REPORT

Open Finance in Sweden

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Content

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Summary

Open finance refers to the sharing and reuse of customer data and entails customers giving third-party providers access to customer data in order to receive offers for different types of financial services. This type of data sharing is currently only regulated through the second Payment Services Directive (PSD2) in terms of payment account information. However, the European Commission has announced that a proposal for broader regulation will be presented in June 2023.

Currently, both regulated and unregulated methods are used within open finance. Payment initiation, i.e., the initiation of an electronic payment from the customer's payment account, is a common example of a regulated method. It is estimated that between 100 and 150 million payments are made this way per year in Sweden. This can be compared to the approximately 900 million[1] payments made via the payment service Swish in 2022. One big area of use is payment initiations to gambling companies, an industry that poses a high risk of money laundering and terrorist financing. The regulated methods are also used by approximately 30 per cent of the Swedish bank customers for various account information services.[2] The account data is primarily used to gather information about the finances of private individuals and in conjunction with credit assessments for and advice to private individuals.

The unregulated methods are used primarily as a competitive advantage and to increase sales, for example prior to switching to a new occupational pension, insurance or mortgage provider.

FI notes that use of both regulated and unregulated data sharing methods can be problematic. The challenges consist primarily of non-compliance among various actors with statutory rights and obligations and the ambiguous legal framework governing unregulated methods.

Broader open finance regulation could reduce the ambiguities currently surrounding the unregulated methods. Regulation could also facilitate the emergence of different types of financial services that are beneficial for consumers.

For consumers, the primary risks of increased data sharing are judged to be the consumer not understanding what data is being shared or with which parties at the point in time the data is shared. This could result in an elevated integrity risk and that consumers will be mapped in a manner that they do not understand.

[1] https://www.swish.nu/om-swish
[2] Based on survey responses to FI from Swedbank, Handelsbanken and Nordea.

Background

Open finance is when customers give third-party providers access to customer data (for both firms and consumers) in order to receive offers for different types of financial services. The EU has taken a first step toward regulating open finance through the second Payment Services Directive (PSD2) that entered into force in 2018. The upcoming regulation on open finance announced by the EU Commission will take the next step[3].

In its letter of appropriations for 2023, FI received an assignment in preparation for the upcoming regulation to map how open finance is used in Sweden and identify and analyse the risks and opportunities associated with such services, with a particular focus on consumer protection and integrity protection aspects.

In order to map how open finance is used and assess opportunities and risks, FI conducted an in-depth analysis that consisted of both a survey and dialogues with individual companies, industry associations and Swedish authorities. The survey was sent to 219 companies under FI's supervision, of which 174 responded. The sample included companies from throughout the financial market that were assumed to use or be affected by open finance. They were grouped as follows: a) *financial service providers*, for example banks, credit institutions, insurance companies, fund management companies and securities companies, b) *third-party providers* that obtain and reuse data from Swedish financial service providers, and c) *other stakeholders*.

Pending EU regulation

The European Commission has announced that it will present in June 2023 its proposed legislation for open finance. The initiative derives from the European Commission's ambition to build a harmonised internal market for data processing and make Europe a global leader in this area.[4] The aim of regulating open finance is said to be to promote innovative financial products and services. The hope is that it will lead to better products, better targeted advice and better opportunities for consumers to see their own data at various institutions.

[3] https://www.fi.se/sv/publicerat/nyheter/2022/kommissionen-vill-ha-synpunkter-om-oppna-finansiella-tjanster/
[4] European Commission, European Data Strategy (2020). https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-data-strategy_en

Regulated and unregulated access methods

Two regulations currently allow third-party financial service providers access to customer data:

1. the second Payment Services Directive (PSD2) for payment account information, and
2. the General Data Protection Regulation (GDPR)[5] for personal data.

One approach is to gain access to payment account information via a *dedicated interface* (PSD2). Here, a third-party provider uses the dedicated interface that account-servicing payment service providers (for example, banks) must provide under PSD2 (regulated). For third-party providers that are subject to financial supervision, this entails guaranteed access to payment account information.

Access to personal data via other technical methods, such as screen scraping or reverse engineering and that are referred to as *unregulated methods*, are another approach to gain access to customer data. Here, a third-party provider does not use an interface provided and supported by the counterparty; rather, the third-party provider uses the counterparty's existing digital customer interface (internet or mobile) to retrieve customer data with the customer's consent. Given that these methods are currently unregulated, the third-party providers do not have a guaranteed access right to customer data. Data retrieval is also not regulated.

Furthermore, some financial service providers have developed their own supplemental access methods for third-party providers. These methods are often called *premium services* or *premium APIs*. However, FI makes the assessment that premium APIs are currently neither widespread nor comprehensive. Because financial service providers limit who may access their premium APIs, this method should not be included in the term *open finance*.

Continued challenges related to PSD2

The implementation of PSD2 and the dedicated interfaces that provide access to payment account information have resulted in clearer rules but also a number of challenges for both third-party providers and account-servicing institutions (banks). Third-party providers comment that the dedicated interfaces often suffer from quality issues and do not meet accessibility and functionality requirements, and the banks comment that third-party providers avoid using the dedicated interfaces and instead continue to use the unregulated methods. In 2021, FI published a

[5] Assuming that there is a legal basis pursuant to Article 6 of GDPR.

clarification of its expectations on affected parties[6], but the survey responses indicate that the challenges between the parties are still present.

Ambiguous legal framework for the unregulated methods

The respondents state both in their survey responses and through various dialogues with FI that the legal framework surrounding their use of unregulated methods is ambiguous. They assert that this creates an uncertainty on the market related to the use of these methods, which causes considerable friction between the parties. According to the survey responses, 56 per cent of the financial service providers say that using unregulated methods to retrieve customer data from them is problematic, but only a few actively oppose the use of these methods.

[6] https://www.fi.se/sv/publicerat/nyheter/2021/fi-fortydligar-skyldigheter-for-tredjepartsleverantorer-av-betaltjanster/

Early use of the market

FI judges Swedish FinTech companies[7] to have been early adopters of open finance compared to the rest of Europe. The reason for this is a generally high level of digitalisation within the Swedish financial sector and high innovation capacity among the FinTech companies. A very important contributing factor is also judged to be early and wide distribution of common mobile e-identifications. One example of an early application were the mobile apps that used open finance to categorise consumers' banking transactions. They created a better and clearer overview of the consumers' personal finances by combining data from different banks and categorising transactions. Another early application was payment initiation via open finance. Thanks to the early adoption of open finance in Sweden, the country currently has a comprehensive technical infrastructure. This has enabled access to several banks through a single API, which in turn is offered to the entire market, and enables scalability and cost efficiency.

Prior to the introduction of PSD2, all this interaction with the banks occurred through unregulated methods. According to FI's survey, unregulated methods today account for less than ten per cent of the use of open finance[8].

Pay

Payments via open finance are common – but other payment methods dominate

According to FI's survey, payments were one of the most common applications of open finance in Sweden in 2022. Overall, third-party providers approximately completed between 100 and 150 million payment initiations at Swedish banks. This can be compared, for example, to around 3.5 billion card payments in Sweden in 2021[9] and more than 900 million Swish payments in 2022.[10]

The survey shows that, on average, 21 per cent of Swedish consumers use open finance to make a payment[11] compared to 71 per cent of Swedish consumers who use Swish to make a payment.[12]

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[7] https://www.riksbank.se/sv/press-och-publicerat/publikationer/staff-memo/en-oversikt-over-fintech-och-kryptotillgangar/vad-ar-fintech/
[8] Based on the number of retrievals and initiations from market participants who voluntarily answered FI's survey
[9] https://www.riksbank.se/sv/statistik/statistik-over-betalningar-sedlar-och-mynt/betalningar/
[10] https://www.swish.nu/om-swish
[11] Based on survey responses to FI from Swedbank, Handelsbanken and Nordea.
[12] https://www.swish.nu/om-swish

The Riksbank states in its payment report from 2022 that 13 per cent of the payers use direct withdrawal[13] as a payment method when purchasing online.[14] In the payment report from 2020, the corresponding figure was around 20 per cent, which indicates that use of payment initiation services has decreased.[15] Both reports also show that the percentage that pays with Swish has increased from 20 to 31 per cent during the same period.

E-commerce payments common – but transfers to gambling companies more common than the survey responses show

The survey responses show that e-commerce payment initiations and initiations to transfer money for payment by invoice were the two most common types of payment initiation services in 2022. The transfer of money to and from companies that offer gambling placed third. However, FI makes the assessment that this area of use is more common that what is shown by the survey responses in terms of the number of executed payment initiations. The reason for this is that several of the largest actors in the payment initiation category in the survey responses state that "transferring money to and from companies that offer gambling" is one of the most common areas of use, and this is supported by a previous survey that FI conducted where approximately half of the total transaction volumes for the company in question consisted of transactions to and from gambling companies.[16] In addition, FI's previous dialogues with representatives from the gambling industry indicate that payment initiations via dedicated interfaces and unregulated methods continue to be common.

Other payment initiation services include transfer of funds to and from securities companies and transfer of funds between private individuals.

Account information services – common and with several different areas of application

In addition to payment initiation, account information services in accordance with PSD2 are a common area of use. In 2022, account-servicing institutions made a total of approximately 400 million retrievals of account information. The survey responses also show that the large account-servicing institutions have provided

[13] A direct withdrawal is defined by the Riksbank as "when the customer, through a link from the online store, gains access to online banking at their bank and the payment is withdrawn immediately. In other words, a payment initiation both via a dedicated interface and unregulated methods.

[14] https://www.riksbank.se/sv/betalningar--kontanter/sa-betalar-svenskarna/betalningsrapport-2022/

[15] https://www.riksbank.se/globalassets/media/rapporter/betalningsrapport/2020/svenska/sa-betalar-svenskarna-2020.pdf

[16] https://www.fi.se/contentassets/b2a1884d9e1844d5a6677af9fb1d7bc1/beslut-trustly-group-20-20967.pdf

account information for approximately 30 per cent of their customers via a dedicated interface.[17]

The survey responses show that the most common areas of use for account information services were to

- compile and present a private individual's finances for their own use
- retrieve balance information for a payment account in conjunction with a payment initiation
- retrieve information in conjunction with a loan to a private individual
- gather a private individual's account balance at different banks in a single bank's customer interface (for example, a mobile app).

No change in use of open finance for payments

FI sees that the use of payment initiation services in recent years has remained relatively unchanged. Competition from other payment methods such as Swish, Autogiro and card payments is judged to constitute part of the explanation for this. Based on data reported to FI, FI also makes the assessment that transfers to and from gambling companies via payment initiation services overall is tending to decrease, which also has an impact on the total volume for payment initiation services.

FI also notes that unregulated methods continue to be used for both initiating payments and retrieving account information, although to a decreasing extent. According to the survey responses, the continued use of unregulated methods despite the introduction of dedicated interfaces is because, among other reasons, the dedicated interfaces are not always available or the desired functionality or information is missing. According to the survey responses, unregulated methods also create greater flexibility for third-party providers to tailor the customer experience since the customer does not need to leave the provider's interface.

Insure

Increasing use in the insurance industry – but from low levels

The insurance industry currently has no regulated retrieval methods; rather, the third-party providers use the unregulated methods. Forty-two per cent (19 companies) of the insurance undertakings that responded to FI's survey say that different market participants retrieved data from them using unregulated methods.

[17] Based on survey responses to FI from Swedbank, Handelsbanken and Nordea.

The survey also shows that a relatively low share, only two per cent of the insurance undertakings' customers, used the possibility of data sharing via unregulated methods in 2022. At the same time, 61 per cent of the insurance undertakings (27 companies) state that the use of open finance is increasing, and the remaining 39 per cent say they do not know.

There are instances of initiations, for example starting a transfer of an insurance, terminating an insurance or making premium payments, but it is more uncommon than only data retrieval and is said to occur at only 13 per cent of the insurance undertakings.

In contrast, a low percentage, 14 per cent, of the insurance undertakings say that they use open finance themselves for data retrieval. The majority, 57 per cent, are also not planning to start using open finance.

Wide use of open finance in insurance

The insurance industry includes non-life insurance, personal insurance and pension insurance. All of these areas include different types of customer data that is of interest for open finance. From the survey we see that the use is relatively broad in scope.

Non-life insurance includes information about the insurance object's characteristics (e.g., value and propensity for theft) and policyholder's characteristics (e.g., age and place of residence), but also the customer's insurance terms (premiums the customer pays, due date, deductible). Interest in this information in relation to open finance is partly to create an overview of the customer's insurance situation. In the long run, the primary interest is judged to be that it can serve as a basis for switching from one insurance undertaking to another. Currently, in terms of non-life insurance, the use of open finance tends to be primarily sales driven rather than giving the policyholder more information and a better overview of their insurance.

Personal insurance, such as life insurance, health insurance and accident insurance, can include information about an individual's health, age and lifestyle (health data), which is particularly sensitive information from an integrity perspective. Interest in obtaining personal insurance data is currently judged to be limited to giving the individual an overview since, according to dialogues with market participants, switching insurance undertakings for personal insurance is considered a more complex process.

Pension insurance can be of a significant value for a consumer, for example in the form of vested occupational pension, and they can also be transferable to other insurance companies. Information about pension insurance is thus of particular interest for the use of open finance, which is evident in the survey responses. Transferable pension insurance is described more in the chapter Save and Invest.

Borrow

Based on the survey responses, FI notes that information about private individuals' loans is obtained through both dedicated interfaces and unregulated methods. Borrowing costs, which can be included in bank account information (transaction history), are obtained, for example, via dedicated interfaces. General loan information such as principal debt, interest rate, amortisation and maturity, however, can only be obtained via unregulated methods.

Account verification is a common area of use

FI notes that one of the most common areas of use for the credit sector, where dedicated interfaces are used frequently, is account verification. Lenders need to be able to automatically verify a recipient account and the account holder before payment of a loan, for example, in order to avoid fraud or to better comply with customer due diligence and anti-money laundering regulations.

Additional areas of use linked to credit assessment purposes where the basis for a credit assessment (payment account information) is primarily obtained via dedicated interfaces include:

- verifying income
- identifying fraud
- educational loans from CSN
- gambling/casino
- mortgage expenses
- repayment capacity.

There are also currently examples of open finance being completely dependent on unregulated methods since payment account information on its own is insufficient. One of these is an SBAB product called *räntematchen* – a mortgage comparison service that allows users to share existing mortgage data in order to potentially receive a better interest rate offer.[18]

Mapping loans via payment account information

Because PSD2 only includes payment accounts, it is not possible to gain a complete overview of an individual's credit commitments such as principal debt, interest rate, amortisation and maturity solely via the regulated methods. The credit institution, however, can indirectly gain an understanding of an individual's total credit commitment at several institutions by mapping the individual's borrowing costs based on the transaction history (payment account information). Third-party providers can do this by analysing the ongoing amortisation and debt servicing payments visible in the payment account information.

[18] https://www.sbab.se/1/privat/lana/bolan/bolan_-_sa_funkar_det/rantematchen.html

Save and invest

Limited data sharing in the areas of saving and investing

Only one of the thirty-one securities companies, fund management companies and insurance brokers that answered the survey state that third-party providers currently retrieve customer data from them. This information is retrieved exclusively using unregulated methods. Securities companies, fund management companies and insurance brokers are therefore judged to be only subject to data sharing to a limited extent right now. One explanation can be that these companies handle a limited amount of customer data that is of interest for data sharing.

If the company types are expanded to include online brokers and banks, which also offer services within savings and investing, the use of unregulated methods increases significantly. This may be because financial service providers have more extensive customer data and third-party providers already have developed data retrieval in respect of these slightly larger market participants.

In contrast, 30 per cent of the securities companies, fund management companies and insurance brokers say that they use open finance themselves in their offers, and their use is equally split between regulated dedicated interfaces and unregulated methods. In the majority of these cases, the securities companies, fund management companies and insurance brokers have not developed the technical solution themselves; rather, they manage data retrieval through agreements with a small number of active third-party providers.

Data sharing is used for advice and prior to transfers of pensions and savings

According to FI's survey, the areas of use related to savings and investing include primarily analysis of portfolios, economic overview and individually tailored advice, particularly with regard to transfer of occupational pension and savings. Based on its dialogue with firms and participants in the industry, FI views Sweden to lie far ahead of the curve when it comes to transferring pensions and savings. The structure for Sweden's pension system, which has created a need to transfer and compile, is probably part of the explanation for this.

Opportunities

Finansinspektionen's assessment of the opportunities

The playing field in the financial sector is currently uneven, with consumers at a disadvantage. This is largely because of the information advantage that firms have, which can result in consumers paying higher prices and being offered more complex products than necessary. Improved opportunities for data sharing could strengthen consumers' position on the financial markets and smooth out the information disadvantage. Increased data sharing could also lead to more individually tailored services and products and offer consumers greater possibilities for comparing different products.

Innovative services can also increase the possibilities for greater understanding among consumers of matters related to personal finances such as pensions and insurance. With the right regulation, consumer protection is also strengthened in that exercising control over the data shared becomes easier.

Greater opportunities for an overview of consumers' finances also creates better conditions for, for example, banks and insurance companies being able to perform more accurate credit assessments and offer more accurate advice. Another opportunity is better access to credit and advisory services, even for small and mid-sized firms. This also opens the door for new types of services and actors, which in the long run could strengthen competition and thus improve the market's functionality and contribute to increased innovation.

Open finance regulation would probably result in more data being shared via regulated methods. Increased use of regulated methods creates a clearer legal basis for data sharing, which is positive.

Market's viewpoints on regulation

Approximately half of the companies that responded to FI's survey currently use, or plan to use, open finance. There are some differences between how third-party suppliers and financial service providers assess the opportunities arising from regulation.

In the survey, the third-party providers point to the opportunities for greater transparency and consumers' improved understanding of their financial standing. They take the position that this can lead to better advice to consumers but also facilitate and increase flexibility, which benefits the end consumer. The third-party providers also argue that regulation could lead to increased innovation, better competition, enhanced consumer integrity and a reduction in fraud-related risks.

Financial service providers highlight in the survey several opportunities arising from the coming regulation. In addition to several of the opportunities that the third-party providers also highlight, such as increased transparency, better overview of finances and increased flexibility, the financial service providers also highlight improved clarity about what applies to the actors providing the services. The decreased use of unregulated methods is also something that was raised as a desired outcome. This would reduce the risk of unknown actors retrieving and spreading sensitive information to parties that the consumer is not aware of or has not consented to.

Risks

FI makes the assessment that the risks linked to open finance can be categorised as consumer and operational risks.

Consumer risks

From a consumer protection perspective, FI sees a number of risks that need to be considered in order for the services to have a positive impact on the financial markets.

Risk of weaker position for consumers

As presented in earlier sections, open finance is judged to be able to reduce consumers' information disadvantage. However, there is also a risk that the opposite will occur, i.e., that firms' knowledge and information advantage could be amplified. Such a risk could materialise, for example during a negotiation, if firms have more information about the consumer than the consumer has but also if the advantage is used for different types of discrimination, unsuitable advice and in conjunction with fraud.

A special risk in the insurance sector is the generally increasing level of information about an individual that potentially can strengthen the individualisation trend for premiums. This can impact the function of group insurance and also lead to insurance not being offered at all to certain policyholders.

FI also sees a risk that that there will be a normalisation in the increase in data sharing so that even when it is not relevant for the service being offered the consumer will still be required to share data. This could mean that consumers will share more information than necessary, which leads to unnecessary integrity risks.

The consumer does not understand what is being shared and with whom

FI also sees a major risk that the consumer, at the actual point in time the data is shared, does not understand what information is being shared and with which parties. This could result in an elevated risk of being mapped in a manner that the consumer does not understand. It could also be difficult to know who is responsible and to whom a consumer can turn, for example in the event of a complaint.

Processing of particularly sensitive customer data

Data subject to banking secrecy and health data, which, for example, occurs within personal insurance, can be considered in the financial sector to constitute particularly sensitive information for individuals and thus should be given special consideration since it creates and elevated integrity risk. The current use of the unregulated methods, where unlicensed firms process the sharing of this information in several stages, could entail risks to consumer protection.

A general increase in data volume combined with particularly sensitive information also places higher demands on firms' ability to process personal data.

Operational risks

FI also makes the assessment that there are operational risks linked to open finance.

Increased information security risks and cyber security risks

Broader open finance regulation means that a greater volume of financial information needs to be made available compared to what is available today. Companies that are not subject to current regulation will be impacted and, in addition, in most cases more parties are involved than just the end user and the financial service provider. This means that more financial data, which often is sensitive, will be made available and be distributed between different types of market participants in the value chain. This will increase the information and cyber security risks.

Money laundering risks occur in payment initiations

The gambling industry poses a high risk of money laundering and terrorist financing at the same time as FI's survey shows that payment initiations to gambling companies are frequently used in Sweden. A report from the Swedish Police Authority, Penningtvätt på spelmarknaden[19] (Money Laundering and Gambling) also highlights challenges in terms of the requirements to ensure that the holder of a bank account is the same person as the holder of the gambling account, which represents an elevated risk of money laundering via gambling.

The Swedish Gambling Authority is the authority that monitors that licensed gambling companies in Sweden comply with the Anti-Money Laundering Act. However, the authority does not have the right to monitor companies that do not have a Swedish license. Payment service providers that broker deposits or profits to and from unlicensed gambling companies thus help these companies continue to conduct their business without following Swedish anti-money laundering legislation[20]. Payment service providers under FI's supervision use payment

[19] https://polisen.se/contentassets/0808e4fd9d0545ad9a9f22f638bfebbb/penningtvatt-pa-spelmarknaden.pdf

[20] https://www.spelinspektionen.se/globalassets/dokument/informationsdokument/betaltjanstleverantorer-info.pdf

initiations to broker deposits or profits to and from unlicensed gambling companies, which also means an elevated risk of money laundering via gambling.

Market's view on risks

A number of survey respondents highlight the risk that various market participants could interpret the coming regulation of open finance in different ways, which could result in the amount of data being made available varying between participants. The third-party providers refer to the implementation of PSD2 as a contributing factor to why this risk is highlighted.

Many data holders also state that the lack of a possibility for economic incentives in conjunction with data sharing is a risk and take the position in part that the quality of the dedicated interfaces could be worse than what is desirable. A number of respondents also point to the costs to implement the regulation that could arise for data holders and third-party providers. Here, they mention both costs to ensure compliance with the regulation and costs for technical implementation and maintenance.

Special challenges with regulations in the insurance industry

FI also notes from the survey responses and dialogues with industry associations that there is some market uncertainty since it will be particularly challenging to create a regulation that spans all of Europe for the insurance industry. This is because insurance is considered to be more dependent on national conditions, such as the welfare system and the pension system, than, for example, securities trading and the banking sector.