

Enterprise Rating System (ERS)

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Economic Research & Investment Strategy

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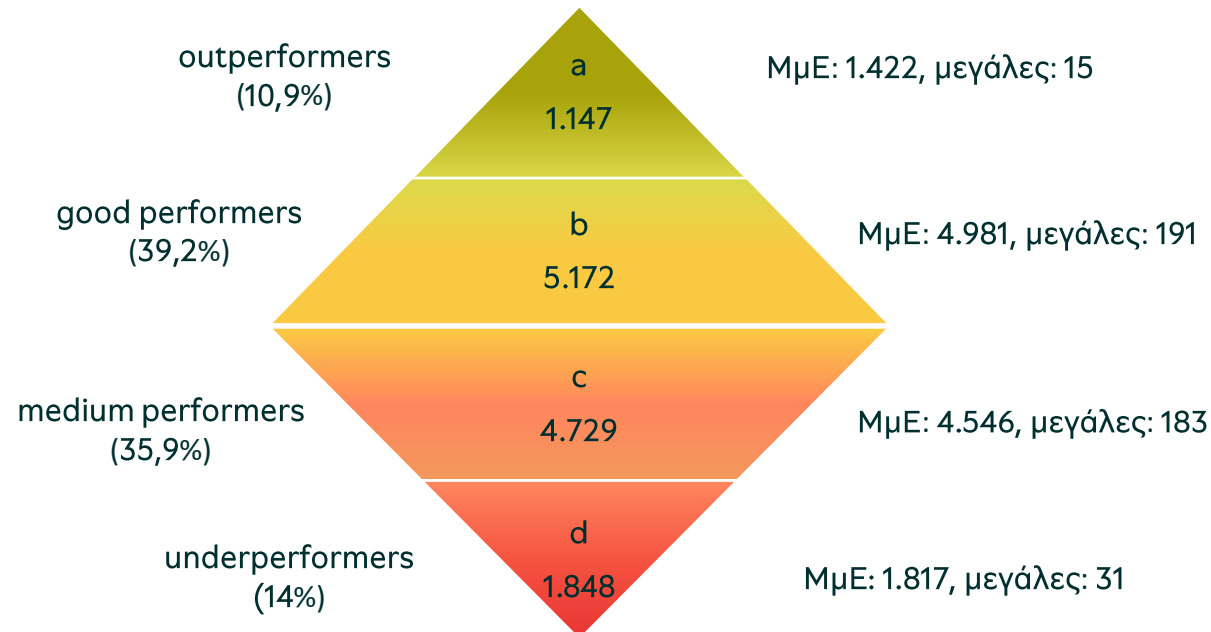
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- Ενημερώσαμε το ποσοτικό σύστημα αξιολόγησης για τις εγχώριες επιχειρήσεις – το Enterprise Rating System (ERS). Αυτό το εργαλείο αξιολόγησης προσφέρει τα εξής πλεονεκτήματα:
- Με την εφαρμογή πλήρως διαφανών και ποσοτικών κριτηρίων, οι επιχειρήσεις μπορούν να ταξινομηθούν σε τέσσερις κατηγορίες αξιολόγησης για χρήση αξιολόγησης του κινδύνου τους.
- Το σύστημα μπορεί να εντοπίσει επιχειρήσεις με ισχυρή οικονομική απόδοση – δηλαδή, εκείνες που πληρούν τα κριτήρια για υγιή χρηματοδότηση.
- Επιτρέπει τον εντοπισμό επιχειρήσεων με χαμηλή απόδοση, οι οποίες έχουν αρνητικά αποτελέσματα αλλά θετικά κέρδη προ τόκων, φόρων και αποσβέσεων (EBITDA). Οι επιχειρήσεις αυτές θα μπορούσαν να ανακάμψουν μέσω ενός προγράμματος αναδιάρθρωσης που στοχεύει στη μείωση των υποχρεώσεών τους.
- Τέλος, το σύστημα μπορεί να εντοπίσει επιχειρήσεις με σοβαρά οικονομικά προβλήματα, όπως προβλήματα ρευστότητας ή εκτεταμένα ανεπαρκή λειτουργικά αποτελέσματα που δεν μπορούν καν να καλύψουν τα χρηματοοικονομικά τους έξοδα. Σε τέτοιες μη αναστρέψιμες περιπτώσεις, ενδεχομένως να χρειάζονται πιο δραστικά μέτρα από αναδιάρθρωση.

Βασικά Συμπεράσματα (I): 2022 vs. 2019: Περισσότερες επιχειρήσεις λαμβάνουν υψηλότερη αξιολόγηση με βάση το ERS

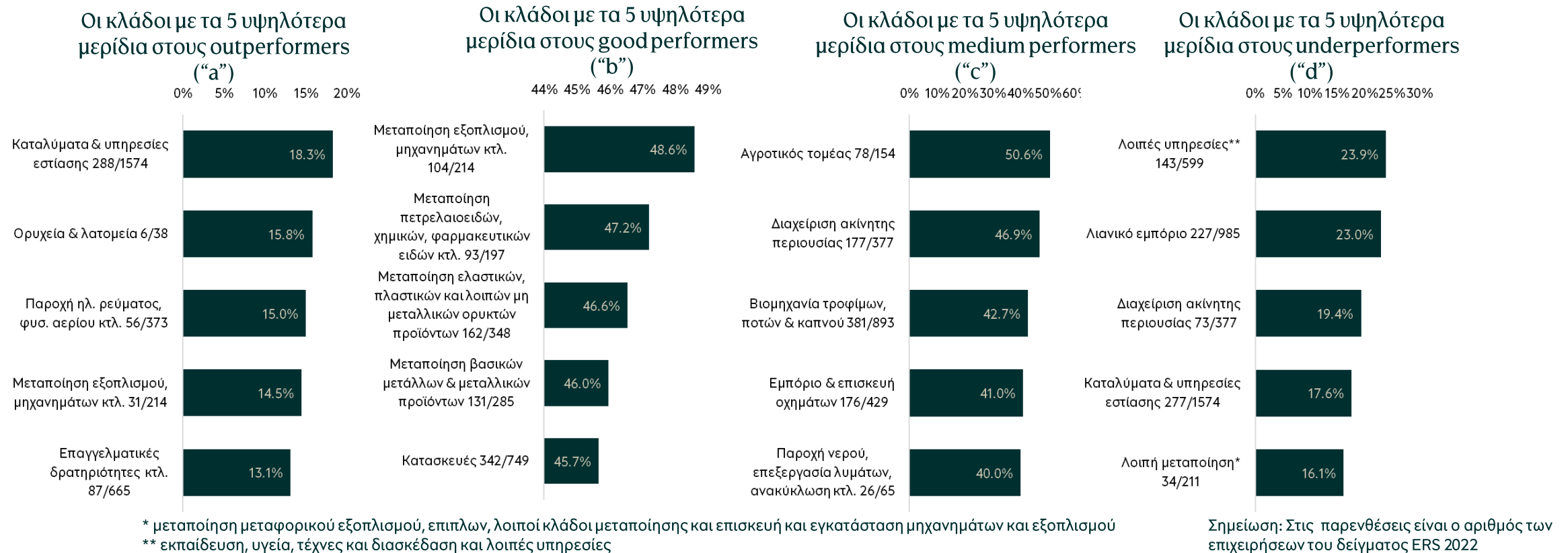
- Το 2022, σε ένα δείγμα 13.186 επιχειρήσεων, το 96,8% ήταν μικρές και μεσαίες επιχειρήσεις (ΜμΕ με κύκλο εργασιών έως €50 εκατ.).
- Οι επιχειρήσεις που υπεραπέδωσαν και έλαβαν την υψηλότερη αξιολόγηση ERS ("a"), αποτελούσαν το 10,9% του δείγματος. Το ποσοστό αυτό είναι υψηλότερο από το αντίστοιχο του 2019 (9%).
- Το 39,2% των επιχειρήσεων με καλή αλλά λιγότερο ικανοποιητική απόδοση αξιολογήθηκαν με "b" και αποτελούσαν το μεγαλύτερο ποσοστό του δείγματος.
- Οι επιχειρήσεις που υστέρησαν σημαντικά και αξιολογήθηκαν με "c" αντιστοιχούσαν στο 35,9% του δείγματος.
- Τέλος, οι επιχειρήσεις με σοβαρά προβλήματα αξιολογήθηκαν με "d" και αντιστοιχούσαν στο 14% του δείγματος.
- Σε σύγκριση με το 2019, παρατηρήθηκε μια μετατόπιση της κατανομής των επιχειρήσεων σε υψηλότερες βαθμίδες.

Κατανομή επιχειρήσεων ανά βαθμίδα ERS, 2022



Βασικά Συμπεράσματα (II): κλάδοι με τα 5 υψηλότερα μερίδια ανάμεσα στις επιχειρήσεις τους ανά βαθμίδα ERS, 2022

- Οι κλάδοι των καταλυμάτων και της εστίασης και της εξόρυξης συγκέντρωσαν τα υψηλότερα ποσοστά επιχειρήσεων που υπεραπέδωσαν ("a") ανάμεσα στις εταιρίες τους με 18,3% και 15,8% αντίστοιχα.
- Στην επόμενη βαθμίδα ERS, οι κλάδοι της κατασκευής εξοπλισμού και μηχανημάτων και των πετρελαιοειδών, χημικών και φαρμακευτικών προϊόντων είχαν επιχειρήσεις καλών επιδόσεων ("b") (48,6% και 47,2% αντίστοιχα).
- Από την άλλη πλευρά, πολλές επιχειρήσεις του αγροτροφικού τομέα παρουσίασαν μεσαίες επιδόσεις "c" (αγροτικός τομέας με 50,6% και βιομηχανία τροφίμων, ποτών και καπνού με 42,7%). Παρομοίως, ο τομέας της διαχείρισης ακινήτων είχε πολλές επιχειρήσεις μεσαίων επιδόσεων (46,9%).
- Τέλος, σχεδόν το ¼ των επιχειρήσεων των λοιπών υπηρεσιών (23,9%) υποαπέδωσαν και βαθμολογήθηκαν με "d" και ακολούθησαν οι επιχειρήσεις της λιανικού εμπορίου (23%).



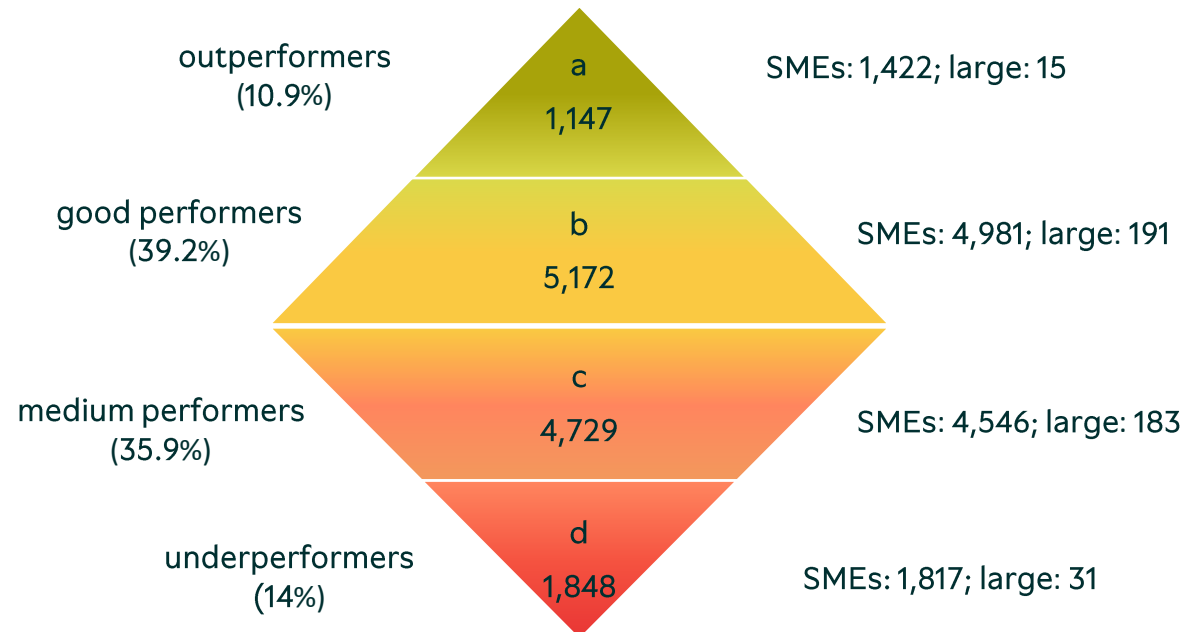
Purpose of the study

- We updated our quantitative rating system for domestic enterprises – the Enterprise Rating System (ERS). This assessment tool offers the following benefits:
- By implementing fully transparent and quantitative criteria, enterprises can be classified into four rating categories to improve their risk assessment capabilities.
- The system can identify enterprises with strong financial performance – meaning, those that meet the criteria for sound financing.
- It also allows the identification of low performing enterprises, which have negative results, but positive earnings before interest, tax, depreciation and amortization (EBITDA). These enterprises have the potential to recover through a restructuring program aimed at reducing their liabilities.
- Finally, the system can identify enterprises with severe financial issues, such as liquidity problems or extended insufficient operating results that cannot even cover their financial expenses. In such irreversible cases, more drastic measures than restructuring may be necessary.

Key Findings (I): 2022 vs. 2019: More enterprises received higher ratings based on ERS

- In 2022, in a sample of 13,186 enterprises, 96.8% were small and medium-sized enterprises (SMEs; turnover up to €50 mn).
- The enterprises that outperformed, thus achieving the highest ERS rating ("a"), constituted 10.9% of the sample, which is higher than in 2019 (9%).
- 39.2% of the enterprises with good but less satisfactory performance were rated "b", the largest percentage of the sample.
- The enterprises that fell behind significantly and were rated "c" accounted for 35.9% of the sample.
- Finally, enterprises with serious problems were rated "d" and accounted for 14% of the sample.
- In comparison with 2019, we witnessed a movement of distribution toward higher ratings among the companies.

Enterprise breakdown by ERS rating, 2022



Key Findings (II): ERS 2022 | Profile of outperformers “a”

- Overall, only 10.9% of the analysed enterprises were outperformers (“a”), with €13.7 bn in assets and €8.5 bn in equity value.
- However, they managed to achieve profits before taxes amounting to €1.7 bn, accounting for 20.2% of the sample’s total profitability.
- On average, their EBITDA margin was 26.3%, and their return on equity was 21.7%.
- Only one of outperformers had positive EBITDA and losses before taxes, and it is SME.
- At the same time, they took on the fewest liabilities (€5.2 bn) or 4.1% of the sample’s total liabilities.
- They had a high degree of liquidity, with their current assets covering their current liabilities by approximately 4 times. The coverage of large enterprises was lower (3.4 times).
- They had low leverage, as their liabilities amounted to only half of their equity.
- The net debt of outperforming SMEs in relation to EBITDA was almost zero. For large enterprises, the relative ratio was higher but remained low (1.2 times).
- Consequently, their debt servicing ability was high, as EBITDA covered financial expenses by 24.5 times, while none of these enterprises had an interest coverage ratio less than 1.

Key Findings (III): ERS 2022 | Profile of good performers “b”

- Good performers (“b”) were the most populated category of our assessment tool, accounting for 39.2% of our sample.
- The total value of their equity was €32,8 billion, with 55.5% owned by large businesses.
- The liabilities of good performers (“b”) were higher than those of outperformers (“a”) at €40.3 bn.
- Their contribution was significant in terms of turnover (€54.3 bn), EBITDA (€7.7 bn) and profits before taxes (€5 bn).
- Although their profitability performance levels were more limited than those of outperformers (“a”), they were still satisfactory, with an EBITDA margin of 15.5% and a return on equity of 17.6%.
- 3% of good performers had positive EBITDA, but net losses before taxes, with the majority being SMEs.
- Their liquidity level was below that of outperformers (“a”) but still satisfactory, as current assets were 2.3 times current liabilities, while the coverage for large enterprises was lower at 1.9 times.
- They had higher debt levels, with liabilities exceeding equity by 1.4 times, and the average net debt was 3.4 times higher than EBITDA.
- They managed their debt well, as EBITDA covered their financial costs by an average of 15 times.
- Only 0.4% of good performers had an interest coverage ratio of less than 1, and these were SMEs, except for one.

Key Findings (IV): ERS 2022 | Profile of medium performers “c”

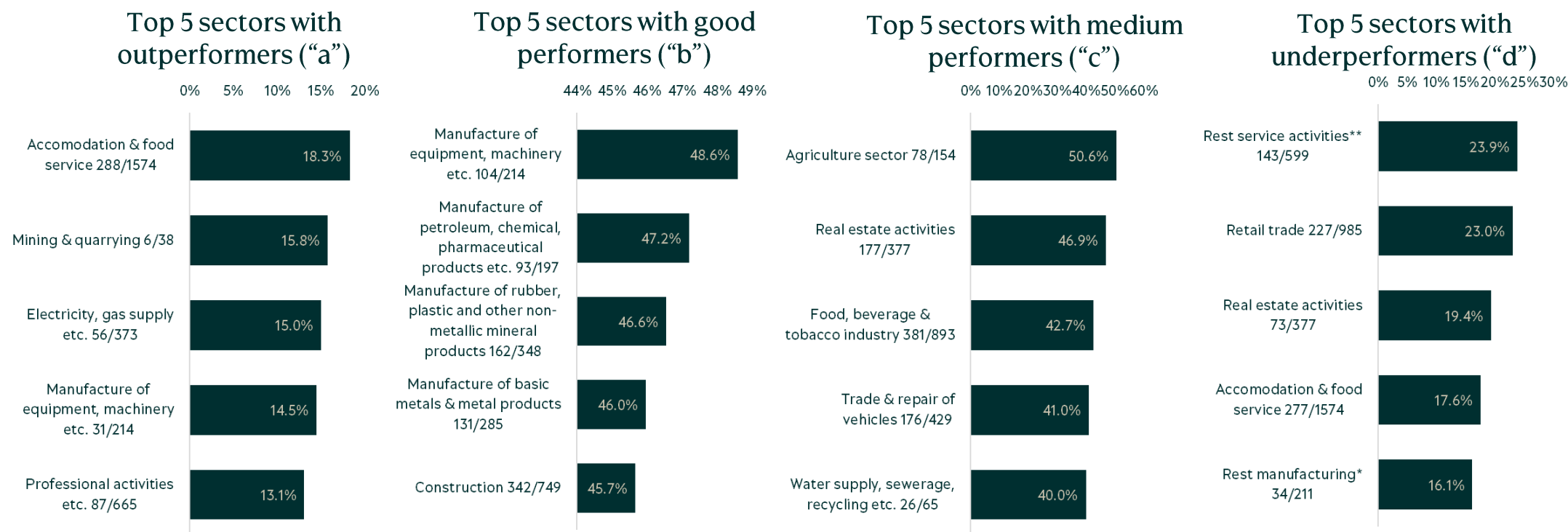
- 35.9% of our sample were rated as medium performers, and they owned the highest aggregated asset value (€97.5 bn).
- Medium performers took on the highest value of financial expenses (€1.8 bn), with 66.4% of that value incurred by large enterprises.
- They recorded the highest turnover (€87.9 bn) in total but only €2.4 bn in profits before taxes, most of which was reported by large enterprises.
- They achieved low levels of efficiency and profitability, with an EBITDA margin of only 8.3% and a return on equity of 8.6%. Large enterprises exhibited better equity profitability at 12.6%.
- 10.1% of SMEs and 16.4% of medium-performing large enterprises had positive EBITDA but net losses before taxes.
- Their liquidity was lower, as their current assets only covered their current liabilities 1.5 times for SMEs and 1.2 times for large businesses.
- They had high net debt, which exceeded EBITDA by 13.1 times for SMEs and by 12.1 times for large corporations.
- Their debt servicing was lower, as SMEs' EBITDA covered financial expenses by 6 times and large enterprises by 6.3 times.
- 15.3% of SMEs and 4.9% of large enterprises had an interest coverage ratio below 1.

Key Findings (V): ERS 2022 | Profile of underperformers “d”

- In the “d” rating, 58.1% of the trapped assets belonged to SMEs (€7.5 bn vs. €5.4 bn in large enterprises).
- Large underperforming businesses accumulated €958 mn in equity, bringing the total equity of underperformers (“d”) to €987 mn, the lowest aggregate among ERS ratings.
- The net debt was almost the same as liabilities, indicating limited cash buffers.
- Compared to large enterprises, underperforming SMEs (“d”) had a higher debt burden as their liabilities and financial expenses were almost twice those of large enterprises, amounting to €7.5 bn and €178 mn, respectively.
- Sales of €12.5 bn resulted in losses, even at the EBITDA level, of €-168 mn, reaching to €-775mn before taxes.
- As they were essentially loss-making enterprises, the average EBITDA margin was -10.3%. However, the average performance of large enterprises was marginally negative (-0.7%).
- The management of equity was inefficient, with a negative return on equity of -17%. The negative performance of large enterprises was limited to -13.4%.
- Only 10.8% of SMEs and 25.8% of underperforming large businesses had positive EBITDA but net losses before taxes.
- They encountered obvious liquidity difficulties as their current liabilities exceeded their current assets (current ratio: 0.7).
- They were overleveraged enterprises with liabilities at 3.7 times the equity. The performance of large enterprises was worse at 4.2 times the equity.
- At the same time, net debt was 24.3 times EBITDA. The performance of large enterprises was slightly better (22.8 times EBITDA).
- Almost all SMEs (80.5%) and 61.3% of large enterprises had an interest coverage ratio below 1.

Key Findings (VI): Top five sectors per ERS rating, 2022

- The highest percentages of outperformers ("a") among their companies were in the *accommodation and food service* and *mining* sectors, at 18.3% and 15.8%, respectively.
- The good performers were in the *manufacturing of equipment and machinery* and of *petroleum, chemical and pharmaceutical products* sectors (48.6% and 47.2%, respectively).
- However, many agri-food corporations had medium performance ("c") (the *agriculture* sector at 50.6% and the *food, beverage, and tobacco manufacturing* industries at 42.7%). Similarly, the real estate business had many medium performers (46.9%).
- Finally, almost a quarter (23.9%) of *rest service* activities firms underperformed and were rated "d", followed by *retail trade* companies (23%).



* manufacture of transport equipment, of furniture, other manufacturing and repair and installation of machinery and equipment

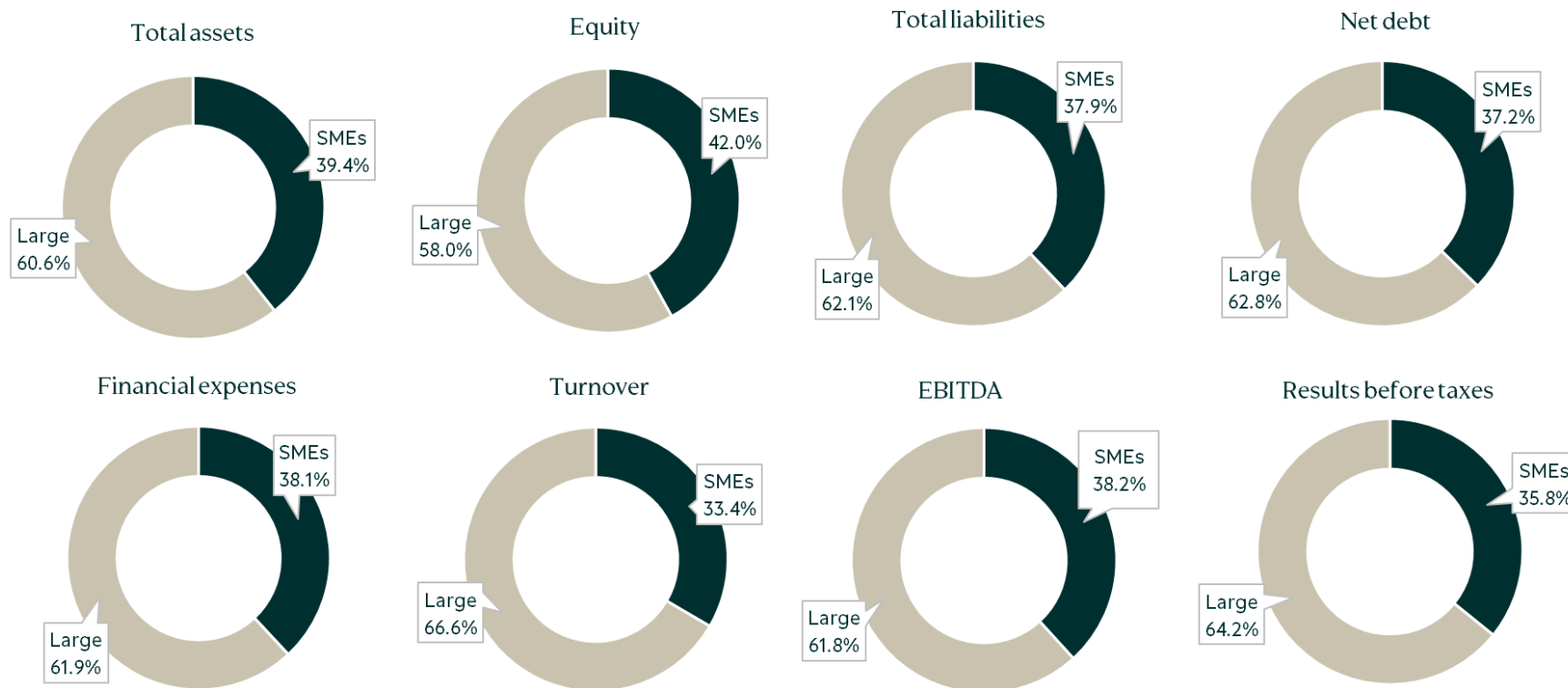
** education, human health activities, art and entertainment and other service activities

Note: in brackets the number of companies of ERS 2022 sample

Presentation of the ERS Results for 2022

Structure of Greek business landscape

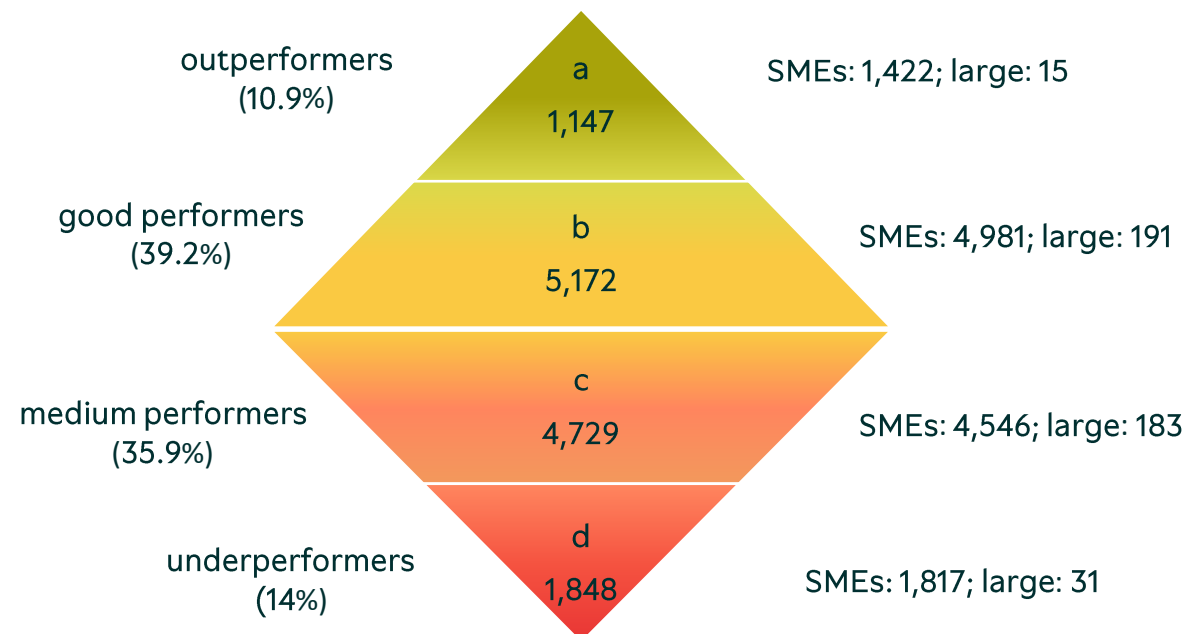
- The vast majority of enterprises in the sample of 13,186 enterprises were SMEs (96.8%). After estimating the key financial figures of the domestic enterprise mixture (SMEs and large enterprises), the following conclusions were reached:
- The large firms own 60.6% of the aggregated assets of the sample.
- In terms of capital structure, large enterprises accounted for 58% of equity, and they took on 62.1% of liabilities and 62.8% of net debt in total.
- Accordingly, large enterprises had higher financial expenses (61.9%) overall than SMEs.
- Despite their high number, the turnover of SMEs was 33.4% of the aggregate.
- Finally, large enterprises were more efficient, as they contributed 61.8% and 64.2% of the total EBITDA and profits before taxes, respectively.



More enterprises received higher ratings based on ERS, 2022 vs. 2019

- Out of the sample of 13,186 enterprises, the figures for 2022 showed a total reported turnover of €163 bn, EBITDA of €15.5 bn and profits before taxes of €8.3 bn.
- However, aggregated undertaken liabilities constituted €126.1 bn, net debt amounted to €106.3 bn, and financial expenses were €3.2 bn.
- The enterprises that outperformed, thus achieving the highest ERS rating ("a"), constituted 10.9% of the sample, which is higher than in 2019 (9%).
- 39.2% of the enterprises with good but less satisfactory performance were rated "b", the largest percentage of the sample.
- The enterprises that fell behind significantly and were rated "c" accounted for 35.9% of the sample.
- Finally, enterprises with serious problems were rated "d" and accounted for 14% of the sample.
- In comparison with 2019, we witnessed a movement of distribution toward higher ratings among the companies.

Enterprise breakdown by ERS rating, 2022



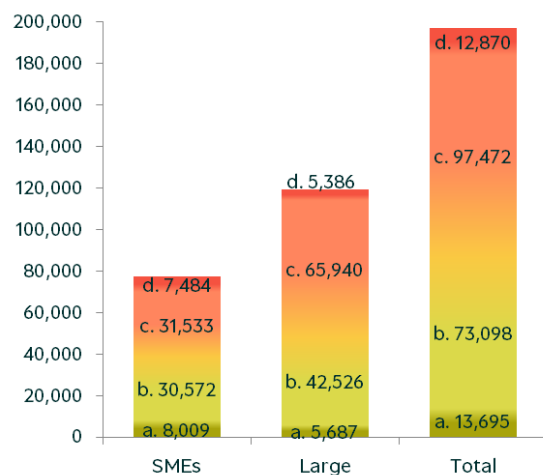
Breakdown by ERS rating, 2022 vs. 2019

(2022 sample: #13,186, 2019 sample: #12,807, as % of enterprises)

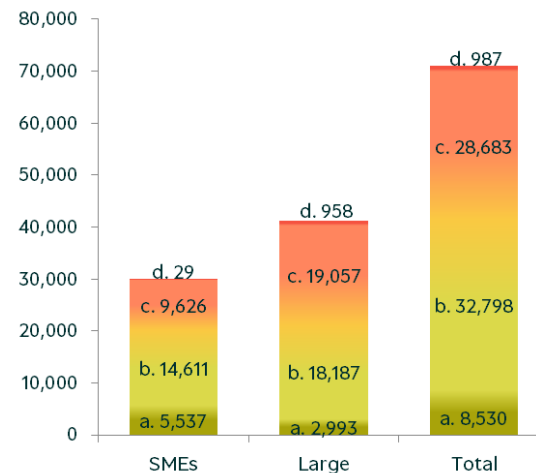
	a		b		c		d	
	2019	2022	2019	2022	2019	2022	2019	2022
Total	9.0%	10.9%	36.2%	39.2%	39.9%	35.9%	15.0%	14.0%
Liquidity	18.6%	18.0%	20.9%	22.1%	28.4%	29.0%	32.0%	30.9%
Profitability	6.1%	9.5%	34.0%	39.9%	33.5%	27.2%	26.3%	23.4%
Solvency	19.3%	20.6%	26.6%	29.4%	34.1%	32.2%	20.0%	17.8%

Financial figures per final ERS rating, 2022 (I)

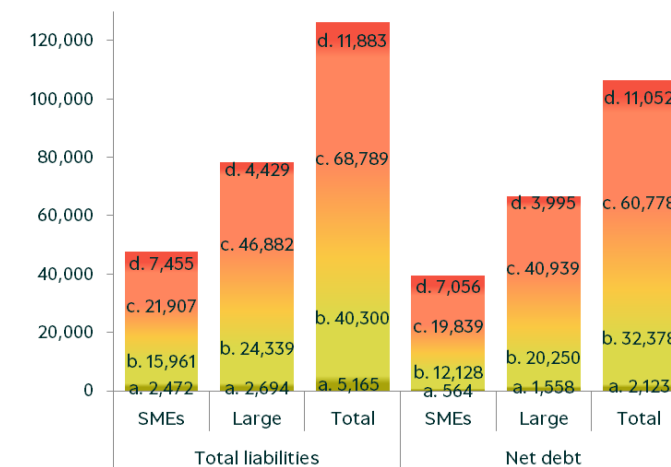
Total assets
(in € mn)



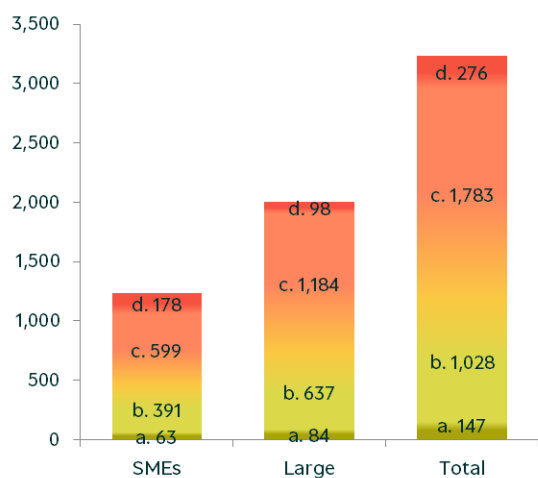
Equity
(in € mn)



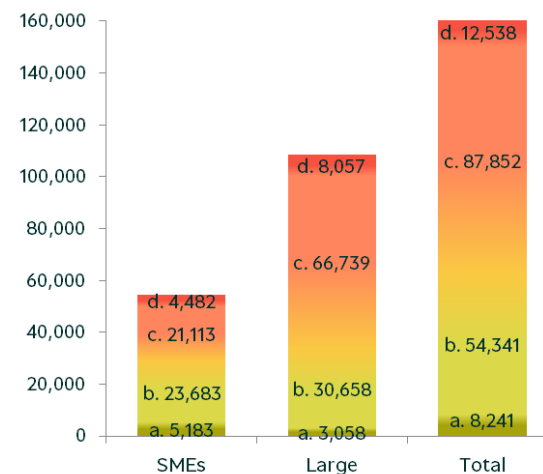
Total liabilities and net debt
(in € mn)



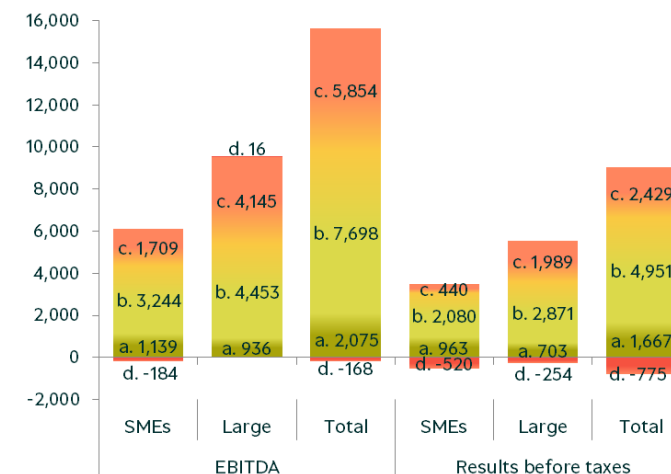
Financial expenses
(in € mn)



Turnover
(in € mn)



EBITDA and results before taxes
(in € mn)



Financial figures per final ERS rating, 2022 (II)

Outperformers (“a”)

- The total assets and equity of SME outperformers (“a”) were greater (€8 bn and €5.5 bn, respectively) than those large corporations.
- Large firms took on almost the same total liabilities (€2.7 bn) as the SMEs.
- Outperformers, which constituted only 10.9% of all enterprises, were highly efficient. They accumulated 5.1% of total turnover at €8.2 bn and they managed to perform 20.2% of aggregated profits before taxes at €1.7 bn.

Medium performers (“c”)

- Most enterprises were rated “c”, thus gathering the highest asset value (€97.5 bn), followed by enterprises rated “b” (73.1 bn).
- Large enterprises represented about 68.2% of the liabilities of medium performers (“c”), at €46.9 bn.
- At the same time, medium performers (“c”) had the highest financial expenses, amounting to €1.8 bn, while large enterprises had €1.2 bn.
- The “c” rated enterprises had the highest total turnover (€87.9 bn), most of which stemmed from large enterprises.
- Although their sales were high, medium performers (“c”) couldn’t maintain the same level of profitability. Their total profits before taxes only reached €2.4 bn, almost half of what good performers achieved. The profitability was mainly contributed by large enterprises.

Good performers (“b”)

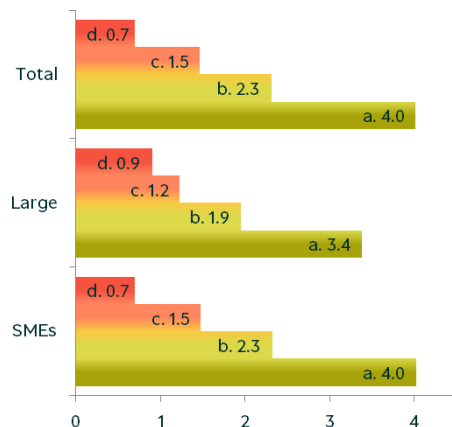
- Among all ERS ratings, good performers (“b”) accumulated the most equity (€32.8 bn), of which large businesses held the majority (€18.2 bn).
- Their liabilities were higher at €40.3 bn than those of outperformers (“a”).
- They performed well, as with €54.3 bn in turnover, they earned €5 bn in profits before taxes — the highest aggregate among all ERS ratings.

Underperformers (“d”)

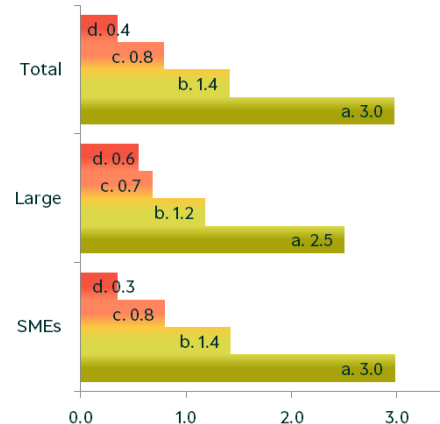
- In the “d” rating, 58.1% of trapped assets belonged to SMEs (€7.5 bn), which had a total equity of €29 mn.
- Large underperforming businesses, on the other hand, accumulated €958 mn in equity, bringing the total equity of underperformers (“d”) to €987 mn, the lowest aggregate among ERS ratings.
- Compared to large enterprises, underperforming SMEs (“d”) had a higher debt burden as their liabilities and financial expenses were almost twice those of large enterprises, amounting to €7.5 bn and €178 mn, respectively.
- Lastly, underperformers (“d”) held low cash buffers, as the levels of liabilities and net debt were almost the same, revealing serious liquidity problems.
- The €12.5 bn in sales of underperformers (“d”) resulted in losses, even at the EBITDA level, amounting to €-168 mn, and were further expanded in terms of losses before taxes, reaching €-775 mn.
- The EBITDA losses of underperformers (“d”) were mostly due to the performance of SMEs. Large enterprises indicated marginally positive aggregated EBITDA profits, amounting to only €16 mn.

Financial ratios per final ERS rating, 2022 (I)

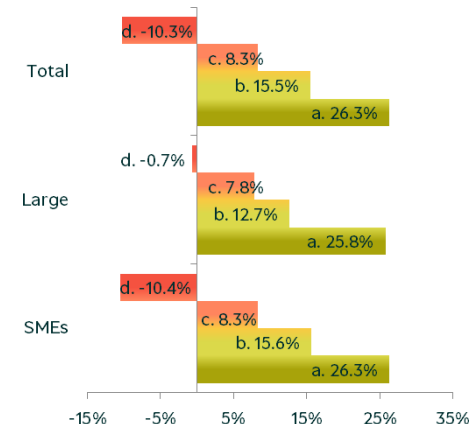
Current ratio



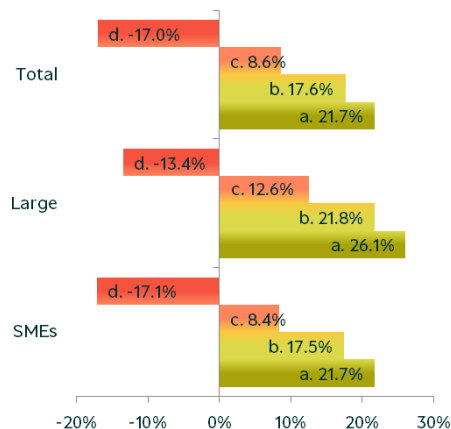
Quick ratio



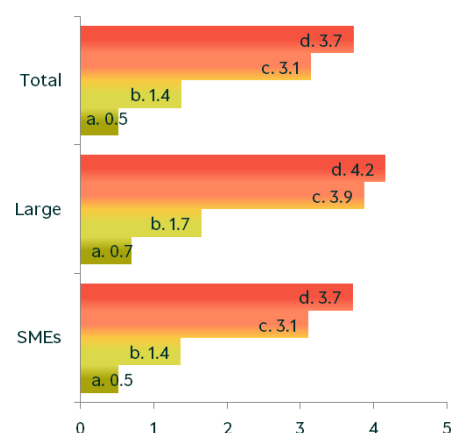
EBITDA margin



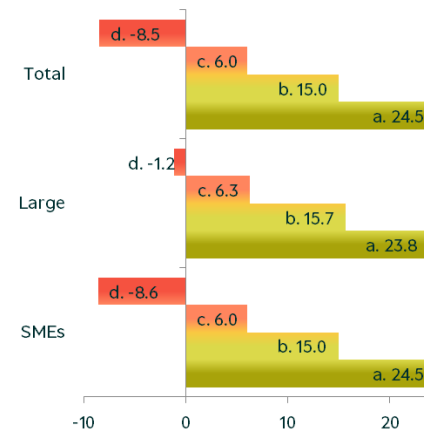
Return on equity*



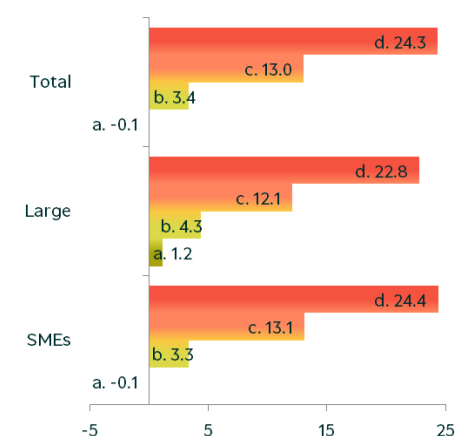
Total liabilities to equity*



Financial expense coverage ratio



Net debt to EBITDA**



* excluding 1,562 SMEs and 13 large enterprises with negative equity. ** Excluding 2,018 SMEs and 25 large enterprises with negative EBITDA.

Note: The enterprises with negative equity are rated with "d" for the ratios "return on equity" and "debt to equity" and the enterprises with negative EBITDA are rated with "d" for the ratio "net debt to EBITDA".

Financial ratios per final ERS rating, 2022 (II)

Outperformers (“a”)

- Their current assets were 4 times their current liabilities for SMEs and 3.4 times for large enterprises.
- They were very profitable, with the EBITDA margin amounting, on average, to 26.3%. At the same time, the average return on equity reached 21.7% for SMEs and 26.1% for large corporations.
- They had low leverage, as their liabilities amounted to only half of their equity. The net debt of outperforming SMEs in relation to EBITDA was almost zero. It was higher, but not much, for large enterprises (1.2 times).
- Their average EBITDA covered financial expenses by 24.5 times. For large enterprises, this ratio was slightly lower at 23.8 times.

Medium performers (“c”)

- Their liquidity was tighter, with current assets being 1.5 times current liabilities for small and medium-sized businesses (SMEs) and 1.2 times for large businesses.
- EBITDA margin was, on average, 8.3%, and their return on equity was 8.6%. The equity profitability of large enterprises was better (12.6%).
- The capital structure significantly deteriorated compared to the “a” and “b” ERS ratings, with total liabilities being 3.1 times the amount of equity for SMEs and 3.9 times for large enterprises. Moreover, net debt was, on average, higher than EBITDA by 13 times. This ratio for large enterprises was a bit lower, at 12.1 times.
- The level of debt service of SME medium performers (“c”) deteriorated significantly, as their EBITDA covered the financial costs by 6 times. The performance of large enterprises was slightly better (6.3 times).

Good performers (“b”)

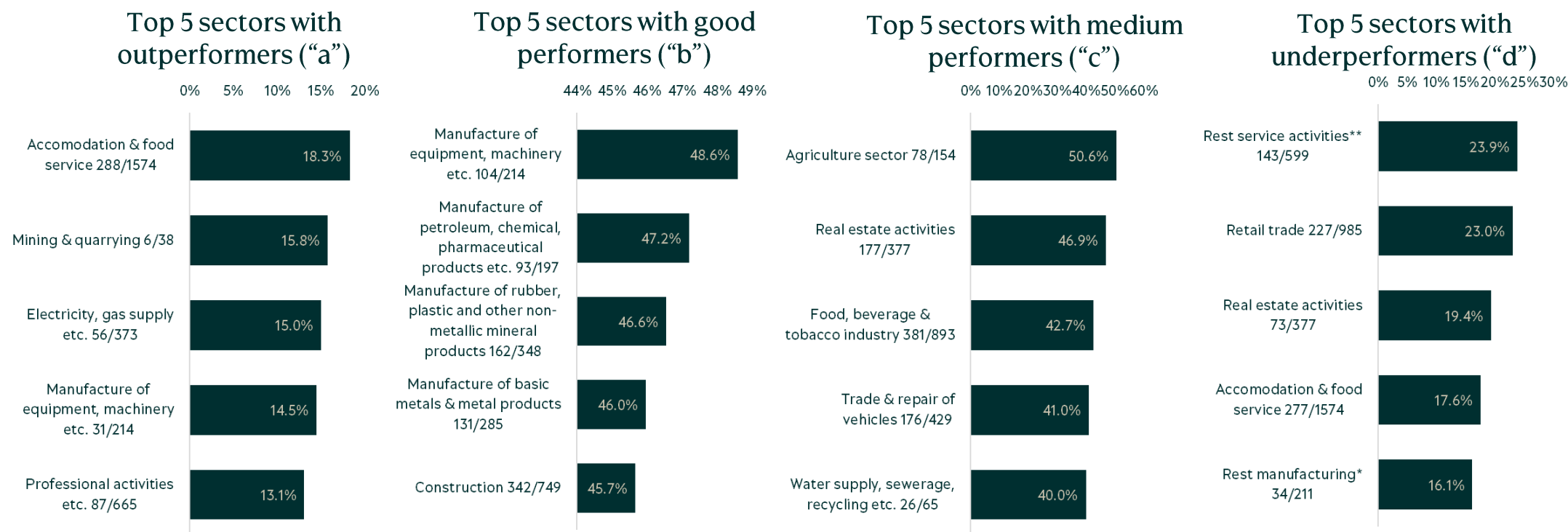
- Their current ratio was lower than that of outperformers (“a”) but still satisfactory (at 2.3 times for SMEs and 1.9 times for large enterprises).
- Their efficiency was more moderate but still satisfactory, with an EBITDA margin of 15.5% and a 17.6% return on equity. Good-performing large firms’ equity was more efficient (21.8%).
- Compared to outperformers (“a”), the leverage went up because liabilities were more than equity by 1.4 times and average net debt was more than EBITDA by 3.4 times.
- At the same time, they were adequately able to manage their debt. EBITDA covered financial expenses by 15 times on average.

Underperformers (“d”)

- They seemed to encounter serious liquidity problems. Current liabilities exceeded their current assets, with an average current ratio of 0.7.
- They were loss-making on average, with a negative EBITDA margin of -10.3%.
- Even though large underperformers (“d”) earned an aggregate €16 mn EBITDA, their average EBITDA margin was slightly negative at -0.7%.
- Lastly, on average, underperformers’ (“d”) equity generated losses, with a negative return on equity of -17%. However, the negative performance of large underperformers (“d”), at -13.4%, was lower than that of SMEs.
- They were overleveraged, as their liabilities were 3.7 times their equity for SMEs and 4.2 times for large enterprises.
- The average net debt was 24.3 times higher than EBITDA, while large enterprises rated “d” managed to contain this ratio at 22.8 times.

Top five sectors per ERS rating, 2022

- The highest percentages of outperformers ("a") among their companies were in the *accommodation and food service* and *mining* sectors, at 18.3% and 15.8%, respectively.
- The good performers were in the *manufacturing of equipment and machinery* and of *petroleum, chemical and pharmaceutical products* sectors (48.6% and 47.2%, respectively).
- However, many agri-food corporations had medium performance ("c") (the *agriculture* sector at 50.6% and the *food, beverage, and tobacco manufacturing* industries at 42.7%). Similarly, the real estate business had many medium performers (46.9%).
- Finally, almost a quarter (23.9%) of *rest service* activities firms underperformed and were rated "d", followed by *retail trade* companies (23%).



* manufacture of transport equipment, of furniture, other manufacturing and repair and installation of machinery and equipment

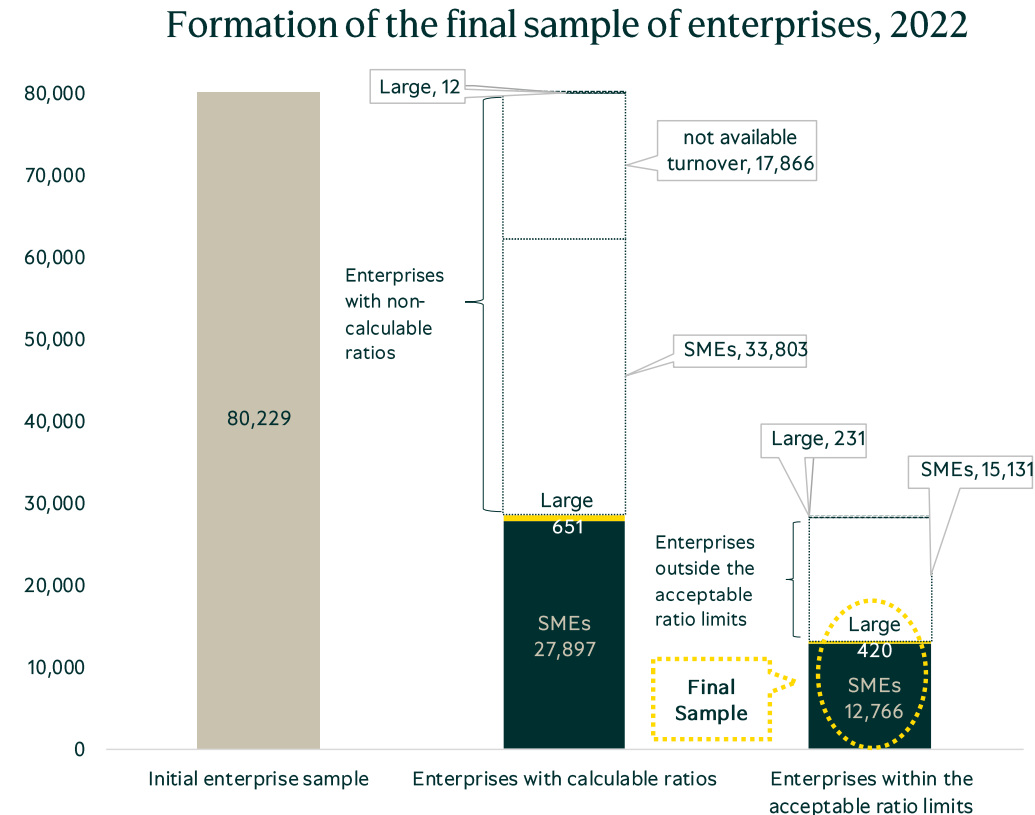
** education, human health activities, art and entertainment and other service activities

Note: in brackets the number of companies of ERS 2022 sample

Appendix I | 2022 enterprise sample

Selection of 2022 enterprise sample

The source of the financial data is ICAP CRIF DATA.Prisma and the data extraction period is November 2024. The initial number of enterprises with available published assets for financial year 2022 was 80,229. The turnover was chosen as the most suitable criterion for the classification of enterprises according to their size. Therefore, the SMEs* selected were enterprises whose turnover amounted to (and included) €50 mn, and the turnover of large enterprises exceeded €50 mn. In the next step, the selected enterprises had available data for the year 2022, in terms of the accounts used to calculate the financial ratios in question. This led to a sample of 28,548 enterprises (27,897 SMEs and 651 large enterprises) with calculable ratios. Finally, after the adoption of acceptable limits for the ratios, the final sample of the examined enterprises was reduced to 13,186 enterprises (12,766 SMEs and 420 large ones).



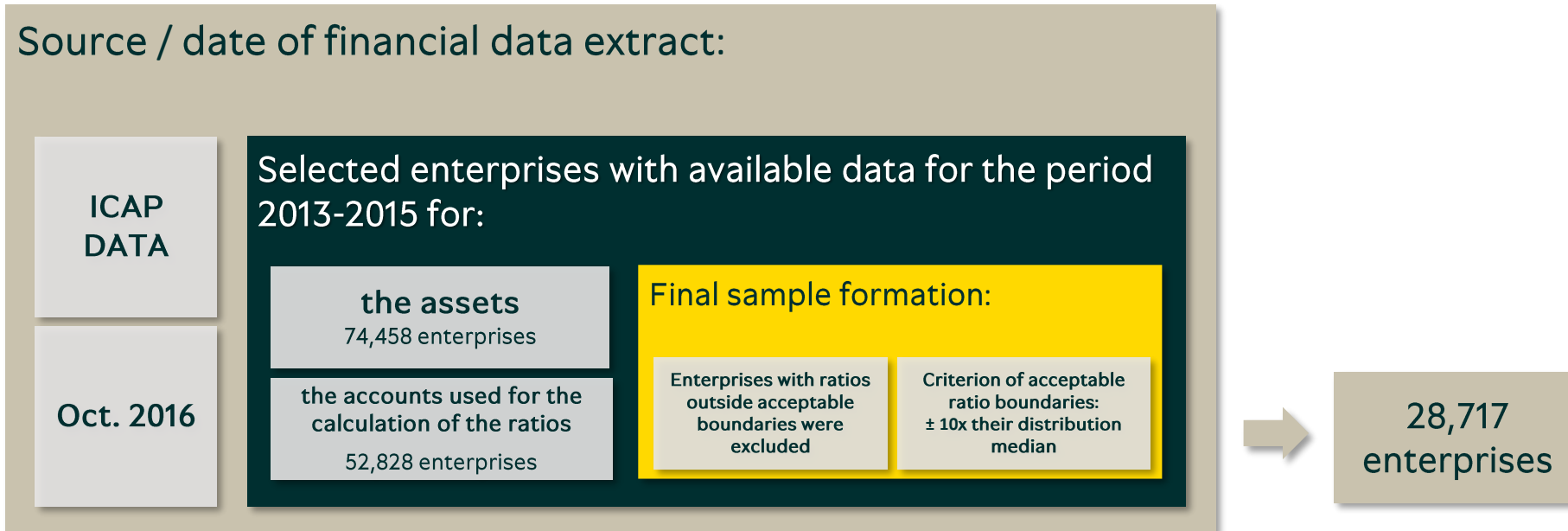
* After adopting the turnover ceilings of the SMEs definition stipulated by the European Commission (Commission Recommendation 2003/361/EC).

Appendix II | Methodology of ERS

Methodology of Enterprise Rating System*

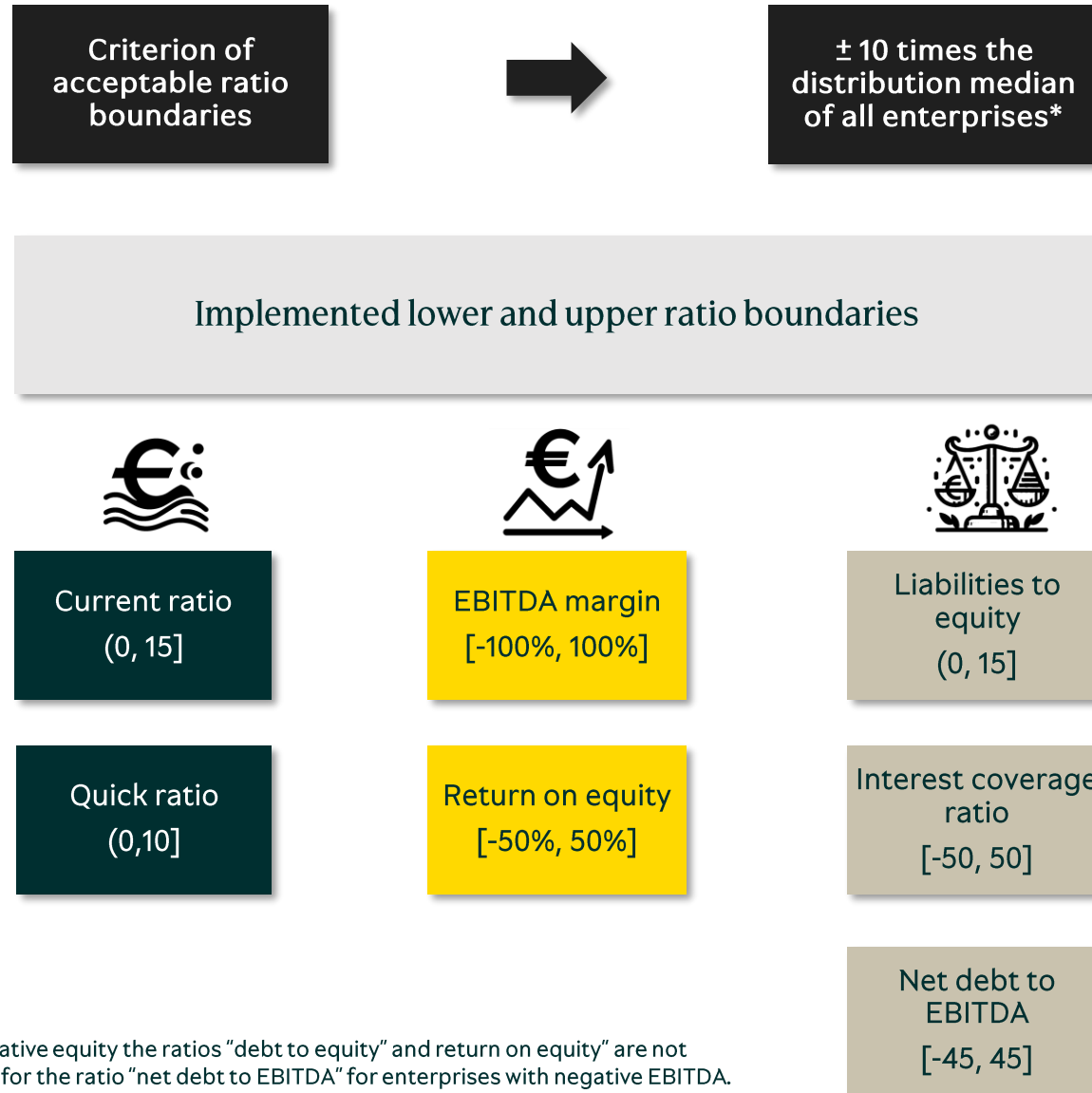
For the purpose of this analysis, **all enterprises were examined**, without any size criteria. Furthermore, **all sectors** of economic activity were examined according to the **NACE rev. 2** classification, with the following exceptions:

- **K:** Financial and insurance activities
- **O:** Public administration and defence; compulsory social security
- **T:** Activities of households as employers; undifferentiated goods – and services – producing activities of households for own use
- **U:** Activities of extraterritorial organisations and bodies



* For more see "Enterprise Rating System: the rhomboid structure of the Greek corporate universe, March 2017" (<https://www.piraeusbankgroup.com/en/oikonomiki-analisi-ependitiki-stratigiki/oikonomiki-analisi-ellinikis-oikonomias-kladikes-meletes/analysis-category/2017/enterprise-rating-system>)

Definition of acceptable ratio boundaries

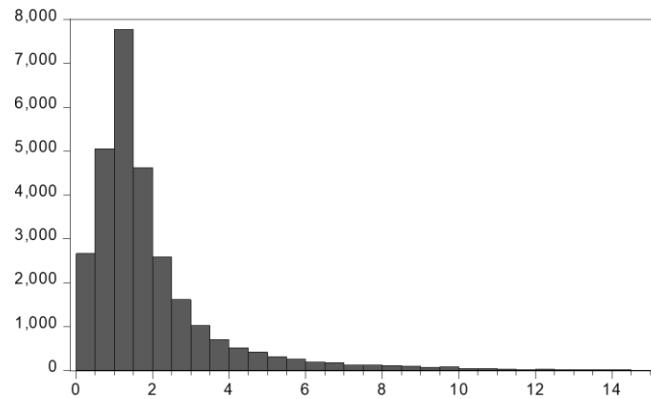


* For the enterprises with negative equity the ratios "debt to equity" and return on equity" are not considered. The same applies for the ratio "net debt to EBITDA" for enterprises with negative EBITDA.

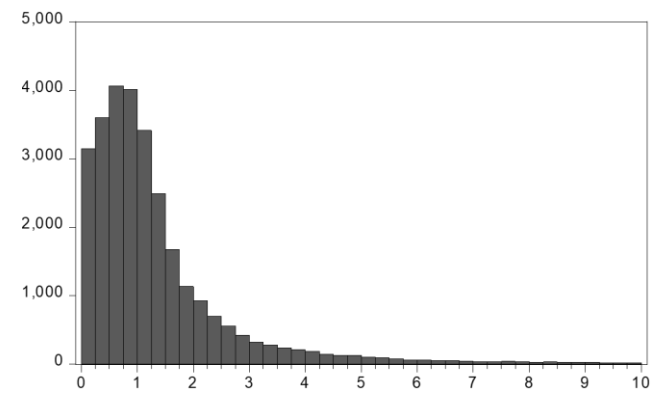
Enterprise distribution per ratio (I)

For the period 2013-2015, the distribution of the enterprises per examined ratio based on the implemented boundaries is as follows:

Liquidity

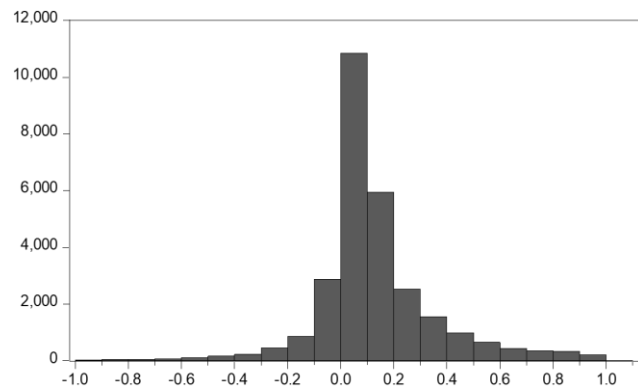


Series: Current ratio	
Sample 28717	
Observations 28717	
Mean	1.932033
Median	1.413653
Maximum	14.99756
Minimum	0.002237
Std. Dev.	1.769645
Skewness	2.728749
Kurtosis	12.88059
Jarque-Bera	152451.8
Probability	0.000000

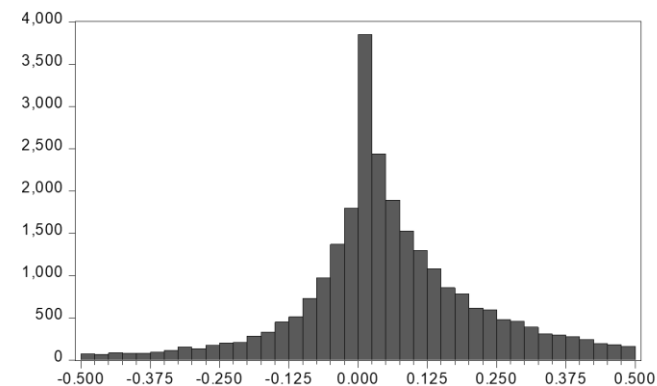


Series: Quick ratio	
Sample 28717	
Observations 28717	
Mean	1.341537
Median	0.968957
Maximum	9.971817
Minimum	6.97e-05
Std. Dev.	1.368725
Skewness	2.666894
Kurtosis	12.23342
Jarque-Bera	136053.3
Probability	0.000000

Profitability



Series: EBITDA margin	
Sample 28717	
Observations 28717	
Mean	0.127122
Median	0.086198
Maximum	1.000000
Minimum	-0.992609
Std. Dev.	0.228255
Skewness	0.473555
Kurtosis	6.720730
Jarque-Bera	17638.05
Probability	0.000000

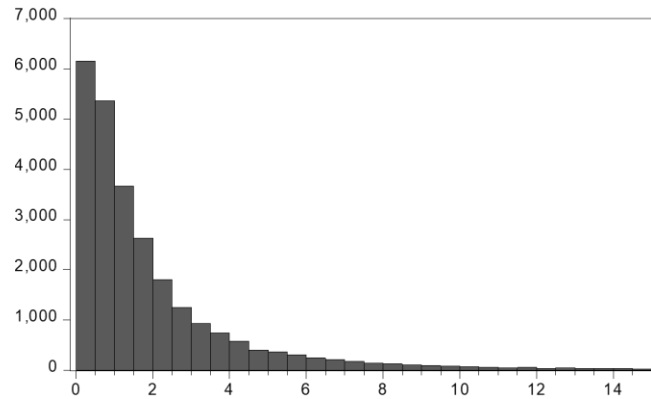


Series: Return on equity	
Sample 28717	
Observations 25872	
Mean	0.054148
Median	0.035858
Maximum	0.499945
Minimum	-0.499515
Std. Dev.	0.162482
Skewness	-0.043749
Kurtosis	4.081955
Jarque-Bera	1270.188
Probability	0.000000

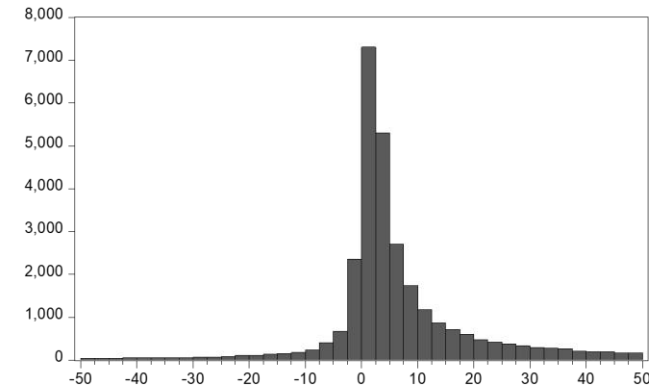
Enterprise distribution per ratio (II)

For the period 2013-2015, the distribution of the enterprises per examined ratio based on the implemented boundaries is as follows:

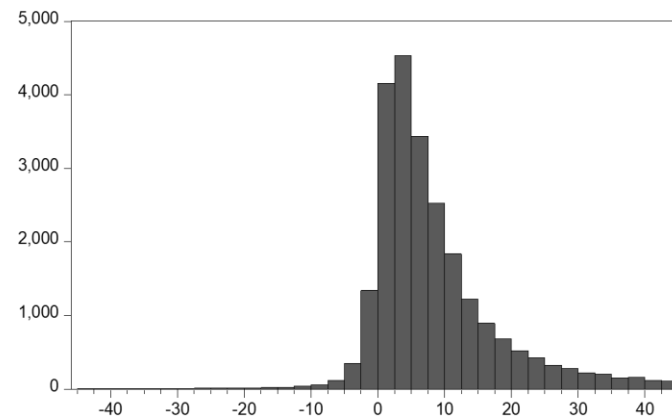
Solvency



Series: Debt to equity	
Sample 28717	
Observations 25872	
Mean	1.964985
Median	1.171551
Maximum	14.98910
Minimum	0.003578
Std. Dev.	2.292560
Skewness	2.452902
Kurtosis	10.12408
Jarque-Bera	80655.37
Probability	0.000000



Series: Interest coverage ratio	
Sample 28717	
Observations 28717	
Mean	6.210742
Median	3.290262
Maximum	49.99228
Minimum	-49.96896
Std. Dev.	12.63672
Skewness	0.447108
Kurtosis	6.544160
Jarque-Bera	15986.62
Probability	0.000000



Series: Net debt to EBITDA	
Sample 28717	
Observations 23799	
Mean	8.190871
Median	5.789356
Maximum	44.95071
Minimum	-44.29842
Std. Dev.	9.255533
Skewness	1.188930
Kurtosis	6.089775
Jarque-Bera	15073.63
Probability	0.000000

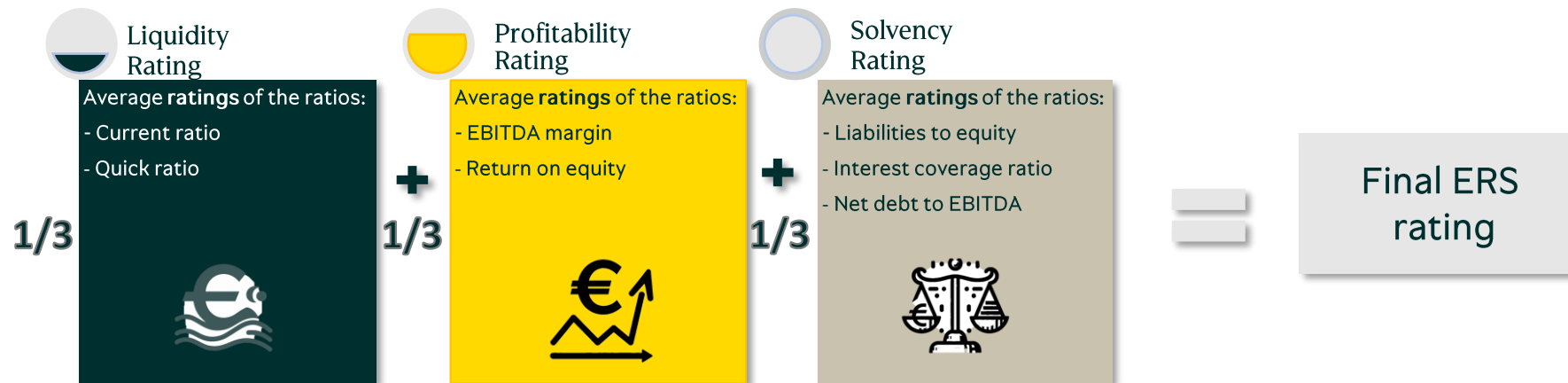
Presentation of ERS (Enterprise Rating System)

The aforementioned enterprises were divided into four groups (quartiles) based on the final enterprise distributions per ratio and a rating system for enterprises was created based on their financial performance. The results of the Enterprise Rating System (ERS) are presented below:

Enterprise Rating System (ERS)

Rating	Performance	Percentile	Current ratio	Quick ratio	EBITDA margin	Return on equity*	Liabilities to equity*	Interest coverage ratio	Net debt to EBITDA*
a	outperformers	≥ 75	≥ 2.25	≥ 1.61	≥ 19.60%	≥ 13.60%	≤ 0.53	≥ 9.31	≤ 2.39
b	good performers	50	[1.41-2.25)	[0.97-1.61)	[8.63%-19.60%)	[3.60%-13.60%)	(0.53-1.17]	[3.30-9.31)	(2.39-5.80]
c	medium performers	25	[0.96-1.41)	[0.53-0.97)	[2.80%-8.63%)	[-1.97%-3.60%)	(1.17-2.44]	[1.19-3.30)	(5.80-11.51]
d	underperformers	<25	< 0.96	< 0.53	< 2.80%	<-1.97%	> 2.44	<1.19	> 11.51

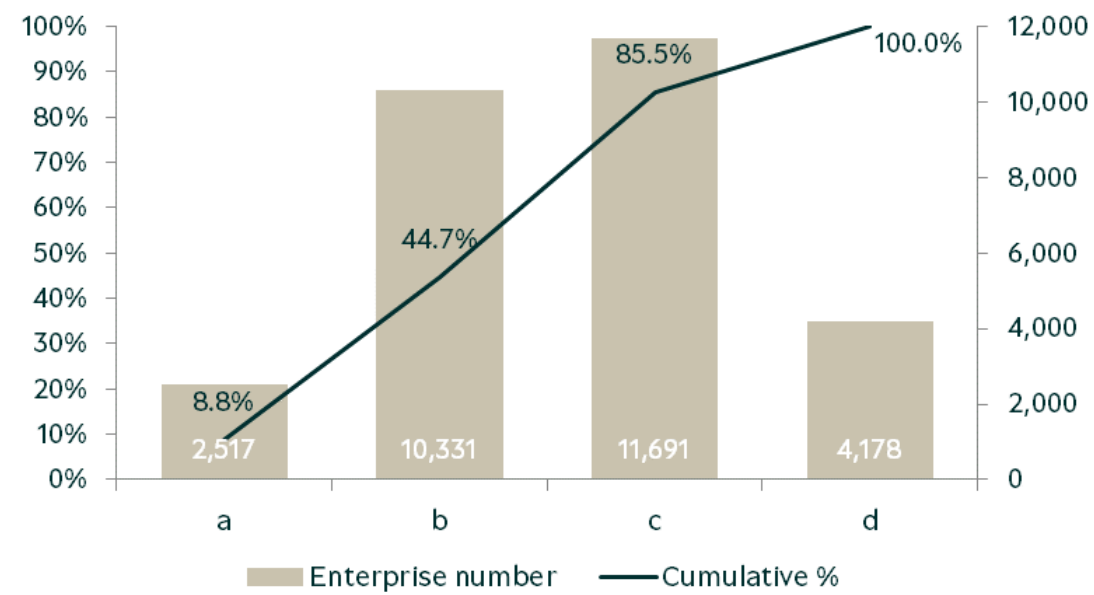
* The enterprises with negative equity are rated with "d" for the ratios "return on equity" and "debt to equity" and the enterprises with negative EBITDA are rated with "d" for the ratio "net debt to EBITDA".



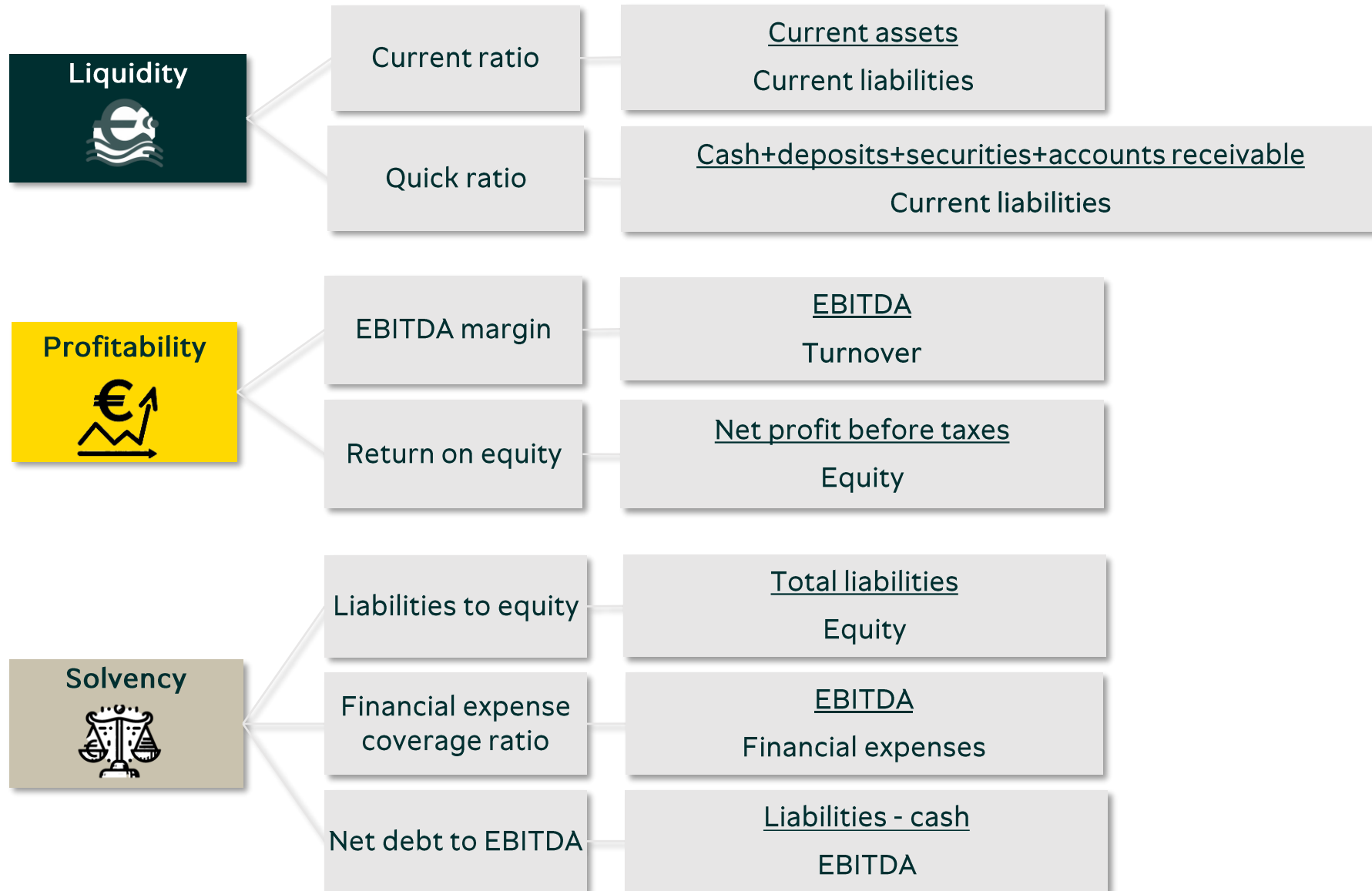
Presentation of ERS (Enterprise Rating System)

Based on the four ERS grade rating scales, for the period 2013-2015 enterprises can be classified as follows:

Enterprise distribution and cumulative percentages, 2013-2015 based on the Enterprise Rating System (ERS)



Examined ratio formulas



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