

Open finance: opportunities, challenges and policy implications

Note written by by Marc Truchet, Eurofi

1. Objectives of open finance and main use cases

1.1 Objectives

Open finance (OF) refers to the sharing of personal and non-personal customer data held by financial sector intermediaries and other data holders with third-party providers for the purpose of providing a wide range of financial and information services¹. It is an extension to a broader range of data (credit, savings, investment, insurance, pensions) of the Open Banking concept which focuses on payments and the sharing of bank account data².

The main objectives of OF are (i) to offer individual consumers and businesses that consent to share their financial data an improved range of financial products and services leveraging the potential of data-enabled innovation in finance and (ii) to increase competition in the provision of financial services to the benefit of customers and of the overall financial system³.

In the EU, OF concepts were first implemented in the payments area and for bank accounts in the context of the revised Payments Service Directive (PSD2) adopted in 2015 and currently under review. PSD2 inter alia requires that payment service providers (mainly banks) open up their customers' current account data to authorised and regulated third parties in order to enhance competition in the payments market and create incentives for further digitalisation. These rules apply to the accounts of individual customers and also businesses.

PSD2 has led to the emergence of new payment service providers (payment initiation services) and also new information services aggregating payment account data (account information services), provided by banks and fintechs that interact with payment accounts mainly through application programming interfaces (APIs). New account information services supplied by PSD2-entities for individuals include services offering an overview of the different current

accounts held by a given customer and budget planning apps⁴. For businesses, open banking applications include SME financial dashboards and scoring systems using in-going and out-going payment history to assess loan applications.

The development of open banking solutions in the EU has been significant with more than 350 account information and payment initiation service providers authorised⁵ following the implementation of PSD2, but market penetration is lower than expected for the time being with open banking touching less 5% of customers in 2021⁶. The objective with open finance is to further leverage the potential of data sharing and data-led innovation in finance with a wider range of services provided and a review of the regulatory framework, taking into account the lessons learned from the implementation of the open banking provisions of PSD2.

1.2 Examples of open finance use cases

Open finance broadens the open banking approach to almost all financial services including banking and savings accounts, investments, insurance and pension products. This wider sharing of financial data and interconnection of accounts supported by APIs⁷, possibly combined with data analytics and artificial intelligence (AI), may bring value to retail and business customers in many areas of finance beyond payments such as investment and financial advice, pension preparation, mortgage and credit, insurance...

Examples of use cases of open finance include: dashboards, financial management and wealth management tools consolidating information on different accounts and products; product and supplier comparison tools; credit-worthiness and insurability assessments using a wide range of financial data; financial services and insurance imbedded in online sales or information processes (e.g. banking as-a-service, insurance as-a-service); data collection processes from multiple sources to support onboarding, loan, mortgage or insurance applications; sharing

1. See definition for example in: Consultation document, Targeted consultation on open finance framework, European Commission, 2022.

2. Beyond open finance there is the possibility of expanding the scope of data sharing into open data, applying the same principles to other types of data beyond financial data, including those from telco, utilities, IoT, e-commerce platforms and social media for example.

3. OF may also contribute to more effective supervision by the direct provision of regulatory information potentially on a real-time basis.

4. These services allow consumers to have a global view on their financial situation and to analyse their spending patterns, expenses, financial needs in a user-friendly manner.

5. See EBA chairperson keynote speech at the Money Live Summit, 8 March 2023.

6. See Com. McGuinness keynote speech at event in European Parliament "From open banking to open finance" 21 March 2023.

7. The APIs that are being used under the PSD2 and are essential for connecting different financial applications could be expanded for this purpose.

of in-vehicle data to help insurers provide more customized policies; handling of insurance claims; supotech solutions offering supervisors access to prudential, product or consumer information on a real time basis... See Appendix 1 for further detail on potential OF use cases.

2. Main benefits and opportunities of open finance

2.1 Benefits for customers

Open Finance may contribute to improve the financial products and services offered to individual consumers and businesses and also enhance customer experience in different ways.

OF solutions may in particular: (i) provide consumers with access to more tailored financial services and insurance products better suited to their needs and profiles and provide more choice; (ii) empower consumers to make more informed financial decisions with an aggregated view on their financial situation, the forecasting of possible future scenarios and information on how products and services may match their needs; (iii) make it easier for consumers and businesses to compare prices and product features and switch products or providers; (iv) support more effective creditworthiness or insurability assessments based on a wider range of data, enabling certain customer segments or specific customer needs to be better served; and (v) improve the provision of financial advice based on a more holistic view of the financial situation of customers⁸.

The access to and sharing of data potentially in real-time supported by OF may also allow financial institutions to streamline certain data collection and processing activities (e.g. related to credits and mortgages) to the benefit of their customers and enable the transferability of customer profiles among financial providers to facilitate e.g. on-boarding and suitability assessments.

2.2 Opportunities for financial services providers

The easier access to larger customer datasets supported by OF also creates new business opportunities for financial service providers, both newcomers and incumbent firms.

First, OF creates opportunities for new service providers such as fintechs, that will be able to offer new services

based on the data sharing and aggregation possibilities offered by OF in the areas inter alia of investment and financial advice, pension preparation, mortgage and credit, insurance...

As far as traditional banks and insurers are concerned, OF will introduce new forms of competition, but should also bring about new opportunities to better serve existing customers and attract new ones. OF solutions may indeed enable banks and insurers to improve their offering and develop cross-selling opportunities, by integrating services from third parties seamlessly through APIs in the range of products they offer. In addition, the possible consolidation in one place of customer financial data thanks to OF (including accounts, loans, payments, investments, insurance policies...) should give banks and insurer a more holistic view of the financial situation of clients, allowing them to offer new financial management and insurance services and improve the advice that their advisors currently provide for their customers⁹. The potential streamlining of data collection processes via OF infrastructures may also contribute to enhancing the efficiency of a number of processes such as credit applications, on-boarding, AML verifications, claims management... Expanded access to a customer's financial history could also facilitate decision-making in bank lending processes or the provision of more effective wealth management services or insurance policies.

3. Possible risks and challenges from open finance

Open finance can potentially bring about many changes in financial value chains and the existing market structure, creating new opportunities and also some challenges for customers, financial firms and supervisors.

3.1 Potential customer risks from open finance

The implementation of OF solutions creates new risks or increases some existing risks related to data sharing and the technical infrastructure supporting OF¹⁰ and also to a higher level of disintermediation in OF ecosystems.

The exposure of customers to data privacy and security issues may increase with OF. The risk that customer data may be used without sufficient consent or may be inappropriately used could be amplified by the more complex and active data

8. See: Open Finance Feedback statement, FCA, March 2021; Open insurance: accessing and sharing insurance-related data Discussion paper EIOPA 2021.

9. See The future of open finance: empowering consumers in a connected ecosystem, BCG, April 2021.

10. See in particular FCA Open Finance Feedback statement March 2021; Open insurance: accessing and sharing insurance-related data Discussion paper EIOPA 2021.

sharing chains used for supporting OF, also creating potential concerns in terms of customer trust. The increased sharing of personal data in an OF context may also increase the vulnerability of customers to financial crime, fraud and scams, as well as to operational ICT¹¹ risks such as API security risk and cyber-risk.

Consumer protection issues may also emerge as a result of a higher level of disintermediation in the provision of financial services in OF ecosystems. OF may indeed allow the development of more sophisticated product comparison tools, advisory tools based on data aggregation and imbedded financial services that may replace part of the role currently played by traditional financial intermediaries and advisors, potentially creating risks for customers if these applications generate over-simplified information or mis-leading recommendations.

The data-driven nature of OF-based services and the possible use of sophisticated data analytics and AI in this context, may also expose OF customers to the risks usually associated with these techniques *i.e.* biases concerning certain customer profiles, errors due to out-of-date or incomplete data or unfair price optimisation practices, potentially leading to customer discrimination or exclusion issues or over-charging in some cases.

3.2 Challenges for financial firms and supervisors

The financial firms and third-party providers operating in OF environments also face a certain number of specific risks and challenges. First, operational risks relating to API use; interoperability issues between different types of systems and applications including legacy systems; an increasing complexity and dependency in the interconnectedness with third-parties; greater exposure to cybersecurity risks; and a possible shortage of skills for operating such environments. Secondly, competition risks, if OF leads to asymmetrical access to and sharing of data between financial institutions and third-party providers or to an unfair sharing of costs for setting up and running APIs and OF services; or if barriers hinder the access of newcomers to APIs and OF applications due to insufficient proportionality in the calibration of rules or proprietary standards.

Supervisors also face new challenges and risks with OF due to the cross-sectoral nature of OF ecosystems, the reliance of OF ecosystems on API-based

interconnected infrastructures and also possible changes in the financial market structure driven by OF (greater fragmentation of financial value chains with the emergence of specialised providers, possible development of new types of platforms aggregating financial services from multiple providers or combining financial activities and ecommerce or information provision activities...)¹². This may require new competences and changes in the current financial supervision approaches (*e.g.* to tackle risks involving multiple interconnected players operating under different financial frameworks, more complex data governance and API related issues...).

While OF could have some implications in terms of financial stability (*e.g.* due to a higher level of interconnectedness among financial service providers; or the possibility for customers to move more of their money in real time making the monitoring of liquidity positions harder), it is unlikely that OF will rapidly reach a scale sufficient to create a significant stability threat for the financial system.

3.3 Implementation challenges

Moreover, the uptake of effective OF-based services and products may be hindered by operational challenges and standardisation issues. Insufficiently standardised data and API interfaces are an obstacle to the development of OF, leading to insufficient interoperability in OF ecosystems. This may include the standards used by non-financial companies that operate within or interact with an open finance ecosystem such as car manufacturers for the use of in-vehicle data for insurance purposes for example. Technical challenges related to the maintenance of the API infrastructure of OF ecosystems with a sufficient level of security and the management of interfaces with the legacy infrastructures of incumbent financial institutions also need considering.

The investment required for setting up OF systems and platforms (including technology costs stemming from the implementation and connection of APIs; the costs of standardising and digitising data; the costs of improving cyber-security and fraud detection; additional compliance costs and OF business development costs) is an additional challenge, requiring a detailed assessment of the potential business impact and feasibility of OF use cases and an adequate sharing of costs along the OF value chain.

11. Information and communication technology.

12. OF may indeed have significant impacts on existing financial value chains and the financial market structure over time if it develops in the market. A greater fragmentation of financial value chains can be expected from OF with the emergence of OF service providers focusing on certain steps of the value chain or providing specific services. OF and the use of APIs could also favour new forms of platformisation in the financial sector, leading to more concentration in certain areas of the financial ecosystem, with the development of non-bank providers aggregating best-in-class financial services from multiple providers or multi-activity or e-commerce platforms embedding multiple financial services in their sales processes. See for example Speech by Denis Beau, Banque de France, From open banking to open finance, 24 March 2022; White paper by BCG and Innovate Finance, Unlocking the potential of open finance in the UK, March 2023.

4. Main issues to consider regarding a possible open finance framework

4.1 Objectives of an EU open finance framework

The European Commission is planning to propose an open finance framework by the end of H1 2023 in order to support the sound development of OF applications in the EU. A review of PSD2 is being conducted in parallel to strengthen the framework applying to payment service providers with an enhancement of security and customer protection requirements, a strengthening of enforcement and supervision and a merger of PSD2 and the electronic money directive (EMD2).

The establishment of an OF framework was first proposed in 2020 by the European Commission in the context of the Digital Finance Strategy as a key element of the 'European financial data space', which aims to enhance the access to and sharing of financial data across the EU in order to promote data-driven innovation in finance¹³. This objective was also put forward in the Capital Markets Union (CMU) communication of November 2021 as a driver for developing retail investment and diversifying the financing of SMEs¹⁴. The proposal to establish a European Single Access Point (ESAP) to corporate and financial institutions' public disclosures, adopted in November 2021, aiming to consolidate online access to financial and sustainability-related data in a single interface, is a first application of these objectives in the capital markets area.

A targeted consultation was subsequently led by the Commission in H1 2022 for the preparation of an EU open finance framework. A report on open finance was also published in October 2022 by an Expert Group set up by DG FISMA in 2021 for providing advice and expertise in relation to the preparation of legislative proposals and policy initiatives in the field of data sharing in the financial sector¹⁵. A number of other jurisdictions including the UK, US, Brazil and several APAC jurisdictions have also implemented or are considering implementing Open Banking and Open Finance initiatives either through

regulatory-driven or market-led approaches¹⁶.

The EU open finance framework is expected to build on the data sharing provisions of the EU Data Strategy framework in the process of being implemented¹⁷ (comprising the Data Governance and Digital Markets Acts and the upcoming EU Data Act¹⁸ – see further detail in Appendix 2) and the data portability and third-party access provisions of GDPR¹⁹. These rules will however need to be fine-tuned and completed for supporting open finance. Indeed the EU Data Strategy legislations do not introduce any new data access rights in the financial sector beyond those of PSD2 and while GDPR enables third party service providers to have direct access to personal data, including financial data, this only applies in cases where it is technically feasible, which does not guarantee such access.

4.2 Main lessons from the implementation of PSD2 open banking standards

Many stakeholders consider that the upcoming open finance framework should build on the lessons learned from PSD2, correcting the shortcomings observed in the initial implementation of open banking provision in the EU, and should not be a mere extension of PSD2 open banking requirements to a broader range of financial services.

A study conducted by the European Commission on the application and impact of PSD2²⁰ concludes that while PSD2 has laid the foundations of open banking and finance in the EU, many expected benefits and its full potential have not been realised due to issues relating to data access and sharing, consent and data protection and fragmentation of API standards in particular.

The main issues according to the Commission study on PSD2 relate to the lack of incentives for banks to provide appropriate access and to the insufficient standardisation of APIs.

The PSD2 indeed relies on the assumption that the costs of building interfaces for accessing payment data will be exclusively supported by ASPSPs (Account Servicing Payment Service Providers) such

13. The financial data covered by the European financial data space includes existing financial information provided through national registries (e.g. corporate disclosures) and information released under EU financial regulations. There is also an objective in the Digital Finance Strategy to improve supervisory reporting and the sharing of supervisory information with the use of new technologies (including RegTech and SupTech).

14. In December 2021, the Commission also adopted a supervisory data strategy for EU financial services, with the objective of modernising EU supervisory reporting and putting in place a system that delivers accurate, consistent, and timely data to supervisory authorities at EU and national levels, while minimising the aggregate reporting burden for all relevant parties.

15. Report on Open Finance of the Expert group on European financial data space, European Commission, October 2022.

16. For further detail see for example: Data portability in open banking, OECD, February 2023; Data mobility and the financial sector, DNB-AFM discussion paper, September 2022.

17. The European Data Strategy aims to establish by 2030 a single market for data in order to increase the availability and use of data across the EU.

18. These initiatives establish rules for data intermediaries and online gatekeeper platforms and requirements for the sharing of data held by public sector bodies and generated by connected devices.

19. The European General Data Protection Regulation (GDPR) ensures a consistent protection of personal data across EU Member States. GDPR also establishes a right to data portability *i.e.* a right for data subjects to receive personal data concerning them in a structured commonly used and machine-readable format and to port those data to other controllers. Data subjects also have the right to have their personal data transmitted from one controller to another, but only where technically feasible. These rules however do not establish any specific requirements on the format of a data request.

20. A study on the application and impact of Directive (EU) 2015/2366 on Payment Services (PSD2), FISMA, 2023.

as banks. This means that the costs related to the setting up and running of the infrastructure needed to share payment data with third-party providers (TPP) are not shared in a fair way and that banks do not have a real incentive to invest in well-functioning and effective APIs to provide TPPs with access to customer data. This resulted in most cases in the setting up of interfaces offering a limited access to the minimum data required by the PSD2 regulation²¹. The lack of reciprocity of PSD2 open banking rules in terms of data access has also been pointed out by some banks²².

Moreover, PSD2 RTS do not detail specific API standards. This has led to the emergence of multiple API standards across the EU and differences in the application of these standards in the industry since their implementation was left to the discretion of each bank²³, leading to sub-optimal outcomes. This has resulted in APIs varying significantly in quality and functionality which increased costs and resources for the industry, creating obstacles to the seamless provision of open banking services across the EU. By way of comparison, in the UK, where a single standard has been enforced for the largest ASPSPs for providing access to TPP, the penetration of open banking appears to be higher than in the EU with an estimated 10-11% of digitally-enabled consumers having used open banking services in 2022 and a month-on-month growth of around 10% observed in 2022 for open-banking payments²⁴ and continuing to increase.

4.3 Main areas to consider for the establishment of an EU open finance framework

The different assessments undertaken by the European authorities regarding the impact and feasibility of OF and the lessons learned from the implementation of PSD2 have allowed the identification of a number of areas to be considered for establishing an effective OF framework²⁵. These areas include data ownership and consumer protection issues; the fair access to data and the level playing field among OF market participants; liability issues; and data and API standardisation²⁶. While there appears to be a certain consensus on

these areas, the extent to which these issues should be subject to regulatory requirements and what they may involve still needs defining, particularly concerning API and data standardisation for which an appropriate balance needs to be found in order to achieve a sufficient degree of standardisation without being too prescriptive. How the open framework may be implemented (*e.g.* covering all financial sectors and data or a subset and possibly in a staged way) and which data may be most most relevant to share and may deliver most value to customers are further questions to address.

A first issue to address for implementing sound OF solutions is defining how individual and business customers may have sufficient transparency on and meaningful control over how their data is shared and reused for the purposes of OF services and how this interacts with GDPR principles and other data rules. A way to achieve this in regulatory terms is establishing the principle that personal data²⁷ should be owned and controlled by customers, in order to foster customer trust and protect their data, which involves *inter alia* that data should not be accessed without customers' explicit consent. In addition, consent should be granted for specific purposes only and end-users should have the possibility to withdraw consent. How these principles may be implemented still needs to be further determined however: first, which data may be covered by consent rules (*i.e.* personal data supplied by customers and also possibly data created on their behalf by the OF ecosystem) and how consent may be managed in practical terms (*e.g.* through consent interfaces provided by banks whereby customers can check with whom and how their data is being shared). Other possible measures that have been proposed to tackle data privacy concerns include the requirement to publish lists of customer data fields stored by financial institutions that may be potentially shared or determining data perimeters delineating the categories of personal data which may be used for the delivery of specific financial products and services. Measures may also be needed to mitigate the risks of discrimination, over-charging or exclusion in the use of data-based OF services, particularly when they are combined

21. See Eurofi Views Magazine, April 2023, The success of Open Finance is mainly dependent on the industry, not regulation, Geoffroy Goffinet, ACPR.

22. The current lack of reciprocity of PSD2 rules has indeed been criticized by banks. While PSD2 rules mandate access to bank account data in order to allow the development of new payment services, they do not provide the reverse *i.e.* access to data held by non-financial firms such as online platforms, creating an unbalanced level playing field and potentially limiting the overall flow of data.

23. The industry elaborated PSD2 API market standards but multiple standards were elaborated (*e.g.* Berling Group, STET standards) and their implementation was left at the discretion of each bank.

24. See OECD (2023), Shifting from open banking to open finance, Results from the 2022 OECD survey on data sharing frameworks, Eurofi Views Magazine, April 2023, The UK's approach to open banking and open finance, Sheldon Mills, FCA. According to this latter article in the UK over 7 million customers and over 600,000 SMEs are already using innovative open-banking enabled products and services to manage their money and make payments. The trend continues to accelerate with open-banking payments having grown at a rate of 500% year-on-year.

25. See for example BaFin, Paving the way towards open finance in the European Union, 12 December 2022; Report on Open Finance of the Expert group on European financial data space, European Commission, October 2022; EBA chairperson keynote speech at the Money Live Summit, 8 March 2023; Com. McGuinness keynote speech at event in European Parliament "From open banking to open finance" 21 March 2023.

26. The CMU communication of November 2021 pointed out that an OF framework should be based on the principles of customer consent, subject to data protection rules and clear security safeguards, and provide a level playing field for existing and new entrants.

27. *i.e.* personal data supplied by customers and also created on their behalf within the OF ecosystem.

with AI tools that may introduce biases or black-box issues.

A second issue to be considered in the OF framework is how to ensure a level playing field and a fair sharing of costs and obligations among the different players potentially contributing to and benefitting from OF. This first requires that market participants carrying out the same activity and giving rise to the same risks should be subject to equivalent rules, notably in relation to consumer protection and operational resilience. This means in particular that new entrants providing regulated financial services in the context of OF should be regulated under the relevant existing financial regulations. The creation of a license or registration system has also been proposed to allow access to OF APIs, particularly in cases where OF services combine a mix of financial services. Ensuring a proportionate and fair access to data and allocation of costs related to data sharing among the different players on the data value chain is also essential. This may be achieved through reciprocity in the access to data or with a fair compensation scheme for the provision of data, in cases where reciprocal access to data cannot be implemented or is not worthwhile. There is also a question as to which data may be accessed free of charge and which data may be monetized. Whether the setting up of interfaces such as APIs by data holders should be mandatory or voluntary is a further question to be addressed in this context.

Establishing clear liabilities with regards to the accessing, processing, sharing and storing of data is a further area to consider from a policy perspective. The possible liability claims stemming from the misuse of data or use of inadequate data (e.g. outdated or incomplete data sets) by entities operating in an OF context must be addressed in particular, in order to foster legal certainty, trust and accountability. This requires ensuring that liabilities are appropriately determined and addressed in an OF context either through common principles that may apply to contractual and non-contractual agreements or through existing rules, when applicable. A dispute resolution mechanism tailored to OF environments may also need developing.

Achieving a sufficient level of standardisation of data (definitions, core data fields and minimum sets of standardised data²⁸), technical interfaces (such as APIs) and operating principles (including authentication, consent management, security protocols...) is also essential for supporting the development of effective OF ecosystems. Suggestions

have been made that API standardisation should be addressed mainly through industry-driven initiatives, given the fact that regulatory standards may be too prescriptive, however the PSD2 experience shows that an involvement of the public authorities may be needed to ensure a sufficient level of standardisation either by the definition of minimum standards or to ensure that industry standards are implemented in a consistent way. As for data standards, these should build on existing regulations (e.g. the EU eIDAS standards) and international data standards such as LEI and ISO standards. The provision of a portable digital identity is another area of standardisation that could facilitate the development of OF by simplifying identification processes and the collection of documents necessary for certain financial activities such as opening an account or applying for a loan²⁹.

Another key aspect relates to security requirements (e.g. in terms of authentication of OF service users to avoid frauds), which are important for ensuring consumer trust in OF. The suggestion has been made that security requirements similar to those being used for PSD2 and currently being reviewed, should be used for the communication between TPPs and data providers in OF³⁰. The Digital Operational Resilience Act (DORA), which has recently been adopted should also help to address possible ICT risks and cyber-risks from the implementation of OF solutions.

Finally, supervision also needs to be adapted to open finance activities that potentially fall within the remit of different competent authorities (e.g. combining different financial services currently supervised by different sectoral authorities) and that may give rise to new data protection and governance issues and ICT risks due to the interconnected OF infrastructure and the highly data-driven nature of OF products and services.

28. The areas of data standardisation required for OF suggested by the Expert Group on European financial data space in its report include authentication and identity management (e.g. based on the EU eIDAS Regulation (Electronic IDentification Authentication and trust Services), standards and technical requirements (e.g. field names, messaging format syntax, information exchange protocols...) and existing global data standards.

29. The EU digital ID proposed can for example facilitate the identification of customers by different financial providers operating in an OF environment and also support certain OF-enabled processes such as loan or credit applications, with users able to select the necessary documents for their application from those stored in their digital wallet.

30. See EBA chairperson keynote speech at the Money Live Summit, 8 March 2023.

Appendix 1: Main use cases of open finance

A number of use cases of open finance were outlined in the recent reports published for the preparation of an open finance framework in the EU and UK³¹. These use cases cover different areas of finance and steps of the financial value chain and may be combined with data analytics and artificial intelligence (AI) to improve decision-making and the efficiency of operations:

Investments and savings

- Personal financial management dashboards or nudge systems that enable customers to understand and optimise their overall financial position (cash flow, savings, investments, spending, future projects, pension needs) based on an aggregation of information from their different financial accounts: bank accounts, savings, investment and pension products held.
- Pension adequacy dashboards consolidating the information of the different pension schemes and products held and simulating expected pension payments.
- Wealth management or investment management advice tools supporting the financial decisions of retail investors, aggregating data on investors' current investments and making it easier to share comprehensive information with advisers.
- Automatic saving and investment solutions *i.e.* sweeping automatically excess funds into savings and investment accounts on a monthly basis and automatically covering possible overdraft.

Credit and mortgage

- Streamlining of credit and mortgage application processes (with OF based data collection).
- More accurate creditworthiness assessments of SMEs and individuals, based on a holistic view of financial assets, cash flows and payment and account history.
- Transfer of the credit applications of SMEs to other financial intermediaries or providers of finance in cases where credit applications are turned down.

- Credit imbedded in sales processes and credit-as-a-service.

Insurance

- Sharing of in-vehicle data to increase road safety and help insurers provide more customized policies.
- Handling of insurance claims management by third-parties.
- Insurance imbedded in sales processes.
- Tool assessing whether insurances are up-to-date based on the actual living situation inferred from the analysis of bank accounts.

Transferability and comparability

- Transferability of customer-profile data and information on current savings and investments³² among financial intermediaries to facilitate in-boarding and support financial advice.
- Tools comparing services and products in terms of functionality and cost that may facilitate product choice and the switching of products and providers.

Supervision

- Suptech solutions offering access to prudential, product or consumer information on a real time basis to support oversight and supervisory capabilities.³³

ESG and Carbon-footprint

- Digital tools to assess the ESG profile of financial products.
- Combining transaction and investment data to measure carbon footprint.

31. See: Report on Open Finance of the Expert group on European financial data space, European Commission, October 2022; Open Finance Feedback statement, FCA, March 2021; Open insurance: accessing and sharing insurance-related data Discussion paper EIOPA 2021.

32. Including information on customers' risk and sustainability preferences, financial knowledge and experience, transaction track record, ability to bear losses, wealth, income, investment horizon based on the customers' projects, AML-CFT information...

33. This may allow compliance with regulatory goals to be automatically monitored by reading the data that is exchanged by providers via standardised APIs thus reducing the need to actively collect, verify and deliver data for supervision, in particular for conduct of business supervision. Regarding distribution and product regulation, OF solutions could potentially allow supervisors to access directly and on a real-time basis information *e.g.* on the products effectively bought, insurance policies underwritten (costs, fees, features...) and consumer complaints filed.

Appendix 2: Data access and sharing rules of the EU Data Strategy

The pieces of regulation part of the EU Data Strategy³⁴ (the Data Governance and Digital Markets Acts and the upcoming EU Data Act) and the data portability and third-party access provisions of GDPR set out cross-sectoral rules for the re-use and sharing of personal and non-personal data that may form a basis for a more specific OF framework.

The EU Data Strategy legislations indeed do not introduce any new data access rights in the financial sector, focusing on the establishment of general rules for data intermediaries and online gatekeeper platforms and on requirements for the sharing of data held by public sector bodies and generated by connected devices. And while the GDPR enables third party service providers to have direct access to personal data, this is only when it is technically feasible, which does not guarantee such access.

- The Data Governance Act, adopted in April 2022, aims to facilitate the sharing of personal and non-personal data across the EU and between industry sectors. It sets out rules relating in particular to the re-use of data held by public sector bodies³⁵ and creates a regulatory framework for providers of data intermediation services such as data marketplaces, platforms and databases. This latter framework proposes a model establishing the neutrality and transparency of data intermediaries, which will be required to provide services via a separate legal entity and on commercial terms that are not dependent on whether data holders or users are using other services of the intermediary.
- The Digital Markets Act, adopted in July 2022 aims to ensure that large on-line platforms providing an important gateway between business users and consumers (so called gatekeepers) do not abuse their position and that digital markets remain fair and open. This includes provisions to ensure data portability, enabling businesses and end-users to access and transfer their data outside the gatekeeper platform, and also to allow access by business users to the data that they generate in their use of the gatekeeper's platform (e.g. transaction data)³⁶.
- The Data Act proposal published in February 2022 completes these rules with measures

related to non-personal data sharing, allowing notably users of connected devices to gain access to data generated by them and to share such data with third-parties, and establishing model contractual terms to help SMEs draft and negotiate fair data-sharing contracts.

- The European General Data Protection Regulation (GDPR) ensures a consistent protection of personal data across EU Member States. GDPR also establishes a right to data portability *i.e.* a right for data subjects to receive personal data concerning them in a structured commonly used and machine-readable format and to port those data to other controllers. Data subjects also have the right to have their personal data transmitted from one controller to another, but only where technically feasible. These rules however do not establish any specific requirements on the format of a data request.
- Non-financial data that could be relevant in a broader scope of open finance including data from e-commerce platforms, utilities, telcos etc. may also be shared under the EU open data directive.
- In December 2021, the Commission also adopted a supervisory data strategy for EU financial services, with the objective of modernising EU supervisory reporting and putting in place a system that delivers accurate, consistent, and timely data to supervisory authorities at EU and national levels, while minimising the aggregate reporting burden for all relevant parties.

34. The European Data Strategy aims to establish by 2030 a single market for data in order to increase the availability and use of data across the EU.

35. These rules aim to ensure that data privacy and confidentiality are respected for protected data in particular, such as health data, data from social insurance institutions, pension registers, population registers...

36. However, in line with GDPR, business users have to request user consent to access and use personal data.