EBA/Rep/2023/10

28 March 2023

EBA's retail risk indicators

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EBA's retail risk indicators

Article 9(1) of Regulation (EU) nº 1093/2010 ("EBA Regulation") requires the EBA to develop retail risk indicators (RRIs) for the timely identification of potential consumer harm. For this purpose, the EBA is publishing a list of 11 RRIs that cover a wide variety of different types of products in the EBA's remit (e.g., mortgage credit, consumer credit, or payment accounts).

These indicators aim to facilitate the monitoring of the banking markets across the EU by measuring the risk of detriment arising to consumers from the misconduct of the institutions, and from wider economic conditions.

They provide information that help the EBA and national competent authorities to prioritise their regulatory and supervisory work in the area of consumer protection but may be of interest to other, external stakeholders as well. The RRI are summarized in a table below, which is accompanied by a set of charts showing results at Member State-level, and a methodological note explaining the interpretation of the results, which should be read alongside it.

The data used to calculate the indicators has a number of limitations that have an impact on how these indicators should be interpreted. Amongst those that apply more generally across several of said indicators is the limitation that some indicators do not cover all EU and other EEA countries. Further, in the absence of comprehensive consumer protection data being available for the EU, some indicators are calculated based on data collected by the EBA primarily for the purpose of prudential supervision rather than consumer protection requirements, and thus should be understood as mere proxies for potential consumer detriment, not precise metrics. Finally, many of these indicators are published for the first time, and any potential trends will only emerge in the coming years.

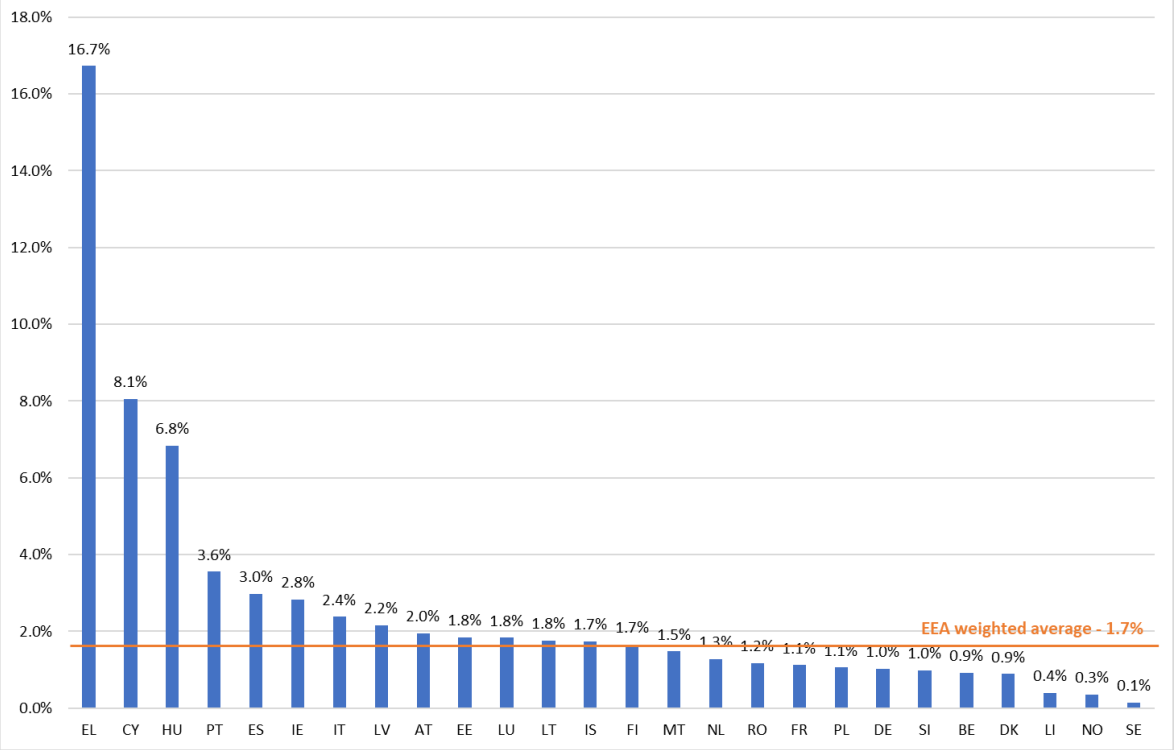
These limitations are particularly important when comparing Member States against one another, where the aforementioned limitations are more likely to make it difficult to arrive at robust conclusions as results may reflect market and/or business model specificities. For that reason, direct comparison of results between specific Member States should be done very cautiously and should be done in the wider context of a given banking market and the Member State's economic circumstances. The main purpose of showing Member State level data is to demonstrate the divergence across all EU Member States. These divergences can be significant and are an interesting observation in their own right for the purpose of future prioritization of tasks. Future improvements in the comprehensiveness and quality of the data will gradually improve the robustness of these indicators over time.

Following its initial publication in Q1 of 2023, the indicators will subsequently be updated and refined on an annual basis and published as part of the EBA's annual Risk Assessment Report.

Product category	Name of indicator	Indicator number	Calculation formula	Calculation result	Reference period
I. Mortgage credits	**Share of loans with forbearance measures over all household loans**	MC1	(A x 100)/B A: Exposures with forbearance measures for loans and advances to households B: Total loans and advances to households on balance sheet	1.71%	30/06/2022
	Share of NPLs collateralised by immovable property over all loans collateralised by immovable property	MC2	(A x 100)/B A: Non-performing loans and advances for loans collateralised by residential immovable property B: Total gross loans and advances for loans collateralised by residential immovable property	1.54%	30/06/2022
II. Other consumer loans	**Share of NPLs from credits for consumption over all credits for consumption**	OCL1	(A x 100)/B A: Non-performing loans and advances for credit for consumption B: Total gross loans and advances for credit for consumption	5.26%	30/06/2022
III. Payment and deposit accounts	**Percentage of deposit expenses paid by households over total household deposits**	PDA1	(A x 100)/B A: Interest expenses of households' deposits B: Total households' deposits	0.37%	30/06/2022
IV. Credit & debit cards	**Share of fraudulent card payments over all card payments (in terms of volume and value of total transactions)**	CDC1	(A x 100) / B A: Volume of fraudulent card payments B: Volume of total card payments	0.0228 %	2021
			(A x 100) / B A: Value of fraudulent card payments B: Value of total card payments	0.0385 %	2021
	Change to previous year of the fraud losses borne by card payment users	CDC2	(100 x (A - B)) / B A: Absolute value losses due to fraud borne by card payment services users Time Y B: Absolute value losses due to fraud borne by card payment services users Time Y - 1	+ 11 %	Time Y: H2 2021 Time Y - 1: H2 2020
V. Other payment instruments	**Share of fraudulent credit transfer payments over all transfer payments (in terms of volume and value of total transactions)**	OPI1	(A x 100) / B A: Volume of fraudulent payments B: Volume of total payments	0.0025 %	2021
			(A x 100) / B A: Value of fraudulent payments B: Value of total payments	0.0004 %	2021
	Change to previous year of the fraud losses borne by consumers (credit transfers)	OPI2	(100 x (A - B)) / B A: Absolute value losses due to fraud borne by payment services users Time Y B: Absolute value losses due to fraud borne by payment services users Time Y - 1	+ 21 %	Time Y: 2021 Time Y - 1: 2020
VI. Access to financial services	**The percentage of people aged 15+ who have an account at a bank or another type of financial institution**	AFS1	Simple average of percentages reported for each EU Member State in the Global "Findex" database	86%/89%/91%/92%	2011/2014/2017/2021
	The percentage of respondents aged 15+ who report having a debit or credit card	AFS2		74%/78%/84%/85%	2011/2014/2017/2021
	The percentage of respondents aged 15+ who report borrowing any money from family, relatives, or friends in the past year	AFS3		13%/16%/15%/15%	2011/2014/2017/2021

Charts with Member State-level data for the EBA's retail risk indicators

Figure 1. Share of loans with forbearance measures over all household loans (MC1) – 30/06/2022

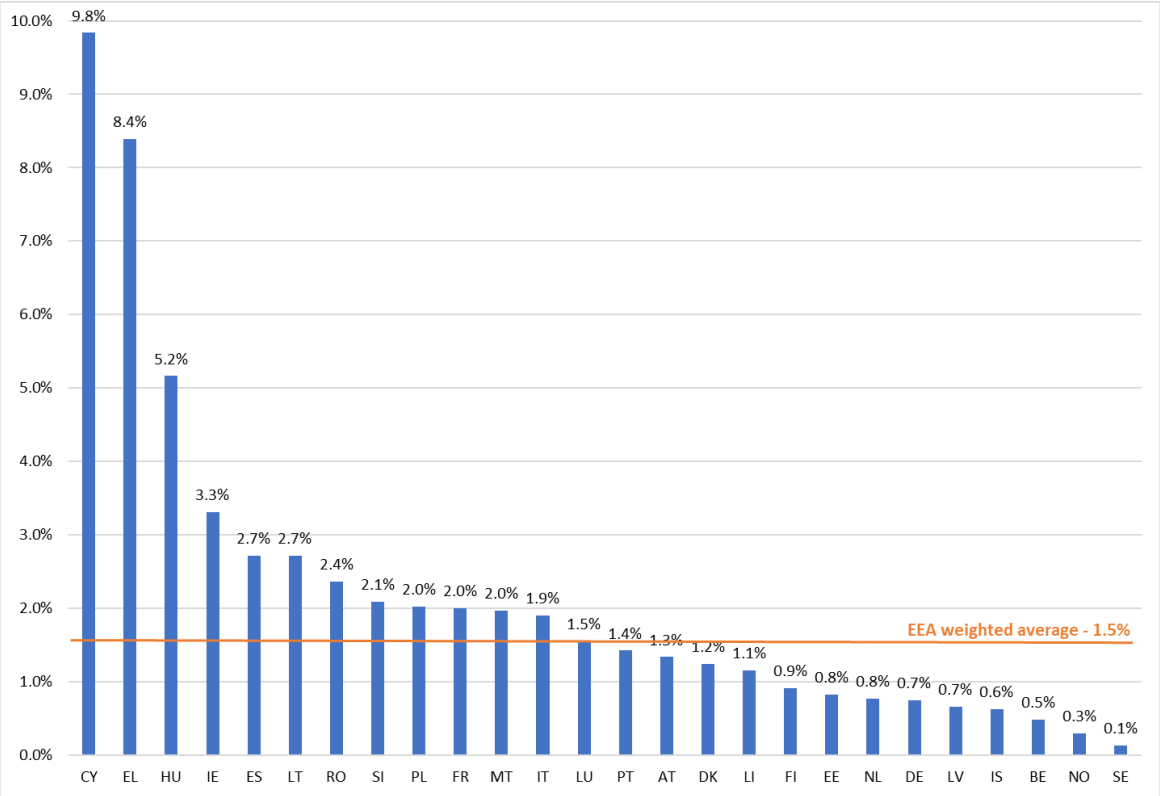


Data source: FINREP/COREP

Formula used to calculate the indicator: (A x 100)/B, where A = Exposures with forbearance measures for loans and advances for households, and B = total loans and advances to households on balance sheet. EEA weighted average is calculated by dividing the sum of all MS numerator data by the sum of all MS denominator data.

Note: Member State-level data presented at consolidated level meaning that numbers corresponding to subsidiaries and branches are added to the numbers of the parent institution and thus count towards the Member State where the parent is located.

Figure 2. Share of non-performing loans collateralised by residential immovable property over all loans collateralised by residential property (MC2) – 30/06/2022

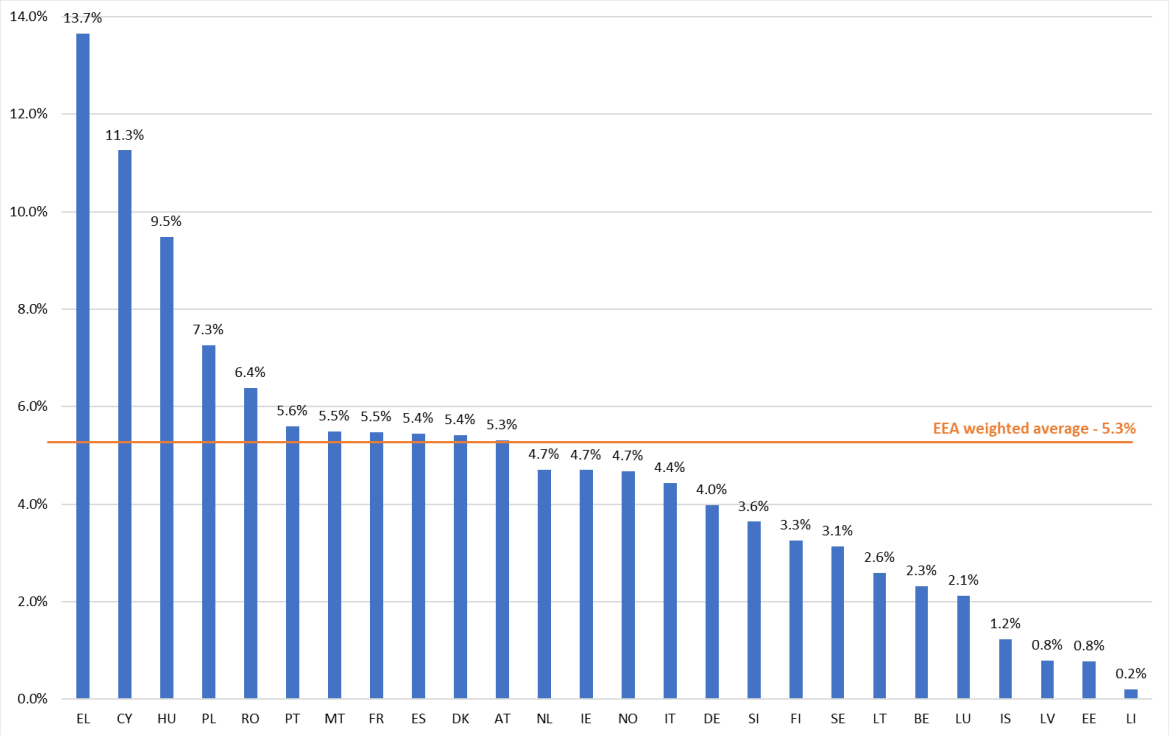


Data source: FINREP/COREP

Formula used to calculate the indicator: (A x 100)/B, where A = Non-performing loans and advances for loans collateralised by residential immovable property, and B = Total gross loans and advances for loans collateralised by residential immovable property. EEA weighted average is calculated by dividing the sum of all MS numerator data by the sum of all MS denominator data.

Note: Member State-level data presented at consolidated level meaning that numbers corresponding to subsidiaries and branches are added to the numbers of the parent institution and thus count towards the Member State where the parent is located.

Figure 3. Share of non-performing loans from credits for consumption over all loans from credits for consumption (OCL1) – 30/06/2022

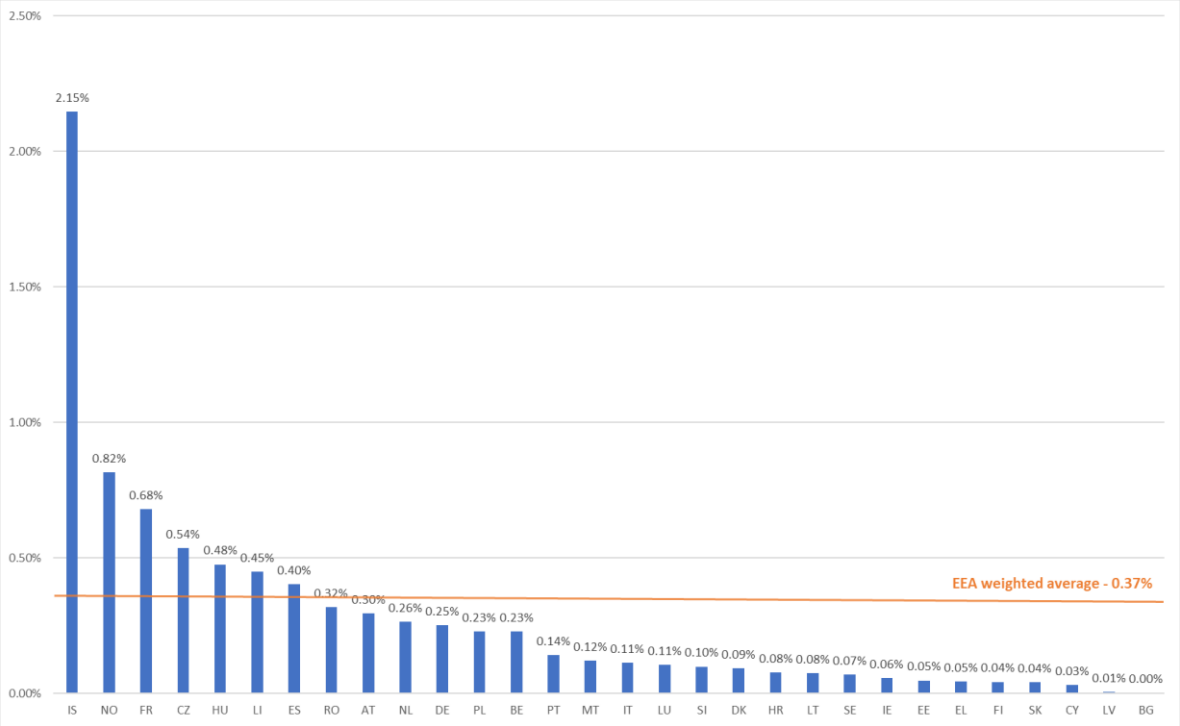


Data source: FINREP/COREP

Formula used to calculate the indicator: (A x 100)/B, where A = Non-performing loans and advances for credit for consumption, and B = Total gross loans and advances for credit for consumption. EEA weighted average is calculated by dividing the sum of all MS numerator data by the sum of all MS denominator data.

Note: Member State-level data presented at consolidated level meaning that numbers corresponding to subsidiaries and branches are added to the numbers of the parent institution and thus count towards the Member State where the parent is located.

Figure 4. Percentage of deposit expenses paid by households over total household deposits (PDA1) – 30/06/2022

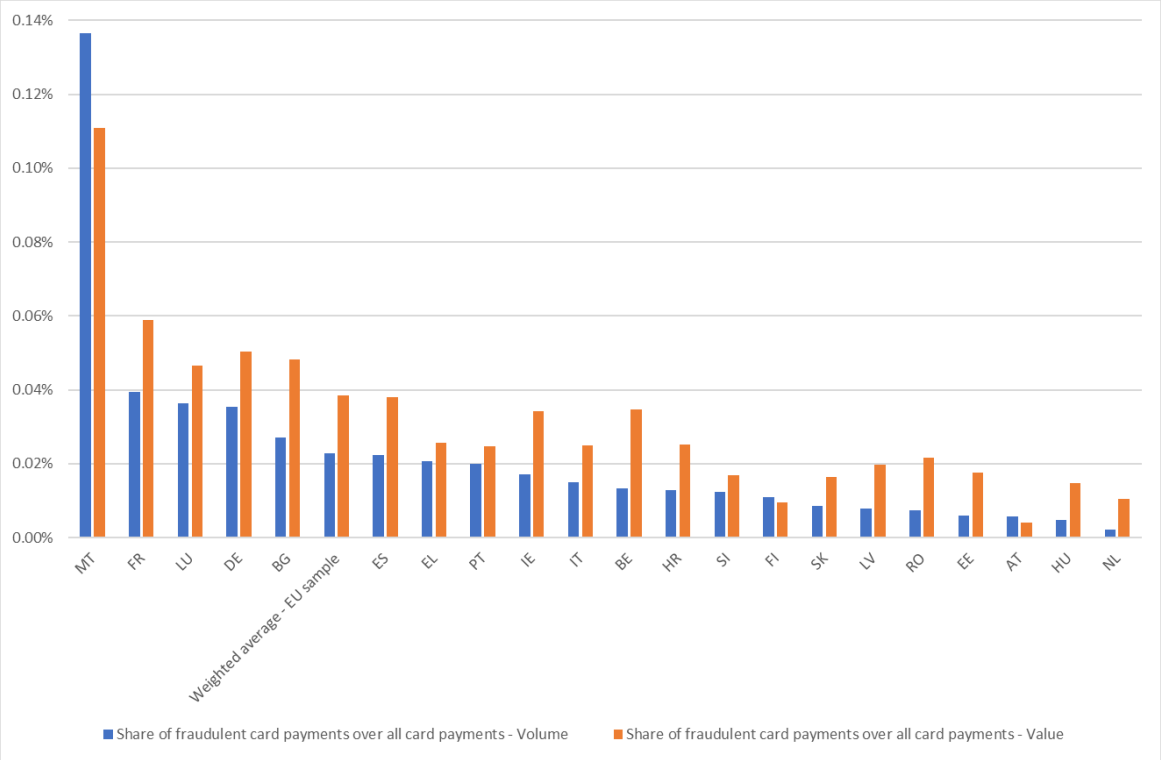


Data source: FINREP/COREP

Formula used to calculate the indicator: (A x 100)/B where A = Interest expenses of households' deposits (annualised), and B = Total households' deposits (average). EEA weighted average is calculated by dividing the sum of all MS numerator data by the sum of all MS denominator data.

Note: Member State-level data presented at consolidated level meaning that numbers corresponding to subsidiaries and branches are added to the numbers of the parent institution and thus count towards the Member State where the parent is located.

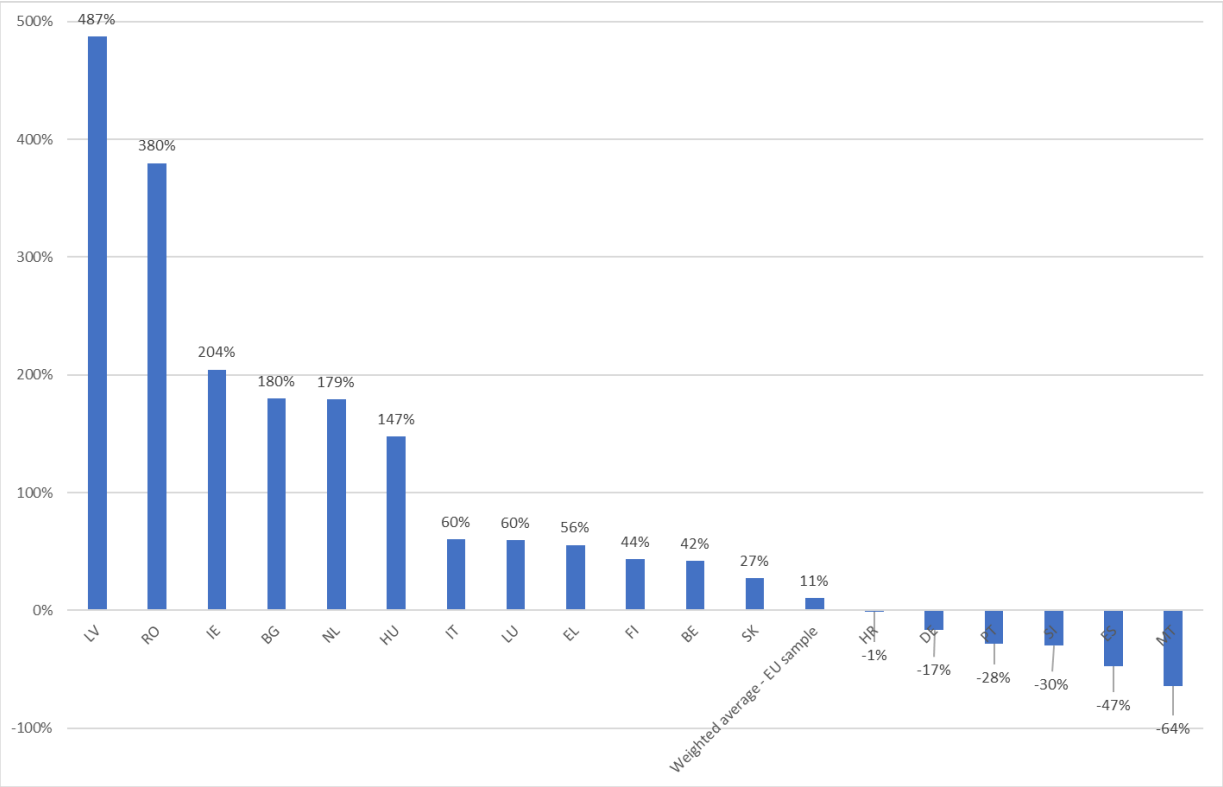
Figure 5. Share of fraudulent card payments over all card payments – volume and value (CDC1) – 2021



Data source: EBA

Formula used to calculate the indicator: (A x 100) / B, where A = Volume of fraudulent card payments, and B = Volume of total card payments. And (A x 100) / B, where A = Value of fraudulent card payments, and B = Value of total card payments. Weighted average EU MS sample is calculated by dividing the sum of all MS numerator data (multiplied by 100) by the sum of all MS denominator data.

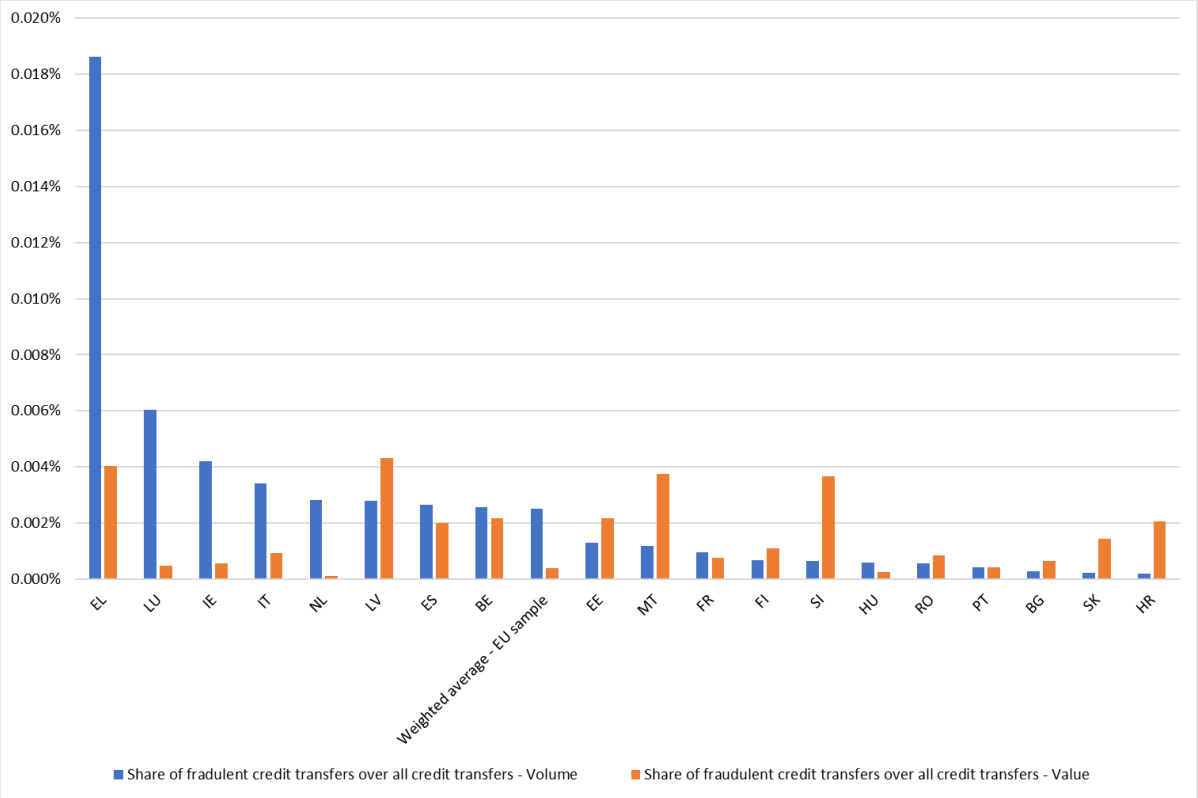
Figure 6. Change to previous year of the fraud losses borne by card payment users (CDC2) – from H2 2020 to H2 2021



Data source: EBA

Formula used to calculate the indicator: (100 x (A - B)) / B, where A = Absolute value losses due to fraud borne by card payment services users Time Y, and B = Absolute value losses due to fraud borne by card payment services users Time Y – 1. Weighted average EU MS sample is calculated by dividing the sum of all MS numerator data (multiplied by 100) by the sum of all MS denominator data.

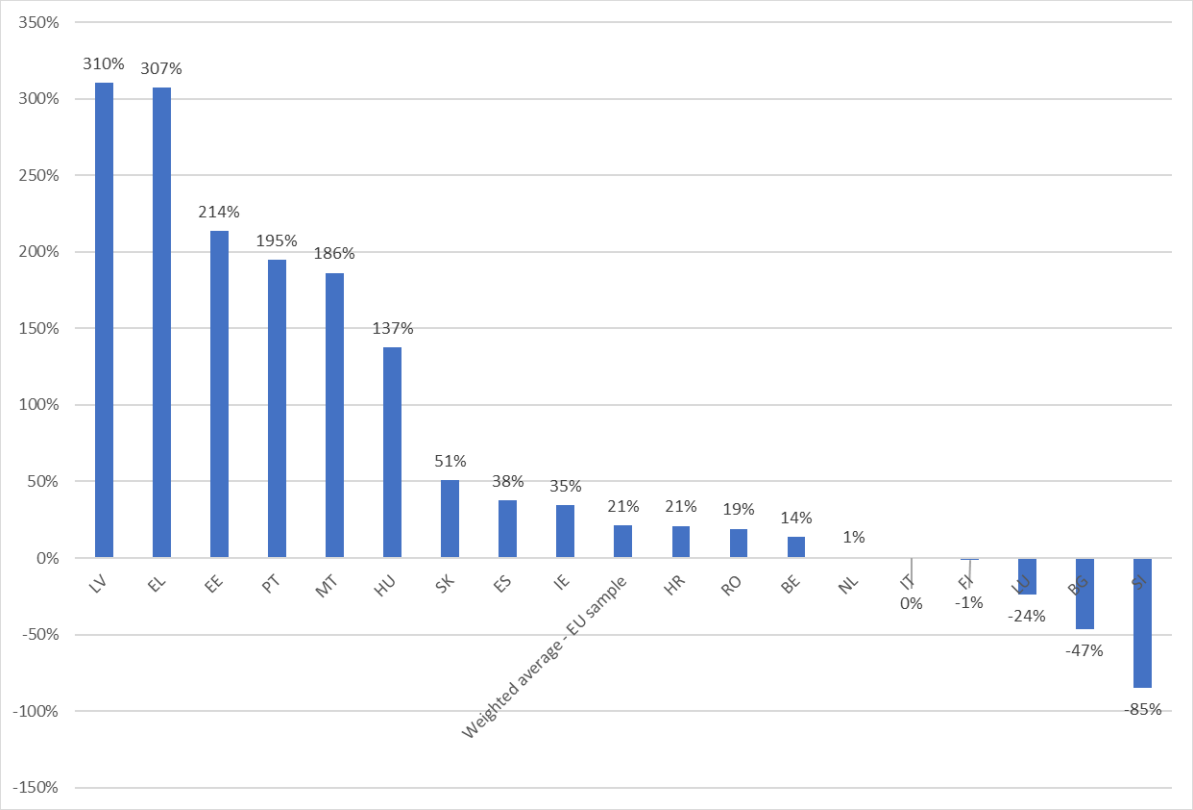
Figure 7. Share of fraudulent payments over all payments (credit transfers) – volume and value (OPI1) – 2021



Data source: EBA

Formula used to calculate the indicator: (A x 100) / B, where A = Volume of fraudulent payments – credit transfers, and B = Volume of total payments – credit transfers. And (A x 100) / B where A = Value of fraudulent payments – credit transfers, and B = Value of total payments – credit transfers. Weighted average EU MS sample is calculated by dividing the sum of all MS numerator data (multiplied by 100) by the sum of all MS denominator data.

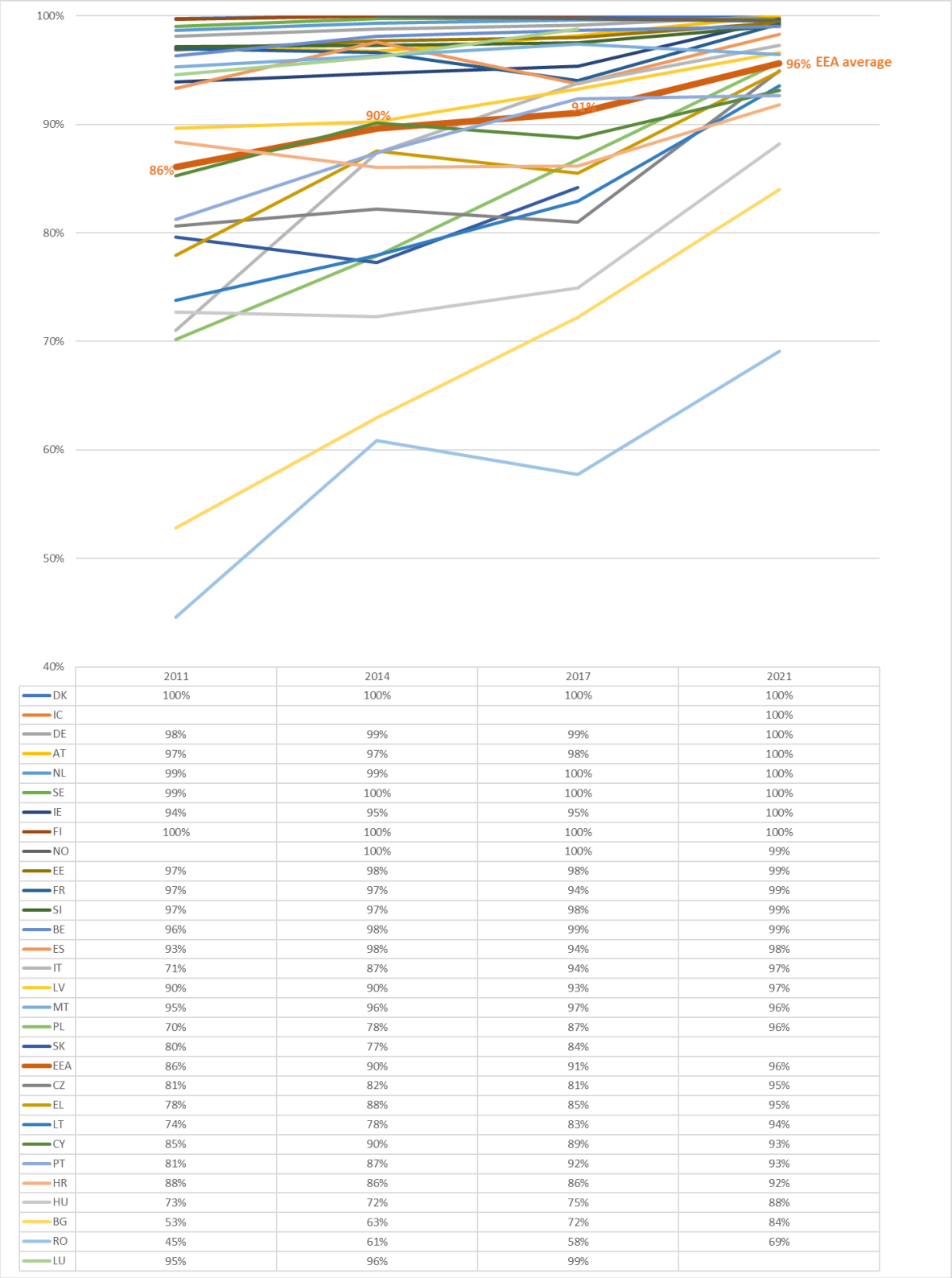
Figure 8. Change to previous year of the fraud losses borne by consumers (credit transfers) (OPI2) – 2020 to 2021



Data source: EBA

Formula used to calculate the indicator: (100 x (A - B)) / B, where A = Absolute value losses due to fraud borne by payment services users (credit transfer) Time Y, and B = Absolute value losses due to fraud borne by payment services users (credit transfer) Time Y – 1. Weighted average EU MS sample is calculated by dividing the sum of all MS numerator data (multiplied by 100) by the sum of all MS denominator data.

Figure 9. Percentage of people aged 15+ who have a bank account (AFS1) – 2011-2021

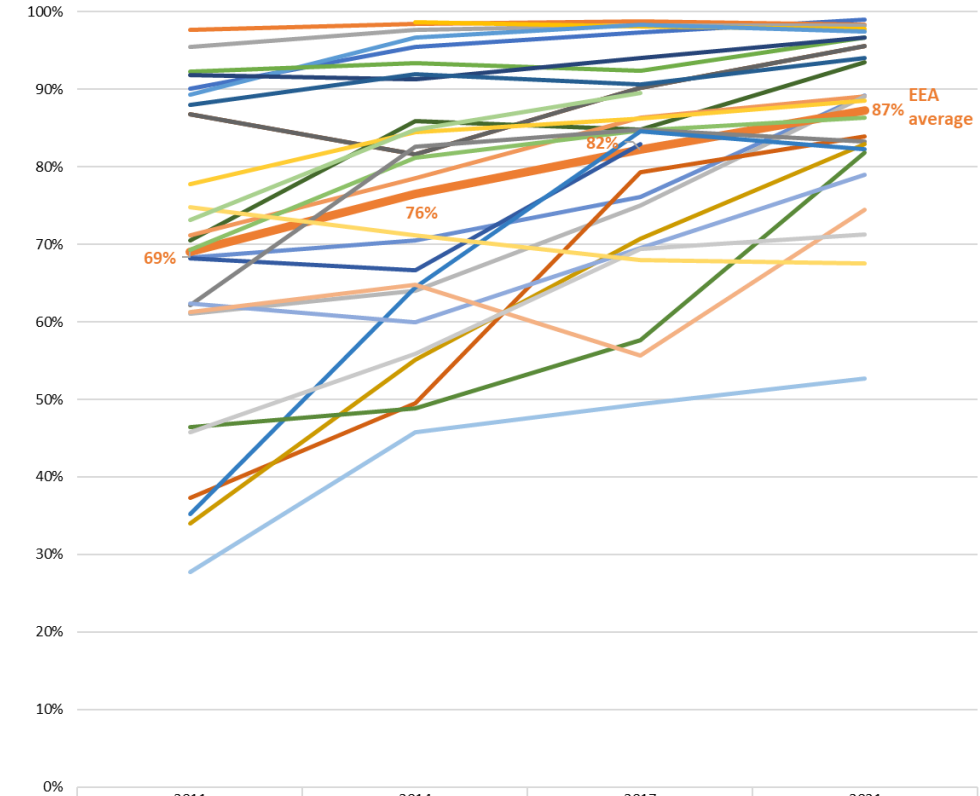


	2011	2014	2017	2021
DK	100%	100%	100%	100%
IC				100%
DE	98%	99%	99%	100%
AT	97%	97%	98%	100%
NL	99%	99%	100%	100%
SE	99%	100%	100%	100%
IE	94%	95%	95%	100%
FI	100%	100%	100%	100%
NO		100%	100%	99%
EE	97%	98%	98%	99%
FR	97%	97%	94%	99%
SI	97%	97%	98%	99%
BE	96%	98%	99%	99%
ES	93%	98%	94%	98%
IT	71%	87%	94%	97%
LV	90%	90%	93%	97%
MT	95%	96%	97%	96%
PL	70%	78%	87%	96%
SK	80%	77%	84%	
EEA	86%	90%	91%	96%
CZ	81%	82%	81%	95%
EL	78%	88%	85%	95%
LT	74%	78%	83%	94%
CY	85%	90%	89%	93%
PT	81%	87%	92%	93%
HR	88%	86%	86%	92%
HU	73%	72%	75%	88%
BG	53%	63%	72%	84%
RO	45%	61%	58%	69%
LU	95%	96%	99%	

Data source: World Bank

EEA average is a simple average of average results across the EU Member States.

Figure 10. Percentage of people aged 15+ who have a debit or credit card (AFS2) – 2011-2021

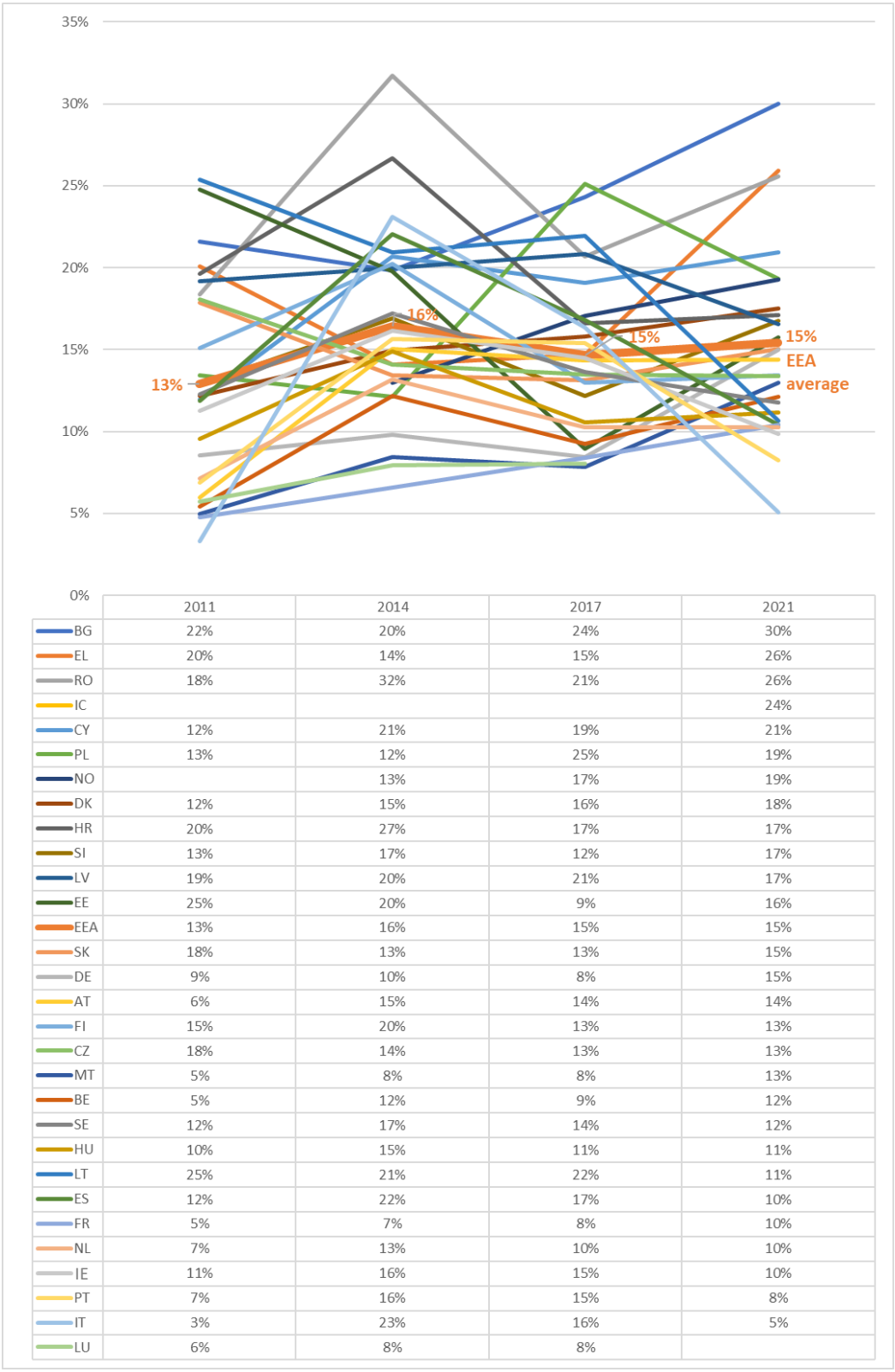


	2011	2014	2017	2021
DK	90%	95%	97%	99%
NL	98%	98%	99%	98%
SE	95%	98%	98%	98%
NO		99%	98%	98%
FI	89%	97%	98%	97%
EE	92%	93%	92%	97%
SI	92%	91%	94%	97%
AT	87%	82%	90%	96%
BE	87%	82%	90%	96%
IC				94%
DE	88%	92%	91%	94%
IE	70%	86%	85%	93%
SK	68%	70%	76%	89%
MT	71%	78%	86%	89%
CZ	61%	64%	75%	89%
LV	78%	84%	86%	89%
EEA	69%	76%	82%	87%
FR	69%	81%	85%	86%
PT	68%	67%	83%	
PL	37%	49%	79%	84%
ES	62%	83%	85%	83%
EL	34%	55%	71%	83%
IT	35%	64%	85%	82%
CY	46%	49%	58%	82%
HU	62%	60%	69%	79%
LT	61%	65%	56%	74%
BG	46%	56%	69%	71%
HR	75%	71%	68%	68%
RO	28%	46%	49%	53%
LU	73%	85%	90%	

Data source: World Bank

EEA average is a simple average of average results across the EU Member States.

Figure 11. Percentage of people aged 15+ who borrowed from family or friends (AFS3) – 2011-2021



	2011	2014	2017	2021
BG	22%	20%	24%	30%
EL	20%	14%	15%	26%
RO	18%	32%	21%	26%
IC				24%
CY	12%	21%	19%	21%
PL	13%	12%	25%	19%
NO		13%	17%	19%
DK	12%	15%	16%	18%
HR	20%	27%	17%	17%
SI	13%	17%	12%	17%
LV	19%	20%	21%	17%
EE	25%	20%	9%	16%
EEA	13%	16%	15%	15%
SK	18%	13%	13%	15%
DE	9%	10%	8%	15%
AT	6%	15%	14%	14%
FI	15%	20%	13%	13%
CZ	18%	14%	13%	13%
MT	5%	8%	8%	13%
BE	5%	12%	9%	12%
SE	12%	17%	14%	12%
HU	10%	15%	11%	11%
LT	25%	21%	22%	11%
ES	12%	22%	17%	10%
FR	5%	7%	8%	10%
NL	7%	13%	10%	10%
IE	11%	16%	15%	10%
PT	7%	16%	15%	8%
IT	3%	23%	16%	5%
LU	6%	8%	8%	

Data source: World Bank

EEA average is a simple average of average results across the EU Member States.

Methodological note on the choice, calculation, and interpretation of the EBA's retail risk indicators

Background

1. Article 9(1) of Regulation (EU) no 1093/2010 ("EBA Regulation") requires the EBA to develop retail risk indicators (RRIs) for the timely identification of potential consumer harm. For this purpose, the EBA is publishing a list of 11 RRIs that cover a wide variety of different types of products in the EBA's remit (e.g., mortgage credit, consumer credit, or payment accounts).

2. These indicators aim to facilitate the monitoring of the banking markets across the EU by measuring the risk of detriment arising to consumers from the misconduct of the institutions, and from wider economic conditions.

3. They provide information that help the EBA and national competent authorities to prioritise their regulatory and supervisory work in the area of consumer protection but may be of interest to other, external stakeholders as well. The RRI are summarized in a table published on the EBA website, which is accompanied by a set of charts showing results at Member State-level. This methodological note aims to help with the interpretation of the results presented in the said table and charts.

4. The data used to calculate the indicators has a number of limitations that have an impact on how these indicators should be interpreted. Amongst those that apply more generally across several of said indicators is the limitation that some indicators do not cover all EU and other EEA countries. Further, in the absence of comprehensive consumer protection data being available for the EU, some indicators are calculated based on data collected by the EBA primarily for the purpose of prudential supervision rather than consumer protection requirements, and thus should be understood as mere proxies for potential consumer detriment, not precise metrics. Finally, many of these indicators are published for the first time, and any potential trends will only emerge in the coming years.

5. These limitations are particularly important when comparing Member States against one another, where the aforementioned limitations are more likely to make it difficult to arrive at robust conclusions as results may reflect market and/or business model specificities. For that reason, direct comparison of results between specific Member States should be done very cautiously and should be done in the wider context of a given banking market and the Member State's economic circumstances. The main purpose of showing Member State level data is to demonstrate the divergence across all EU Member States. These divergences can be significant and are an interesting observation in their own right for the purpose of future prioritization of tasks. Future improvements in the comprehensiveness and quality of the data will gradually improve the robustness of these indicators over time.

6. Following its initial publication in Q1 of 2023, the indicators will subsequently be updated and refined on an annual basis and published as part of the EBA's annual Risk Assessment Report.

Choice of indicators

7. The EBA chose the 11 RRIs from a long list of more than 50 indicators, on the basis of the following 7 selection criteria:

    A. **Measurability**: the indicators chosen shall quantify an observation;

    B. **Measurement accuracy**: the indicators shall measure the harm that arises to consumers in terms of the number of consumers impacted and/or the extent of detriment accruing to each consumer[1];

    C. **Data availability**: the indicators shall be based on data that the EBA can attain, on a regular basis, so that the observations can be measured across time;

    D. **Data reliability**: the indicators shall be based on data that is retrieved from sources that employ a methodology that is robust and also stable across time;

    E. **Implementation cost**: the indicators shall be based on data that can be retrieved without the EBA imposing additional data reporting obligations on financial institutions or NCAs, and without the EBA incurring unnecessary or oversized costs;

    F. **Geographical representativeness**: the indicators shall measure observations across as many as possible, and ideally all, of the 27 EU Members States;

    G. **Actionability**: the indicators shall be suitable for leading to concrete action. The need for action can be highlighted by EBA's RRIs ex-post, for detriment that has already materialised, which then allows for potential mitigating action to be taken to reduce a further proliferation of said detriment. Also, this can be done ex-ante, for detriment that is at risk of materialising in the future, which then allows for preventive action to be taken to reduce the extent and/or likelihood of detriment that will materialize.

8. These 11 RRIs have been deemed by the EBA as sufficiently relevant and robust when assessed against the aforementioned criteria. The following section outlines the 11 RRIs and for each provides its basic characteristics, aim of the indicator, the source of the data, and an explanation how to interpret it, and what are the limitations of that indicator.

[1] Definitions of the concept "detriment" are also available, for example in the 2017 study by the EU Commission, Study on measuring consumer detriment in the European Union, and the 2020 document of the OECD Measuring consumer detriment and the impact of consumer policy, which also helpfully lists generic types of detriment, such as inflated prices, the cost of replacing a product, the costs associated with complaining and resolving a problem, and the cost of advice.

Calculation and interpretation of the indicators

Share of loans with forbearance measures over all household loans (MC1)

Calculation formula	(A x 100)/B A: Exposures with forbearance measures for loans and advances for households B: Total loans and advances to households on balance sheet
Data source	Data point A: template F19.00, column 010, rows 150, 197 and 227. Data point B: template F18.00, column 010, rows 150, 197 and 227.
Reporting frequency	Quarterly

9. Indicator MC1 aims to assess the access of consumers to forbearance measures, and consequently aims to proxy the forbearance willingness of the banks.

10. This indicator, as well as indicators MC2, OCL1, PDA1 are based on the prudential data submitted by the NCAs and the ECB in the context of the EBA reporting frameworks, which include e.g., COREP and FINREP reports[2]. Even though originally tailored for prudential banking supervision, this data source is considered of relevance for consumer protection purposes because it is broad in scope and robust due to the maturity and reliability of the reporting channel in place. Member State-level data is at consolidated level meaning that numbers corresponding to subsidiaries and branches are added to the numbers of the parent institution and thus count towards the Member State where the parent is located.

11. The sample used to calculate this indicator corresponds to the sample used by the EBA to calculate the EBA Risk Dashboard, and does therefore also not include results for BG, CZ, HR, and SK.

12. The data should be interpreted cautiously and seen in the wider context of the economic situation in a given Member State and the EU. A decrease of this ratio may indicate that consumers experience detriment because their access to forbearance measures is lower over time. Though it may also be the case that the indicator decreases because of the overall strength of the economy and fewer customers requiring forbearance measures.

[2] Further specifications are available on the EBA website here: EBA reporting frameworks | European Banking Authority (europa.eu)

Share of NPLs collateralised by immovable property over all loans collateralised by immovable property (MC2)

Calculation formula	(A x 100)/B A: Non-performing loans and advances for loans collateralised by residential immovable property B: Total gross loans and advances for loans collateralised by residential immovable property
Data source	Data point A: template F18.00, column 060, rows 160, 910 and 930. Data point B: template F18.00, column 010, rows 160, 910 and 930.
Reporting frequency	Quarterly

13. Indicator MC2 aims to measure if consumers face difficulties to make their mortgage payments.

14. This indicator is based on the prudential data submitted by the NCAs and the ECB in the context of the EBA reporting frameworks, which include e.g., COREP and FINREP reports. Member State-level data is at consolidated level meaning that numbers corresponding to subsidiaries and branches are added to the numbers of the parent institution and thus count towards the Member State where the parent is located.

15. The sample used to calculate this indicator corresponds to the sample used by the EBA to calculate the EBA Risk Dashboard, and does therefore also not include results for BG, CZ, HR, and SK.

16. When customers are facing difficulties in making mortgage repayments, it will be reflected in this ratio. A decrease of this ratio may indicate that consumers' financial situation is improving. However, it may also be the case that indicator decreases because banks have changed their business model and/or limited providing mortgage products to certain consumers, and/or have disposed of such loans. Thus, the result of this indicator needs to be interpreted in the context of the wider EU economic environment.

Share of NPLs from credits for consumption over all credits for consumption (OCL1)

Calculation formula	(A x 100)/B A: Non-performing loans and advances for credit for consumption B: Total gross loans and advances for credit for consumption
Data source	Data point A: template F18.00, column 060, rows 170, 913 and 933. Data point B: template F18.00, column 010, rows 170, 913 and 933.
Reporting frequency	Quarterly

17. Indicator OCL1 aims to proxy if consumers face difficulties to repay their loans other than mortgages.

18. This indicator is based on the prudential data submitted by the NCAs and the ECB in the context of the EBA reporting frameworks, which include e.g., COREP and FINREP reports. Member State-level data is at consolidated level meaning that numbers corresponding to subsidiaries and branches are added to the numbers of the parent institution and thus count towards the Member State where the parent is located.

19. The sample used to calculate this indicator corresponds to the sample used by the EBA to calculate EBA Risk Dashboard, and does not include results for BG, CZ, HR, and SK.

20. When customers are facing difficulties in making loan repayments, it will be reflected in this ratio. A decrease of this ratio may indicate that consumers' financial situation is improving. However, it may also be the case that indicator decreases because banks have changed their business model and/or limited providing loans to certain consumers, and/or have disposed of such loans. Thus, the result of this indicator needs to be interpreted in the context of the wider EU economic environment.

Percentage of deposit expenses paid by households over total household deposits (PDA1)

Calculation formula	(A x 100)/B A: Percentage of deposit expenses paid by households (annualized) B: Total households' deposits (average)
Data source	Data point A: template F16.01, column 020, row 220. Data point B: template F08.01, columns 010, 020, 030, 034 and 035, rows 310.
Reporting frequency	Quarterly

21. Indicator PDA1 aims to measure the costs incurred by consumers on their deposits.

22. This indicator is based on the prudential data submitted by the NCAs and the ECB in the context of the EBA reporting frameworks, which include e.g., COREP and FINREP reports. Member State-level data is at consolidated level meaning that numbers corresponding to subsidiaries and branches are added to the numbers of the parent institution and thus count towards the Member State where the parent is located. The average of the denominator is calculated as follows:

- Q1: [Q4 (t-1) + Q1 (t)] / 2;
- Q2: [Q4 (t-1) + Q2 (t)] / 2;
- Q3: [Q4 (t-1) + Q3 (t)] / 2;
- Q4: [Q4 (t-1) + Q4 (t)] / 2.

23. The annualization of the numerator is calculated as follows:

- Q1: Q1 (t) * 4;

- Q2: Q2 (t) * 2;
- Q3: Q3 (t) * (4/3);
- Q4: Q4 (t).

24. An increase of this ratio would mean that deposits are less profitable for consumers. On the other hand, a decrease would mean that consumers are profiting more from holding their deposits at a bank.

Share of fraudulent card payments over all card payments (CDC1)

Calculation formula	Indicator expressed in terms of volume of total transactions, (A x 100) / B A: Volume of fraudulent card payments B: Volume of total card payments Indicator expressed in terms of value of total transactions, (A x 100) / B A: Value of fraudulent card payments B: Value of total card payments
Data source	Annex 2 of the EBA guidelines on fraud reporting under the PSD2 Indicator expressed in terms of volume of total transactions, Data point A: Table C – item 3: fraudulent payments volume (Fvo3) Data point B: Table C – Item 3: payments volume (Pvo3) Indicator expressed in terms of value of total transactions, Data point A: Fva3 Data point B: Pva3
Reporting frequency	Biannual

25. Indicator CDC1 aims to measure the share of fraudulent transactions in the total volume and value of card payments. An increase of this ratio would indicate that consumers are more exposed to fraud in the context of their card payments.

26. This indicator, but also indicators CDC2, OPI1 and OPI2 are based on the statistical data on payment fraud reported to the EBA by the NCAs in compliance with Article 96(6) of the revised Payment Services Directive (PSD2) and EBA Guidelines on fraud reporting[3]. This source allows to determine the volume and nature of fraud for a large set of payment means (credit transfers, direct debits, card payments, cash withdrawals, e-money transactions, money remittance payment transactions, and transactions initiated by payment initiation services providers). The EBA is currently working on improving the completeness and reliability of the submitted fraud

[3] Guidelines EBA/GL/2018/05 on fraud reporting under PSD2, as revised in January 2020.

reports by assessing the feedback received in the context of a Discussion Paper dedicated to this reporting[4]. The limitations of this data source that the reader should keep in mind when assessing the abovementioned indicators are outlined below.

27. A small number of NCAs decided to comply with the EBA Guidelines on fraud reporting with a delay, inter alia to implement them at the same time as the revised ECB Regulation on payment statistics from 2022. The EBA exceptionally accepted this approach to benefit from synergies and facilitate relevant compliance with applicable requirements, and as a result, not all NCAs have reported data for all reporting periods in 2021 and 2022. Furthermore, the EBA excluded from the calculation scope of the involved RRIs the reports in which substantial sets of data were missing or in which the EBA identified significant outlier figures (presumably due to reporting errors). With the implementation of the ECB Regulation in 2022, the EBA expects future reporting periods to be more complete.

28. On this basis, the sample of countries that the EBA included in the calculation of indicator CDC1, comprises 21 EU countries: AT, BE, BG, DE, EE, EL, ES, FI, FR, HR, HU, IE, IT, LU, LV, MT, NL, PT, RO, SI and SK. The EBA considers the figures provided by these countries to be sufficiently robust. For the above-mentioned reasons the sample does not include data from CY, CZ, DK, LT, PL, SE. Also, among the 7 payment instruments for which national authorities are required to report payment fraud data under the EBA guidelines, the EBA applied those indicators for 2 of these payment instruments. These are credit transfers (for OPI1 and OPI2) and payment cards (for CDC1 and CDC2 based on the data reported by card issuers). These payment instruments are the ones for which the data reported has been assessed as sufficiently consistent and robust, and most relevant in terms of volume of transactions.

29. In the context of the future updates and refinements of the RRIs, the EBA expects to gradually expand the scope of Member States and payment instruments included when computing indicator CDC1. This would be allowed by the continuous improvement of the data collected as per the EBA guidelines on fraud reporting under PSD2.

Change to previous year of the fraud losses borne by card payment users (CDC2)

Calculation formula	(100 x (A – B)) / B A: Absolute value losses due to fraud borne by card payment services users time Y B: Absolute value losses due to fraud borne by card payment services users time Y – 1
Data source	Annex 2 of the EBA guidelines on fraud reporting under the PSD2 Data point A: 9.3 PSU time Y Data point B: 9.3 PSU time Y – 1
Reporting frequency	Biannual

[4] Discussion Paper EBA/DP/2022/01 on the EBA's preliminary observations on selected payment fraud data under PSD2, as reported by the industry.

30. Indicator CDC2 measures percentage changes to the amount of losses due to fraud that are borne by card payment services users. A positive value of the indicator would indicate an increase in losses to the consumer from one year to the next, while a negative value of the indicator would indicate a decrease in losses to the consumers. However, the figure needs to be interpreted with caution because changes to the volumes of transactions would impact the indicator. Moreover, in case of very limited aggregate value of the fraudulent transactions, this indicator is sensitive even to little variations, in absolute terms, of the losses borne by the card payment services users over the reference periods. Thus, the indicator should be analysed alongside indicator CDC1.

31. Based on the abovementioned limitations encountered in the context of the fraud payment data collected under PSD2, the sample of countries that the EBA included in the calculation of indicator CDC2 comprises 18 EEA countries: BE, BG, DE, EL, ES, FI, HR, HU, IE, IT, LU, LV, MT, NL, PT, RO, SI and SK. This sample is smaller than the one used for indicators CDC1 and because the EBA excluded the Member States that did not report data for at least one of the two reporting periods considered when computing the indicator, or in which the EBA identified significant outlier figures (presumably due to reporting errors). The EBA expects to gradually expand the scope of Member States and payment instruments included in the context of the future updates and refinements of the RRIs.

Share of fraudulent payments over all payments (credit transfers – OPI1)

Calculation formula	(A x 100) / B A: Volume of fraudulent payments – credit transfers B: Volume of total payments – credit transfers (A x 100) / B A: Value of fraudulent payments – credit transfers B: Value of total payments – credit transfers
Data source	Annex 2 of the EBA guidelines on fraud reporting under the PSD2 Indicator expressed in terms of volume of total transactions, Data point A: Fvo1 Data point B: Pvo1 Indicator expressed in terms of value of total transactions, Data point A: Fva1 Data point B: Pva1
Reporting frequency	Biannual

32. Indicator OPI1 aims to measure the share of fraudulent credit transfers transactions in the total volume of such payments. An increase of this ratio may indicate that consumers are more exposed to fraud in the context of their use of credit transfers.

33. The higher the figures, the more fraudulent transactions there are, and thus the more detriment there is to consumers. Conversely, the lower the figure, the less fraudulent transactions there are in comparison to all transactions, which is to the benefit of the consumer.

34. A small number of NCAs decided to comply with the EBA Guidelines on fraud reporting with a delay, inter alia to implement them at the same time as the revised ECB Regulation on payment statistics from 2022. The EBA exceptionally accepted this approach to benefit from synergies and facilitate relevant compliance with applicable requirements, and as a result, not all NCAs have reported data for all reporting periods in 2021 and 2022. Furthermore, the EBA excluded from the calculation scope of the involved RRIs the reports in which substantial sets of data were missing or in which the EBA identified significant outlier figures (presumably due to reporting errors). With the implementation of the ECB Regulation in 2022, the EBA expects future reporting periods to be more complete.

35. On this basis, the sample of countries that the EBA included in the calculation of indicator OPI1, comprises 19 EU countries: BE, BG, EE, EL, ES, FI, FR, HR, HU, IE, IT, LU, LV, MT, NL, PT, RO, SI and SK. The EBA considers the figures provided by these countries to be sufficiently robust. For the above-mentioned reasons the sample does not include data from AT, CY, CZ, DE, DK, LT, PL and SE. Also, among the 7 payment instruments for which national authorities are required to report payment fraud data under the EBA guidelines, the EBA applied those indicators for 2 of these payment instruments. These are credit transfers (for OPI1 and OPI2) and payment cards (for CDC1 and CDC2) (based on the data reported by card issuers). These payment instruments are the ones for which the data reported has been assessed as sufficiently consistent and robust, and most relevant in terms of volume of transactions.

36. In the context of the future updates and refinements of the RRIs, the EBA expects to gradually expand the scope of Member States and payment instruments. This would be allowed by the continuous improvement of the data collected as per the EBA guidelines on fraud reporting under PSD2.

Change to previous year of the fraud losses borne by payment services users (credit transfers – OPI2)

Calculation formula	(100 x (A - B)) / B A: Absolute value losses due to fraud borne by payment services users Time Y (credit transfers) B: Absolute value losses due to fraud borne by payment services users Time Y-1 (credit transfers)
Data source	Annex 2 of the EBA guidelines on fraud reporting under the PSD2 Data point A: 9.1 PSU Time Y Data point B: 9.1 PSU Time Y – 1
Reporting frequency	Biannual

37. Indicator OPI2 aims to measure a potential increase during the past year in the amount of losses due to fraud that are borne by the users of credit transfers.

38. A positive value of the indicator would indicate an increase in losses to the consumers from one year to the next, while a negative value of the indicator would indicate a decrease in losses to the consumers. However, the figure needs to be interpreted with caution because significant changes to the volumes of transactions would impact the indicator. Moreover, in case of very limited aggregate value of the fraudulent transactions, this indicator is sensitive even to little variations, in absolute terms, of the losses to the consumers over the reference periods. Thus, the indicator should be analysed alongside indicator OPI1.

39. The sample of countries that the EBA included in the calculation of indicators OPI2 comprises 18 EEA countries: BE, BG, EE, EL, ES, FI, HR, HU, IE, IT, LU, LV, MT, NL, PT, RO, SI and SK. The EBA had to exclude the Member States which did not report data for at least one of the two reporting periods considered when computing the indicator, or in which the EBA identified significant outlier figures (presumably due to reporting errors). Those indicators reflect the variation of consumer's losses over time and do not only provide a snapshot based on one reference period. The EBA expects to gradually expand the scope of Member States and payment instruments included when computing indicator OPI2 in the context of the future updates and refinements of the RRIs.

The percentage of people aged 15+ who have an account at a bank or another type of financial institution (AFS1)

Calculation formula	Simple average of percentages reported for each EU Member State in the Global findex database (based on surveys)
Data source	World Bank Global findex database
Reporting frequency	Every 3 years

40. Indicator AFS1 measures the percentage of people 15+ who report having an account at a bank or another type of financial institution or report personally using mobile money services in the past year.

41. The higher the figure the higher the proportion of adult population with access to the most basic financial service.

42. The dataset does not allow to only include people aged 18+, but does allow to only include those aged 25+. There is little difference between the results for the full 15+ dataset and the 25+ sample. For that reason, the indicator includes everyone aged 15+.

43. The source of the information is the World Bank Global findex database. The data is based not on private or public data but on consumer surveys.

The percentage of people aged 15+ who have a debit or credit card (AFS2)

Calculation formula	Simple average of percentages reported for each EU Member State in the Global findex database (based on surveys)
Data source	World Bank Global findex database
Reporting frequency	Every 3 years

44. Indicator AFS2 measures the percentage of people 15+ who report having a debit or a credit card. The higher the figure the higher the proportion of adult population with access to payment services.

45. The source of the information is the World Bank Global findex database. The data is based, not on private or public data but on consumer surveys

The percentage of people aged 15+ who have borrowed any money from family, relatives, or friends in the past year (AFS3)

Calculation formula	Simple average of percentages reported for each EU Member State in the Global findex database (based on surveys)
Data source	World Bank Global findex database
Reporting frequency	Every 3 years

46. Indicator AFS3 measures the percentage of people 15+ who report borrowing any money from family, relatives, or friends in the past year.

47. A higher figure may indicate that fewer people have access to loans from financial institutions, and thus, resort to borrowing from family, relatives, or friends. A higher figure may also indicate that the costs of borrowing have increased making it less affordable to use financial services.

48. The source of the information is the World Bank Global findex database. The data is based not on private or public data but on consumer surveys.