are recognised, feel secure about their financial future and trust their firm. The new regulations are set to lead to better competition, growth and innovation in the interest of consumers. It will also act as a preventative measure from any occurrence of harm, and it will be easier to act assertively when a problem does occur [21].

### Is it working?

Some publications assert that Consumer Duty was not a new solution, , and express their scepticism towards its success, arguing that the proposal of duty of care by the FCA was not the right solution to address the gaps in consumer protection within financial services [22]. The same paper suggests that 'generally framed duties can be added to the Treating Customers Fairly principle and the specific regulatory duties found in the MiFID and Conduct of Business Sourcebook' [23]. Others suggest that Consumer Duty is acting as MiFID II enhancement [24].

However, despite some arguments against Consumer Duty, it came into force in July 2023 for open products and services, and firms had to meet the requirements by July 2024 for closed books. As this is a recently implemented regulation, it is difficult to measure its success in full now. However, some of the good practices and improvement areas were first shared by the FCA in February 2024 [25].

Good practice has been adopted by the banks, such as:

- reviewing their processes on identifying vulnerable customers,
- improving communication across all channels to better understand and support their customers,
- reviewing and updating their products and services to deliver better customer outcomes, and
- offering better value for customers by updating their pricing models.

On the other hand, the FCA's Consumer Duty Board's report in December 2024 states that some firms lack proactiveness during the process of identifying and addressing potential risks of harm and have no clear plan to resolve the issues identified [26]. Furthermore, stating customer outcomes without qualitative analysis of existing complaints is a risk, as the firms are expected to thoroughly assess whether some of their customer segments may be receiving worse outcomes than others [27]. This was thoroughly discussed in a recent FRIL's report[1], which focuses on whether and how the issues raised in consumer complaints and investigated by the UK Financial Ombudsman Service (FOS) reflect priorities and outcomes, elaborated in the FCA's Consumer Duty. Drawing on a sample of FOS complaints and investigations the report illustrates that issues around consumer understanding (information clarity, information relevance and communication) and cost of credit are key recurring challenges in the contractual conflicts analysed.

Moreover, implementation plans are often driven by programme and compliance teams rather than across all levels of the firm, including at Board level [28]. The first FCA report on Consumer Duty implementation from February 2024 also highlighted that some firms needed 'better data and monitoring strategies' and shouldn't assume that their existing data should just be repackaged in new reports [28].

Another relevant challenge is that some firms lack transparency on their financial products and services. In response to this, the FCA has implemented **PS23/16 Sustainability Disclosure Requirements (SDR)** to address concerns about the verification of sustainability claims in financial products [29].

Overall, the regulator reports 'good practices and areas for improvement'. They have confirmed that while some firms have made good progress to act on delivering better outcomes for customers, some are

[1] ***See Finch and Otioma, 2025, Consumers as Innovators and the UK Financial Conduct Authority's Consumer Duty. FRIL White Paper Series, Fintech Scotland.***

lagging. The reason for that might be implementation costs, which is a heavy burden for smaller firms [30]. However, this does not mean that firms try to avoid new regulations. More than three-quarters (77%) of financial firms believe that Consumer Duty is a first move towards a long journey to improve customer outcomes [31].

Consumer Duty is unlikely to deliver sustainable success if it is considered as a one-off exercise. It requires a cultural transformational change with a strong focus on customers' outcomes. It must go beyond policies and procedure updates, demanding a fundamental transformation in ethical business strategies. Meeting the regulatory standards set by the FCA requires time, ongoing improvement, and expert insight [32]. Consumer Duty does not, however, remove scams or rogue advisors. By calling new rules a 'duty', the worst performing firms have no choice but to improve, in order to be compliant with the regulations, or face FCA-imposed fines [33].

## Consumers' affordability and complaints

The FCA's speech from March 2022 by Brian Corr [34] suggested that more borrowers were getting into financial difficulty, needing help from lenders and looking for debt solutions. Despite the FCA's expectations of increased demand for credit, the rising cost associated with both the provision and acquisition of credit is likely to reduce affordability for certain consumers, which may in turn result in growing volume of complaints.

Indeed, it is expected that consumer confidence to complain about regulated products and services on the back of Consumer Duty could increase due to the type of wording of the consumer principle [35]. Once the principles and interpretations of the framework are fully established within the industry, organisations should anticipate an increase in customer complaints. Additionally, there may be confusion among customers regarding what constitutes a "good outcome" for their specific circumstances. This is particularly relevant in debt recovery scenarios where customers are unable to repay their arrears and may face adverse judgments.

In light of this, while such outcomes may not align with a customer's expectations, companies will need to communicate challenging messages in a manner that upholds the spirit of the Duty and supports both the customer and the intended outcomes [35].

## Areas for future improvement

The implementation of Consumer Duty marks a significant milestone, but it is merely the beginning of a broader journey towards enhanced consumer protection. While the July 2023 and July 2024 deadlines represented the culmination of extensive preparatory efforts for many organisations, it should be viewed as the conclusion of the initial phase rather than the end of the process. To fully align with the FCA's expectations, financial institutions must maintain their momentum and continue to refine their approach, instead of considering this as a tick-box exercise and thinking that their transformational journey is complete [32], [36].

In their 'Complaints and root cause analysis' report in December 2024, the FCA stated that the good policy and procedures documents should be: "interactive, engaging and informative, giving examples of common situations to equip staff to know how to handle a situation or process" [37].

They further reiterated key areas of improvement within the Consumer Duty Board reports, including data quality and Management Information (MI) granularity, report evidence, action impact, target markets information, need for challenges from the firms' governing bodies, high level action plans and others [26], [37].

Browne Jacobson, a leading law firm, recently analysed the FCA report on complaints and highlighted the key areas for improvement [38]:

- **Customers with vulnerability***:* more granular complaints MI needed.
- **Decision-making forums:** discussing data in detail and taking actions, opposed to sharing data as a tick-box exercise.
- **Impact measurement of interventions:** measuring the impact of interventions.
- **Complaints insight feedback:** those responsible for the cause of the complaints should be provided feedback for any changes imposed to reduce further complaints.

The FCA's good practices report also contains guidance specifically targeted to smaller firms, to help firms who may not have dedicated compliance and audit functions feel confident in delivering the Consumer Duty.

In conclusion, this regulatory framework represents a significant shift in how financial services firms approach customer care and product design. The emphasis on delivering good outcomes and providing fair value aligns with the FCA's broader mission to enhance consumer protection in the financial sector. Building on this foundation, we now turn our attention to a more specific regulatory initiative that preceded the Consumer Duty: the 'High-Cost Credit Review'. This product-focused initiative targeted a particular segment of the market where consumers were especially vulnerable to harm. Its findings and outcomes provide valuable context for understanding the evolution of the FCA's approach to consumer protection.

## FCA's High-Cost Credit Review: product-specific regulations

In December 2018, the FCA proposed a package of reforms to address price structure harm in the consumer overdraft market, especially for vulnerable customers. It was aimed to protect consumers from unjustifiable overdraft charges, complicated pricing structures and to increase banks' engagement with their customers. According to the FCA, more than 50% of banks' unarranged overdraft fees came from just 1.5% of customers in 2016 [39]. Their analysis showed that high charges disproportionately harm vulnerable consumers and there is positive correlation between a customer's vulnerability and unarranged overdraft charges.

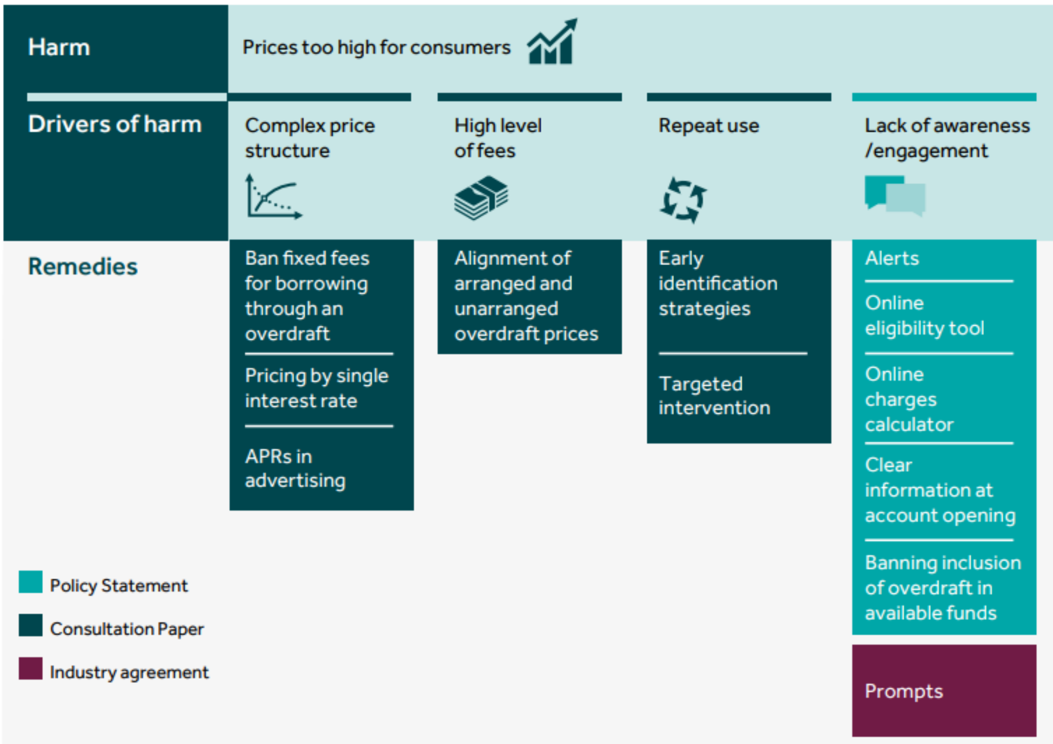


*Figure 4: Proposed package of remedies to address harm in the overdraft market - source: [CP18/42: High-Cost Credit Review: Overdrafts consultation paper and policy statement]*

Pricing remedies were put in place in June 2019 and came into force April 2020. They included changes to make overdrafts simpler, fairer, and easier to manage. Moreover, banks were expected to build forward-looking data models to detect existing and potential financial difficulty and deliver targeted intervention through structured initiatives to support those repeat overdraft users. Competition remedies came into force in December 2019, aiming to improve customers' awareness and engagement with overdrafts [40].

### Outcomes and impact

In April 2023, the FCA issued an evaluation document on overdraft intervention based on the data provided by the six largest personal current account providers [41]. It found that pricing remedies led to a decrease in monthly borrowing by £7.45 per person, a reduction in total charges by £1.45 per person per month, and a decrease in the effective price of overdrafts by £2.80 per £100 borrowed per month. Furthermore, the report examined the English Index of Multiple Deprivation (IMD) deciles 'as a proxy of vulnerability' and concluded that banks' implementation of pricing changes has saved an average of between £8.80 and £11.40 per person per year, with those living in more deprived areas benefitting more when outcomes were better than expectations. However, it does raise a dilemma whether these savings are noticeable in a customer's overall financial position.

Overall, the FCA concludes that the package of remedies is generating net benefits, even considering potential shifts in consumer behaviour due to external economic factors. Another positive customer outcome was that as the effective price of overdrafts decreased, customers are now able to borrow more cheaply (if needed) than they were before the overdraft pricing changes.

External factors, such as COVID-19, happened during regulatory implementation and drastically reshaped many consumers' financial situation. Analysis published by the Office for National Statistics (ONS) in September 2021 concluded that even though workers on the lowest incomes have been affected most by their income fall, they still found it easier to make ends meet due to lower spending [42]. There was a drop of 6% of financially vulnerable people in 2021 compared to 2020. One may argue, however, that the reduction in overdraft charges is not solely driven by the FCA's policies [41].

The FCA review of banks' overdraft repeat use strategies suggested that some took the remedies seriously and acted on it to improve customers' financial situations [43]. They created models to identify actual and potential financial vulnerabilities and introduced different treatments for those categories. These firms used various communication channels to increase customers' awareness and seek for their engagement. They also introduced measurements for evaluation of their models' effectiveness, followed by continuous improvement activities.

## The tick-box exercise question

However, the FCA's findings revealed that other firms looked at these regulations as a tick-box exercise to be compliant and put minimum effort in to help their customers. For instance, they did not distinguish between customers showing signs of vulnerability and those who did not. Furthermore, some firms did not create clear frameworks to identify financially vulnerable customers and did not act proactively to contact those, nor did they suggest any alternative options to high-cost credit products.

In summary, some banks succeed in acting in the best interests of their customers, while others view regulatory compliance as a tick-box exercise. Even though Consumer Duty should not directly be compared to the High-Cost Credit Review (as they are directed to different outcomes), there are similarities between the two, considering the financial vulnerability angle. Vulnerable customers (these with low financial resilience) are the most likely to be affected by high-cost credit products due to their generally limited disposable income. This makes them less cautious about anticipated harm, requiring more support, with often lower financial literacy levels. This makes it harder for them to choose the right financial products or services.

Thus, firms that demonstrated the right attitude in their response to the High-Cost Credit Review, are better placed to implement Consumer Duty and other subsequent strategies, as they already have effective processes and procedures in place to identify vulnerable customers [44]. On the other hand, firms which have not managed to achieve a transformative change in their approach towards the High-Cost Credit Review regulations, are more likely to struggle with Consumer Duty.

The High-Cost Credit Review marked a significant step in the FCA's efforts to address specific areas of concern within the consumer credit market. As we move forward, it becomes evident that a more holistic approach to assessing consumers' financial wellbeing is necessary. This brings us to the concept of Financial Health evaluation, which represents a paradigm shift from traditional Credit Worthiness assessments. In the following section, we will explore how this innovative approach aligns with the evolving regulatory focus on consumer outcomes and how it can drive meaningful innovation in the financial services sector, ultimately leading to better support for consumers in managing their financial lives.

## Financial Health vs Credit Worthiness

Evaluation of credit worthiness and the assessment of financial health, while interrelated, serve distinct purposes and are underpinned by different methodologies. The former, traditionally performed by credit reference agencies, using methodologies like FICO [45], which primarily focuses on an individual's historical ability to repay debt. It relies heavily on retrospective data such as repayment history, credit utilisation rates, the presence of defaults or bankruptcies etc [46], [47]. These insights are distilled into credit scores, which lenders use as a proxy for the likelihood someone will repay new borrowing when making decisions about extending credit. While valuable in assessing immediate lending risk, this approach may lack the granularity to capture broader shifts in an individual's financial trajectory, especially those indicating a slide towards financial vulnerability [48]. As an example, a high earner with suboptimal financial management may have a solid track record of repayment of previous borrowings. However, high dependency on their regular income and limited disposable savings may result in future difficulties in the event of termination of their occupation or another negative life-changing event.

In contrast, evaluating financial health aims to provide a holistic and forward-looking understanding of an individual's overall economic wellbeing. This encompasses not only their ability to manage existing debt but also their capacity to meet day-to-day expenses, build resilience against financial shocks, and plan for long-term goals. Financial health evaluations should incorporate a broader range of factors such as income stability, expense patterns, savings and investments behaviour, and external socio-economic pressures. This nuanced perspective is particularly crucial for identifying customers who are trending towards financial hardship, as it allows for proactive intervention before crises materialise.

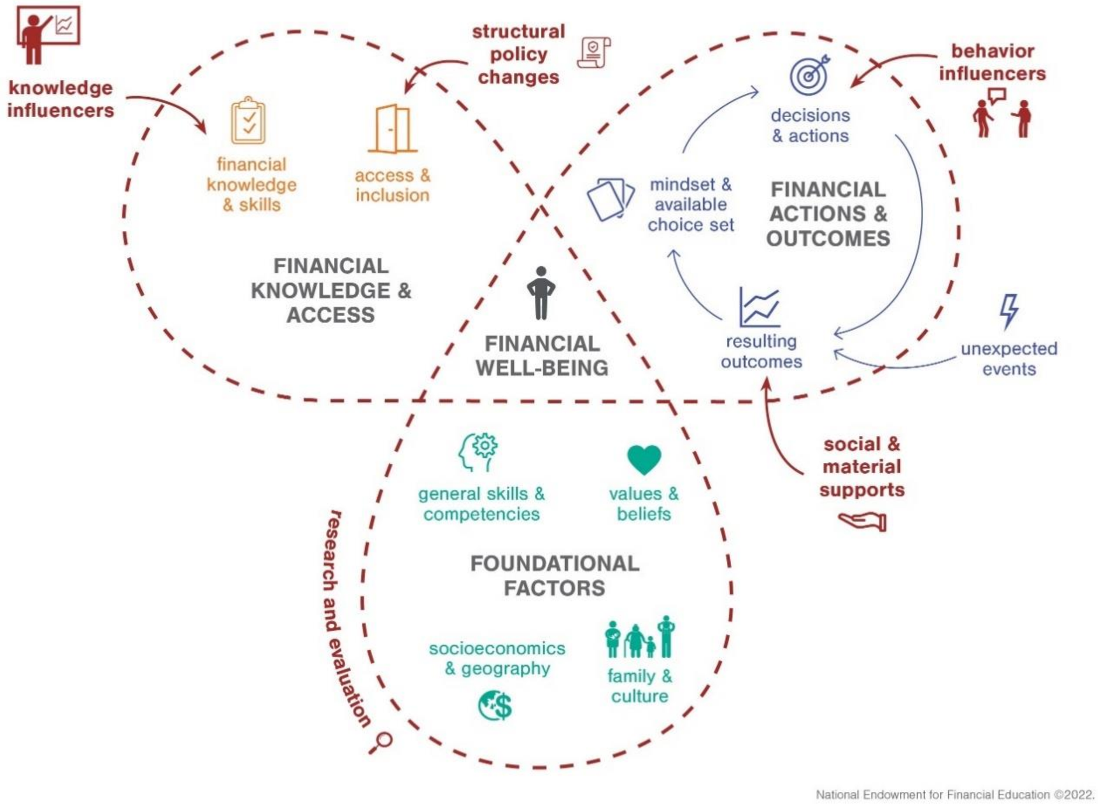


*Figure 5: Evaluating financial wellbeing is a functional result of holistic evaluation of multiple personal finance factors. Source: Understand the Personal Finance Ecosystem*

## Advanced technologies

Efficient use of AI and data science can transform how organisations can support financially vulnerable customers, in addition to credit reference agencies' files. By leveraging advanced modelling techniques, it is possible to detect early warning signals that might precede financial distress. For instance, changes in spending patterns, reductions in discretionary income, or increases in borrowing rates could all indicate emerging difficulties. Unlike traditional credit assessments that are largely backward-looking, AI models can incorporate predictive analytics to flag potential risks early [49], [50]. This allows institutions to engage with customers in a timely manner, offering tailored solutions such as budgeting tools, payment plan adjustments, or financial counselling, thereby preventing a descent into more severe financial hardship.

Leveraging AI solutions (e.g. automated/robo-advisory services) to conduct analysis of consumer financial situations, risk tolerance and goals, and automated investment advice, could offer wider scope for financial inclusion as interested individuals and households are matched with assets/portfolios at relatively lower costs. This can elevate the role of AI in financial wellbeing beyond helping to cope with difficulty and towards affording opportunities for financial resilience and even wealth building.

Moreover, these AI-driven insights can help institutions align their strategies with a broader commitment to social responsibility. Identifying and supporting vulnerable customers is not only an ethical imperative, supporting regulatory-driven initiatives, but it's also a means to foster long-term customer loyalty and trust. Proactively addressing financial health reduces the likelihood of defaults, mitigates reputational risks, and supports the broader financial ecosystem. In this way, AI and data science methods can provide a powerful mechanism for transitioning from reactive measures to proactive, customer-centric financial management, ensuring that individuals are supported before they fall into unmanageable financial difficulty.

## Example use cases

An illustration of the above is the following example use case.

A retail bank builds a predictive machine learning model to analyse historical data and identify customers at risk of financial stress based on their past financial behaviour, disclosed information regarding personal issues, or life-changing events and open-access data (e.g. geographical deprivation index). By examining trends over months or years, the model detects patterns such as a gradual increase in the use of overdraft facilities, intermittent changes in savings balances, history of large transfers between accounts etc. The predictive risk model also considers external factors, such as regional economic trends or global recession indicators, to contextualise individual financial behaviours.

Using these insights, the bank can segment customers who are likely to face financial difficulties soon. Instead of waiting for real-time triggers, such as missed payments or rapid increases in credit card balances, the bank can proactively reach out to these customers with preventive solutions, such as offering educational resources, promoting savings accounts with automated contributions, or restructuring existing loans to lower monthly payments. By leveraging historical data in a predictive manner, the bank mitigates potential financial distress for customers before it escalates into defaults or other serious issues.

Another example is how an energy provider can leverage AI to assess customer vulnerability in the face of rising energy costs. By analysing data such as payment history, energy consumption patterns, and publicly available socioeconomic indicators, the provider can identify customers who are likely to struggle with future payments. For instance, the model might flag households as at risk of financial hardship due to unusually high energy use relative to their income bracket (for instance, accessible via Open Finance, which will be discussed later in this paper), combined with recent delays in payment or emergency use of credit products to repay outstanding bills.

The provider can then offer these customers pre-emptive solutions, such as enrolment in flexible payment plans, personalised energy-saving tips, or connection to government assistance programmes. This targeted support not only reduces the risk of delinquency but also ensures that vulnerable households maintain access to essential services, aligning the provider's operations with social responsibility goals and regulatory expectations.

These examples illustrate how innovation-driven financial health assessments enable institutions to move beyond reactive measures, fostering resilience and stability through timely, tailored interventions. In addition, technological innovations can do more - offering insights and financial growth opportunities beyond financial difficulty. For example, detecting available income or savings which can be moved to higher-yield financial products, such as adding up to £20k/year to Do-It-Yourself or managed ISAs on automated investment platforms (ISA gains are tax-free in the UK), bringing further potential for financial inclusion and resilience.

## Case Study: Financial Health Evaluation - importance and leveraging AI

Sopra Steria's researchers have constructed an intelligent financial health scoring methodology that generalises the concept of evaluating financial health to the more nuanced approach rather than a binary classification.

### Informative data inputs

Most financial institutions maintain sizeable databases consisting of many data attributes across the board. It is unlikely that a data science algorithm can incorporate a large number of these data points as inputs due to the computational cost. The aforementioned methodology evaluates the importance of these attributes through feature engineering and selection techniques, reducing the selection down to a set of metrics that enhances the distinguished information value. For example, if someone's regular income has decreased (e.g. due to reduction of working hours) on a permanent basis, their regular savings contributions are likely to have decreased as well. Thus, we are unlikely to gain much more information by ingesting these data metrics separately in the model, due to their strong correlation. Should any of these prove to add enough value compared to the rest of the database, the algorithm will choose to use only one to reduce the computational cost. Another example of reduction of data inputs is where equivalent metrics are presented, covering different time points, e.g. monthly credit card balances over a finite time interval can be aggregated to last month, last quarter, last annum etc.

### Advanced models

The second part of the financial health intelligent scoring methodology explores alternative (supervised) machine learning algorithms to predict if a particular individual is likely to experience financial difficulty. A cost-benefit analysis considers the trade-off between performance (accuracy) vs complexity (incl. explainability) of the algorithms. For example, a Neural Network[2] approach may result in a similar performance to a Gradient Boost Ensemble[3] construction but is harder to explain, as it is often described as a 'black box' method. On the contrary, using Logistic Regression[4] is much easier to implement and explain, however, its accuracy appears to be substantially lower than neural networks. Nevertheless, whilst this intelligent scoring methodology would recommend a preferred algorithm, it

[2] A machine learning model that makes decisions in a manner similar to the human brain – source: What is a Neural Network? | IBM
[3] Creating multiple weak models and combining them to get better performance as a whole – source: Towards Data Science

[4] Logistic regression estimates the probability of an event occurring, based on a given data set of independent variables. Source: What Is Logistic Regression? | IBM

remains flexible to accommodate the end user's choice.

## Explainable results

Finally, the framework changes the perception of traditional scorecards. Credit reference agencies convert your estimated credit worthiness into scores from 0-999 (Experian), 0-1000 (Equifax) and 0-710 (TransUnion) [51] and define clusters thereafter (e.g. Poor-Fair-Good-Very Good-Excellent), whereas our intelligent scoring methodology adopts a different approach, namely 'Clustering-to-Score'. The end user defines the number of clusters they would like to see in the financial health report and the algorithm categorises each member of the book accordingly. Furthermore, everyone is compared to their peers within their cluster, providing a comprehensive view of which data inputs have the most negative or positive contribution towards your comparative position against the rest of the cluster members.

This case study demonstrates how innovative methodologies can provide a more comprehensive and nuanced understanding of consumers' financial wellbeing. This intelligent scoring framework represents a significant departure from traditional credit worthiness assessments, offering a more holistic view that aligns closely with regulatory objectives and consumer needs. As we look to the future of financial services and consumer protection, the potential for applying such innovations at scale becomes increasingly apparent. In the next chapter we will explore the transformative potential of Open Banking and Open Finance. These developments offer a unique opportunity to leverage advanced financial health evaluation techniques across the broader financial ecosystem, potentially revolutionising how financial institutions interact with and serve their customers.

## Open Banking and Open Finance

Open Banking represents a transformative shift in the financial services landscape, offering both significant opportunities and notable challenges. By enabling third-party providers to access banking data with consumer consent, Open Banking enhances competition and innovation, allowing for the development of personalised financial products and services. This can lead to improved financial health for consumers, as they gain access to tailored budgeting tools, savings solutions and credit options that meet their specific needs.

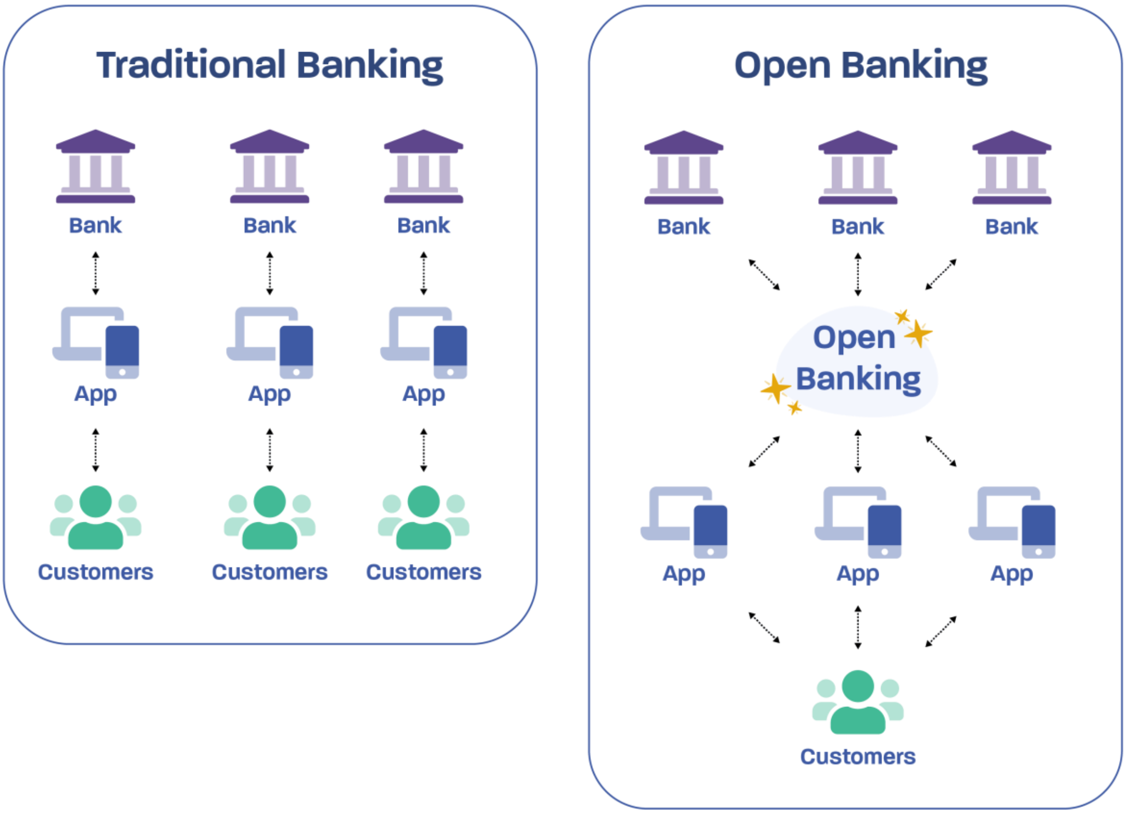


*Figure 6: The shift from traditional to Open Banking. Source: [wonderful.co.uk](wonderful.co.uk)*

However, the implementation of Open Banking was not without challenges [52], [53]. Data privacy and security concerns are paramount, as consumers must trust that their sensitive financial information will be handled responsibly. Regulatory compliance adds another layer of complexity, with institutions needing to navigate evolving legislation while ensuring consumer protection.

Moreover, there is a risk that underserved populations may struggle to access the benefits of Open Banking due to digital literacy or technological barriers [54]. Ensuring equitable access to these innovations is crucial for fostering overall financial health.

In summary, while Open Banking holds the potential to enhance consumer choice and financial wellbeing, addressing its challenges through robust regulatory frameworks, strong security measures and inclusive practices is essential for realising its full benefits.

## Accelerating Open Banking to Open Finance

The transition from Open Banking to Open Finance marks a significant evolution in the financial ecosystem, broadening the scope of data sharing beyond traditional banking services to include a wider array of financial products, such as investments, insurance and pensions. This acceleration presents an opportunity for consumers to gain a more holistic view of their financial health, enabling better decision-making through integrated insights across various financial sectors. By leveraging comprehensive data, consumers can benefit from advanced tools that facilitate budgeting, risk assessment, and financial planning. However, this expanded framework also introduces complexities related to regulatory alignment and data interoperability among diverse financial entities. Ensuring consumer trust in a more extensive data-sharing environment is critical, necessitating robust security measures and clear communication about data usage. As Open Finance unfolds, it will be essential to prioritise consumer protection and accessibility, ensuring that all individuals can harness the benefits of this innovative financial landscape.

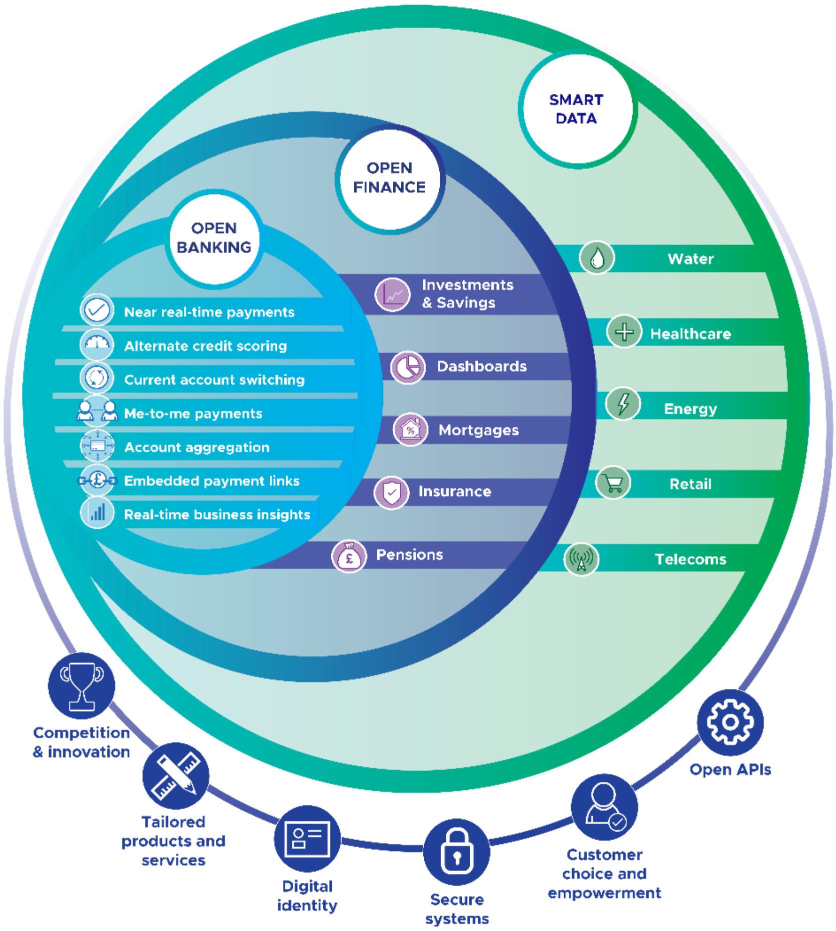


*Figure 7: Product scope in Open Banking and Open Finance - source: [Open Finance - Open Banking]*

## Opportunities and barriers

In the 1990s Bill Gates said “Banking is necessary. Banks are not”. His statement was made during the rise of the internet and the potential for technology to disrupt traditional banking. Numerous research studies and industry reports in the last 20 years addressed the new paradigm shifts and crossroads for banks [55]. The latest technological advances, especially in the AI space, and the related emerging fintech solutions, reaffirm the relevance of Gates’ statement as an open-ended question in today’s reality. It underpins how technology is shaping financial services again and directs the focus to the new angle in the financial services competition: who can build the most consumer-focused innovations?

Open Banking fosters competition through technology-driven solutions and aims to create new categories of competitors. These offer both customers and businesses enhanced services, better value and easier ways to compare financial products [56].

Accessing the next level in financial data sharing through Open Finance (savings, investments, pensions or insurance) will finish what Open Banking started. As a starting point, it can facilitate a wide-range product comparison and encourage switching if a better deal is identified. It is aimed at better-tailored financial journeys with more control over finances for consumers, easier onboarding of new customers and scalable, future-proof fintech solutions. Open Finance is also a leg in the journey towards open (smart) data [56].

In May 2022, the European Commission launched a consultation on the proposal for an Open Finance framework in coordination with a revision of the Payment Services Directive 2 (PSD2). With the Open Banking framework already in place, the Open Finance idea has spread across the jurisdictions. It is commonly agreed that the success achieved in Open Banking should be a backbone for building Open Finance. However, it is highly debatable whether in jurisdictions like the EU, the UK and Australia whether Open Banking has reached sufficient maturity to evolve into Open Finance [57]. It is a matter of discussion what improvements are needed in the Open Banking ecosystem before moving to the wider Open Finance.

## Who is involved?

The Open Banking process revolves around three main actor groups:

- Banks’ customers who consent to share their data;
- Third parties who request to access banks’ customer account information;
- Banks opening their APIs (Application Programming Interfaces).

When constructing Open Finance, the inter-relationship between these actors is vital to emphasising ongoing ‘Open Banking’ issues to be considered particularly at European banking level. However, some challenges have been identified. For instance, verification of third parties, requiring them to be licensed by competent authorities when they receive a customer data access request. Some national registers may not maintain a record of changes to third-party legal status, which can make it difficult for the financial institutions to verify the history of third parties that request to access customer data.

Another notable challenge is the lack of data sharing reciprocity i.e. that financial institutions are mandated to open customer data upon request but cannot ask the same of third-party customers. The fact that EU and UK Open Banking frameworks do not provide for reciprocity is a matter of debate as financial institutions argue that it would create asymmetric competition [57]. On the other hand, consumer protection organisations have expressed concerns that reciprocity could make Open Finance an 'open bar for consumer data' resulting in increased security risks. Hence, reciprocation of both the quality and quantity of data needs to be clarified with more dialogue among all stakeholders if it is deemed a requirement while defining an Open Finance framework.

Furthermore, additional effort should be put into acceleration of consumer education, to enhance new opportunities and benefits derived from Open Finance. This will undoubtedly contribute towards the longer-term horizon, as a solid Open Finance framework will be the test and gateway towards Open (Smart) Data.

Open Banking has evolved the landscape of financial services landscape such as innovation, competition and customer empowerment and opened opportunities for a new era of financial products and services by allowing third-party developers to access bank data through APIs. However, there are challenges in the journey towards Open Banking, which are also relevant to the route to Open Finance:

- **Regulatory compliance and risk management** – Financial institutions must ensure compliance and keep up to date with the regulations which often requires significant investments in legal and technological infrastructure [58].
- **Technological and operational constraints** – There is a need for robust API infrastructure, data standardisation and interoperability between different systems, which can be particularly demanding for smaller financial institutions [59]. Operational constraints include ensuring consistent service quality, managing integration complexities, maintaining data security and privacy, and adapting to evolving regulatory requirements, all of which require significant investment in resources and expertise [60].

## Preferences and adoption challenges

Open Banking is viewed positively by lenders as it simplifies the financial experience for customers. However, to achieve higher adoption rates, consumers need to be encouraged further, which largely depends on awareness efforts by banks and providers.

Many individuals are comfortable using apps provided by their own banks. However, they may be hesitant to share information with other banks and systems. Despite systems integrating Open Banking into their CRM, it remains a relatively new concept. [61].

To overcome these challenges, it is essential to enhance awareness and trust among consumers. Banks and providers should focus on educating customers about the benefits and security of Open Banking, ensuring that they are comfortable with the concept and its applications.

Consumers are also responsible for the effective use of Open Banking and Open Finance, so they should be encouraged to authorise access to all available sources of information about their finances, to avoid processing incomplete data. As an example scenario, some customers may not disclose that they have children, but child benefit statements may be seen in their accounts. Indeed, some may not even be aware that child benefits can count as income which will be considered with affordability [61].

## Consumer trust and security concerns

One of the primary challenges in Open Banking and Open Finance is building trust and raising customer awareness about the benefits and security measures in place. For these initiatives to succeed, customers must be willing to share their financial data with third-party providers [60]. To address this challenge, financial institutions and fintech organisations must adopt transparent communication strategies. In addition, educational initiatives should be implemented to ease consumer concerns and highlight the advantages of Open Banking.

The increased data sharing between banks and third-party providers in Open Banking intensifies the risk of data breaches and misuse [59], [63]. To mitigate these risks, financial institutions must implement robust cybersecurity measures [64]. Strict compliance with data protection regulations, such as GDPR, is essential [65].

**Key security challenges**

- **Data privacy:** The protection of sensitive financial data is a significant concern, as customer information is shared more widely than ever before.
- **Cybersecurity risks:** APIs, while designed to be secure, can still be potential entry points for hackers.
- **Fraud prevention:** As Open Banking enables more online transactions, the potential for fraud increases.

**Principles for enhancing security**

- **Stringent licensing:** Markets should ensure rigorous accreditation processes for new entrants to ensure they meet security standards.
- **Consent-based access:** Open Banking and Open Finance specifications should be consent-based, allowing consumers to control which data is shared and with whom.
- **Robust authentication:** Implementing strong customer authentication (SCA) can help prevent unauthorised access and reduce fraud [66].
- **Continuous monitoring:** Financial institutions should maintain vigilance in detecting and preventing potential security threats.

## Data protection

The General Data Protection Regulation (GDPR) plays a pivotal role in shaping the context of consumer finance. Established to protect personal data, GDPR mandates that organisations handle consumer information transparently and responsibly [67]. This regulation not only safeguards individuals' rights but also enhances their financial health by fostering trust in digital financial services. For instance, when a consumer uses an app for budgeting or investment tracking, GDPR ensures that their data is processed with their consent and that they have the right to access, rectify, or delete their information.

One of the key considerations arising from GDPR is the principle of data minimisation, which states that only the data necessary for a specific purpose should be collected. In the context of financial services, this means that firms should avoid over-collection of data, thereby reducing the risk of data breaches and misuse [68]. For example, a personal finance management tool should focus on collecting only relevant transaction data rather than extensive personal details, thus aligning with standards while still delivering valuable insights to consumers.

Moreover, GDPR's emphasis on transparency is crucial for empowering consumers [69]. One of the main concerns that customers generally have when they are offered Open Banking is that they do not trust how their data would be shared or processed by the organisations. Clear communication regarding how their data is used allows consumers to make informed choices about which services to engage with, enhancing their overall financial health. However, challenges remain, particularly for smaller firms that may struggle with compliance costs [70]. Ensuring that all financial entities, regardless of size, can adhere to GDPR not only protects consumers but also promotes a digital landscape where trust can flourish. Ultimately, integrating GDPR principles into financial services is essential for safeguarding consumer rights while fostering innovation and competition.

The increasing share of AI solutions implemented by third-party providers in financial services adds a layer of challenge, especially as regards sharing consumers' personal data across the value chain. While GDPR serves the purpose of an effective regulatory instrument in the UK/EU/EEA, compliance differs in jurisdictions outside Europe, as partner firms are not under obligation to observe GDPR. In this case, Standard Contractual Clauses (SCCs) are currently used as an instrument to get the commitment of financial services partners outside the UK/EU/EEA to protect personal data shared with them by European business entities. SCCs serve as a mechanism for indirectly ensuring that business partners observe obligations relevant to GDPR under non-European Data Protection Authorities.

### Encouraging consumer-focused innovation

Strategies for encouraging innovation, with a focus on the end consumers in the financial sector, must balance the needs of consumers, businesses and regulators to achieve optimal outcomes. By leveraging evolutionary game theory [71], [72], we can understand how these stakeholders interact and adapt their strategies over time to reach a Nash equilibrium[5] that benefits all parties.

Personal Finance Management (PFM) tools like Mint and YNAB exemplify how technology can empower consumers to make informed financial decisions. These platforms offer features such as budgeting, goal-setting and financial analysis, which help users optimise their spending and saving behaviours [73]. As consumers become more financially literate through these tools, they are better equipped to engage with financial institutions, creating a positive feedback loop that encourages further innovation in consumer-friendly products and services.

AI is revolutionising financial advice, as demonstrated by companies like Cleo. These AI-powered assistants provide personalised financial guidance, making complex financial concepts more accessible to the average consumer [74]. The evolutionary advantage here lies in the AI's ability to learn and adapt to individual user behaviours, continuously improving its advice. This creates a symbiotic relationship where both the AI and the consumer benefit from increased engagement and improved financial outcomes.

Collaborative approaches, such as crowdfunding platforms like Kickstarter and Indiegogo, represent a shift towards consumer-driven innovation in finance [75]. These platforms allow consumers to directly support and shape the development of new financial products and services. This model creates a Nash equilibrium where innovators receive funding and valuable market feedback, while consumers gain early access to products that meet their specific needs. The peer-to-peer (P2P) lending sector similarly leverages this collaborative approach, enabling consumers to act as both lenders and borrowers, potentially reducing the cost of credit for all participants [75].

Regulatory initiatives play a crucial role in fostering consumer-focused innovation. The FCA's regulatory sandbox is a prime example of how regulators can create a controlled environment for testing innovative financial products [76]. This approach allows firms to experiment with new ideas while ensuring consumer protection, ultimately leading to more robust and consumer-friendly financial innovations. Additionally, financial education initiatives, such as those supported by the Centre for Financial Capability, are essential for empowering consumers to make informed financial decisions and actively participate in the innovation process [77].

In summary, consumer-focused financial innovation in the UK is rich with potential, driven by a confluence of technological advancements, regulatory support and evolving consumer needs. From AI-powered financial advisors to collaborative financing models, the industry is witnessing a paradigm shift towards more personalised, accessible and holistic financial services. The UK's regulatory framework, particularly around financial wellbeing and Open Banking, provides a solid ground for these innovations to flourish. However, the path forward requires a delicate balance between fostering innovation and ensuring

[5] Under the Nash equilibrium, a player does not gain anything from deviating from their initially chosen strategy, assuming the other players also keep their strategies unchanged. Source: corporatefinanceinstitute.com

consumer protection. As Open Finance expands the horizons of data sharing, innovators must navigate the complexities of GDPR and digital ethics, ensuring that consumer trust remains at the heart of their solutions. By leveraging these enabling infrastructures responsibly, and aligning with regulatory goals of enhancing financial health, the financial services sector can create a new generation of tools and services that truly empower consumers. This consumer-centric approach, underpinned by robust evaluation of financial health, has the potential to transform not just individual financial wellbeing, but the entire financial ecosystem, making it more inclusive, resilient and attuned to the diverse needs of UK consumers.

# Future outlook

## Emerging trends in consumer innovation

The financial services landscape is poised for significant transformation, driven by emerging trends in consumer-centric innovation. AI and ML are expected to play an increasingly pivotal role in personalising financial products and services. We anticipate the rise of 'hyper-personalised' financial advice, where AI-powered platforms analyse vast amounts of data to provide tailored recommendations for budgeting, saving and investing. Additionally, the integration of behavioural economics into fintech solutions is likely to gain traction, helping consumers make better financial decisions by leveraging psychological insights.

Another emerging trend is the growth of 'embedded finance' where financial services are seamlessly integrated into non-financial platforms and applications. This could lead to more contextual and timely financial services, such as instant micro-loans at point of sale or automated savings based on spending patterns. Furthermore, the development of voice-activated financial assistants and augmented reality interfaces for financial management could revolutionise how consumers interact with their finances, making financial health management more intuitive and accessible.

## Potential regulatory developments

As consumer innovation in financial services accelerates, regulatory frameworks are likely to evolve to keep pace. We may see the introduction of more granular regulations around AI and ML in financial decision-making, particularly focusing on transparency and explainability of algorithms used in credit scoring and financial health assessments. The FCA might expand its regulatory sandbox to include more diverse fintech solutions, encouraging innovation while ensuring consumer protection.

Open Finance initiatives are expected to broaden, potentially leading to regulations that mandate the sharing of a wider range of financial data beyond banking, including insurance, pensions and investments. This could foster a more comprehensive view of consumer financial health and enable more holistic financial planning tools. Additionally, we might see the development of regulatory frameworks specifically addressing the ethical use of consumer data in fintech applications, going beyond current data protection laws to ensure fair and responsible innovation.

## Long-term impact on the financial services industry

The long-term impact of these trends and regulatory developments on the financial services industry is likely to be profound. Traditional financial institutions may need to significantly transform their business models to remain competitive, potentially leading to increased partnerships between banks and fintech companies. We may see a shift towards platform-based financial services, where consumers can access a wide range of products and services from multiple providers through a single interface.

The focus on financial health and wellbeing could lead to a reimagining of how financial products are designed and marketed. Instead of standalone products, we might see the emergence of holistic financial wellness ecosystems that integrate various aspects of a consumer's financial life. This could result in new revenue models based on improving overall financial health outcomes rather than traditional product-based approaches.

Moreover, the democratisation of financial services through technology could lead to increased financial inclusion, potentially disrupting traditional credit markets and creating new opportunities for underserved populations. As consumer-centric innovation becomes the norm, we may witness a fundamental shift in the power dynamics between financial institutions and consumers, with greater emphasis on transparency, fairness and long-term financial wellbeing.

These innovations hold the promise of shifting away from rigid, one-size-fits-all credit scoring models toward more dynamic, fair, and inclusive approaches that better reflect an individual's real financial circumstances. When aligned with principles like the FCA's Consumer Duty, innovation can actively reduce reliance on high-cost credit by enabling earlier interventions, smarter budgeting tools, and more responsive product design tailored to those at greatest risk of financial stress.

Rather than creating a two-tier system, the future of financial services should be one where technological advancement acts as a leveller – bridging gaps, not widening them. By extending the reach of Open Banking into Open Finance, we are entering an era where individuals can have greater control over their financial data and, by extension, their financial outcomes. With the right safeguards in place – ensuring accessibility, digital inclusion, and robust data protection, this next wave of innovation can support more affordable, ethical, and personalised services for all consumers, especially those who have historically been underserved. The direction is clear: innovation and access can and must move forward together.

In conclusion, the future of financial services in the UK is set to be shaped by a powerful combination of technological innovation, evolving regulatory frameworks, and a growing focus on consumer financial health. As these forces converge, they have the potential to create a more inclusive, efficient and consumer-friendly financial ecosystem that truly puts the financial wellbeing of individuals at its core.

## Conclusion

The UK financial services sector is at a pivotal moment, where rising household debt and consumer vulnerabilities demand a shift toward more innovative, customer-centred solutions. As this whitepaper has explored, the regulatory landscape – anchored by initiatives such as the FCA's Consumer Duty, High-Cost Credit Review, Breathing Space and others, provides a strong foundation for prioritising financial wellbeing. However, to truly place consumers at the heart of innovation, the industry must go beyond compliance and embrace holistic approaches to evaluating financial health.

The comparison between traditional creditworthiness assessments and holistic financial health evaluation underscores the need for more inclusive, forward-looking methodologies. The case study on an AI-driven framework for intelligent credit scoring demonstrates how technology can empower both consumers and financial institutions by providing a more nuanced understanding of financial resilience. Open Banking and Open Finance further amplify these possibilities by enabling seamless data sharing and fostering collaboration across the ecosystem.

However, with great innovation comes great responsibility. Adhering to robust data protection and digital ethics principles is critical to maintaining consumer trust and ensuring that technological advancements do not inadvertently exacerbate financial vulnerabilities. By placing ethical considerations at the core of development, fintech innovators can create solutions that are not only effective but also equitable.

Looking ahead, encouraging consumer-centric innovation will require a concerted effort from regulators, financial institutions and fintech companies alike. Key directions include leveraging AI to personalise financial services, expanding access to underserved populations, and promoting financial literacy through intuitive digital tools. By aligning technological advancements with consumer needs and regulatory priorities, the UK can set a global benchmark for fostering financial health in an era of rapid change.

Ultimately, the path forward lies in collaboration, innovation, and an unwavering commitment to improving consumers' financial wellbeing. By keeping consumers at the heart of innovation, the UK financial services industry has the opportunity to build a more resilient, inclusive and sustainable future for all.

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## About the Authors

**Kal Bukovski** is Consulting Senior Manager and Director of Academia & Research at Sopra Steria. He specialises in the financial services domain, driving transformative projects and data-driven excellence. With expertise in analytics, data science, business intelligence and data visualisation, he supports clients in making strategic decisions and gaining a competitive edge in this dynamic, regulated domain. Kal leads business projects and collaborations with Academia, fostering innovation, compliance and data-driven storytelling. His main areas of expertise are regulatory modelling, credit risk, consumers' financial health, scorecards, pricing and others, enhancing risk management and customer experience for sustained success

Email: kal.bukovski@soprasteria.com
LinkedIn: https://www.linkedin.com/in/kal-bukovski/
Orcid: https://orcid.org/0009-0006-4963-3337

**Aurelija Cepkauskaite** is a Senior Data Analyst at Sopra Steria with over 12 years of experience in the financial services sector. She specialises in data analytics, with a focus on regulatory projects and compliance within financial services. Aurelija has extensive expertise in Consumer Duty initiatives, with a proven track record of helping clients implement these projects effectively across various client engagements. She holds an MSc with distinction, with her dissertation titled "Consumer Duty: Tick-box Exercise or Purpose-driven Banking," reflecting her deep understanding of the evolving regulatory landscape.

Email: aurelija.cepkauskaite@soprasteria.com
LinkedIn: https://www.linkedin.com/in/aurelija-cepkauskaite

**Sarfaraz Shaikh** is a Senior Business Analyst at Sopra Steria with over 6 years' experience within the telecoms, healthcare, financial services and education industries. He specialises in defining business requirements, completing GAP analysis, stakeholder management and improving business processes. His experience and academic background as an Executive MBA from the University of Birmingham Business School has driven him to contribute to actionable research activities on the topics of Consumer Duty and Open Banking & Open Finance.

Email: sarfaraz.shaikh@soprasteria.com
LinkedIn: https://www.linkedin.com/in/sarfarazshaikh1/

**John Finch** is Professor of Marketing at the University of Glasgow's Adam Smith Business School, specialising in market studies and business-to-business marketing. He was Head of the Adam Smith Business School 2016 – 2023, leading the school through a period of growth, development and internationalisation, including the introduction of the degree programme, MSc Financial Technology. He is lead investigator for the University of Glasgow in the Financial Regulation Innovation Lab, a project funded by Innovate UK as a partnership between Fintech Scotland, the University of Strathclyde, and the University of Glasgow. John has led projects funded by Innovate UK and by the Leverhulme Trust, has publications in *Research Policy*, *Industrial Marketing Management*, and *Marketing Theory*, and teaches business-to-business marketing on the University of Glasgow's MBA programme.

Email: john.finch@glasgow.ac.uk
LinkedIn: https://www.linkedin.com/in/johnfinch/

**Chuks Otioma** holds a PhD from Maastricht University, the Netherlands. He is part of the Financial Regulation Innovation Lab (FRIL) team at Adam Smith Business School (University of Glasgow), where he works in the theme of financial technology and responsible innovation, with focus on firm capabilities building for the development and deployment of consumer-focused products and services, and the governance of risks associated with digital business models. He has been a Researcher at UNU-MERIT, the Netherlands, where recent engagements include a project on innovation trends in Sub-Saharan Africa with focus on why and how digitalisation policies and regulations can integrate the elements of economic competitiveness, inclusive development, and green transitions. Chuks has experience in the private sector, development practice and research-based policy advisory service, which include roles in telecommunication industry in Nigeria, and at International Telecommunication Union (ITU), UN agency for ICTs.

Email: chuks.otioma@glasgow.ac.uk
LinkedIn: https://www.linkedin.com/in/chuks-otioma

## Get in touch

FRIL@FinTechscotland.com



FinTech Scotland® University of Glasgow University of Strathclyde Glasgow