# **Insolvency Risk Appendix**

This is the Insolvency Risk Appendix to the Board's determination under Section 175(5) of the Act in respect of the 2019/20 Levy Year. Unless defined in this Appendix, expressions defined in the rules set out in the determination (the "**Rules**") shall have the same meanings as set out therein.

#### Part 1: Categorisation Principles

- 1.1. This Part sets out the categorisation principles referred to at Rule E3.2, which will be applied for the purposes of assigning Employers to categories pursuant to Rule E3. Subject to paragraphs 1.5 and 1.6 of this Part 1 and Rule E7, all provisions of Rule E2 will apply in relation to data collection and will be used to determine which category an Employer is assigned to. If an Employer is categorised on any of the Scorecards identified in this Part then, regardless of the type of accounts, if any, Filed by that Employer and regardless of any financial data contained in them, the Scorecard identified in this paragraph will apply. In the event that more than one of these Scorecards could apply to the Employer, the following hierarchy applies:
  - (1) CRA Rated, Scorecard 9;
  - (2) Industry-Specific, Scorecard 10;
  - (3) Not For Profit, Scorecard 8.
- 1.2. To be assigned to a Group category pursuant to Rule E3.1(3), (4), (5) or (6), the following conditions must be satisfied:
  - (1) the Employer must be or must have a Parent; and
  - (2) either:
    - (a) Experian must have collected, or there must have been Filed, in accordance with Rule E2, Consolidated Accounts for the Employer's Ultimate Parent; or
    - (b) there must be at least one other member of the Group other than the Employer which has filed its Latest Accounts with Companies House in the UK.
- 1.3. Where Rule E2.6(2)(c) has applied for the purposes of the 2018/19 Levy Year (the "First Full Accounts Year"), but (in the absence of this paragraph 1.3) would not have applied in any Levy Year subsequent to the First Full Accounts Year, the Employer concerned will (unless it is an employer which falls within one of the categories in Rule E3.1(8)-(11)) nonetheless be categorised for the purposes of any Levy Year subsequent to the First Full Accounts Year as follows:

- (1) Group <£10m in the case of an Employer which is part of a Group and whose Latest Accounts show a Turnover of less than £10 million;
- (2) Group £10m to £50m in the case of an Employer which is part of a Group and whose Latest Accounts show a Turnover of more than £10 million; or
- (3) Non-Subsidiaries <£30m in the case of an Employer which is not part of a Group.
- 1.4. For the purposes of assigning Employers in any case where Accounts are expressed in a currency other than sterling, Experian will:
  - (1) obtain the Employer's last four sets of Accounts (to the extent that four such sets of Accounts are available);
  - (2) confirm the balance sheet date of the Employer's Latest Accounts; and
  - (3) for each set of Accounts obtained under (1) above:
    - (a) retrieve the currency in which the Accounts are stated;
    - (b) retrieve the exchange rate for that currency as at the balance sheet date confirmed in (2) above; and
    - (c) multiply the figures in the Accounts by the exchange rate identified in (b) above.

Where Group non-consolidated Accounts are received in respect of an Employer, Experian will follow the steps outlined at (1) to (3) above for each company in the Group, then add the converted figures for each Group entity together.

Where Accounts are prepared in different currencies in different years, Experian will retrieve the exchange rate for each currency as at the balance sheet date of the youngest set of Accounts prepared in the relevant currency. For example, where an Employer's N Accounts are prepared in euro, but its Accounts for the previous year's N-1 to N-3 were prepared in US dollars, Experian will use the euro exchange rate as at the balance sheet date of the Employer's N Accounts and the US exchange rate as the balance sheet date of the Employer's N-1 Accounts.

- 1.5. For the purposes of determining whether Rule E3.1(8) applies to an Employer:
  - (1) Experian will take into account (in addition to data collected or Filed in accordance with Rule E2) any other data which the Board supplies to it for this purpose (or which the Board directs it to collect), and the Board may direct Experian that Rule E3.1(8) does or does not apply to a particular Employer; and

- (2) subject to any evidential requirements set out in Rule E3.1(8) being met, assignment will be based on whether the factual tests in Rule E3.1(8) are met as at the relevant Score Measurement Date.
- 1.6. For the purposes of determining whether Rule E3.1(1)(b)(iii) applies, Experian will accept data provided pursuant to Rule E2.3 up to and including the Measurement Time.



3

### Part 2: **Scorecards**

Set out below are the Scorecards to which Employers will be assigned pursuant to Rule E3 and on the basis of which their Monthly Scores and Adjusted Monthly Scores will be calculated pursuant to Rule E4.

Scorecard 1 - Non-Subsidiaries £30m+ and Large Subsidiaries

| Scorecard 1 – Non-subsidiaries £30m+ and large subsidiaries |         |                     |                   |  |
|---|---------|---------------------|-------------------|--|
| Variable  | Unit    | Coefficient         | Replacement Value |  |
| Intercept   | -       | -1.69067797214732   | -                 |  |
| Log Net Worth   | £ (GBP) | -0.0339471946263439 | -10.2             |  |
| Log Creditor Days (Sales<br>Based)                          | Days    | 1.16522528204678    | 1.35              |  |
| Log Total Assets  | £ (GBP) | -0.587785191966404  | 5.013             |  |
| Cash by Liabilities   | £ (GBP) | -1.04448733451402   | 0                 |  |
| Log Pre-Tax Profit  | £ (GBP) | -0.14253423300834   | -10.53            |  |

# Scorecard 2 - Non-Subsidiaries <£30m

| Scorecard 2 - Non-subsidiaries <£30m |         |                       |                   |  |
|--------------------------------------|---------|-----------------------|-------------------|--|
| Variable                             | Unit    | Coefficient           | Replacement Value |  |
| Intercept                            | -       | -6.92648362501854     | -                 |  |
| Log Cash                             | £ (GBP) | -0.103164366365695    | 0.3               |  |
| Capital Employed                     | £ (GBP) | -2.00334747681712e-08 | -171600000        |  |
| Log Pre-Tax Profit                   | £ (GBP) | -0.133851392604795    | -8.604            |  |
| Log Creditor Days (Sales<br>Based)   | Days    | 1.46274961590855      | 1.234             |  |
| Log Current Liabilities              | £ (GBP) | 0.148946735493765     | 9.447             |  |

# Scorecard 3 - Group £50m+

| Scorecard 3 - Group £50m+               |            |                |   |   |
|---|------------|----------------|---|---|
| Variable                                | Unit       | Band           | Gradient                                | Constant                                |
| Intercept                               | -          | -              | -                                       | -7.10460674910167000000                 |
| Pre Tax<br>Margin                       | %          | Unknown        | 0.0000000000000000000000000000000000000 | 1.32960640343370000000                  |
| Pre Tax<br>Margin                       | %          | <2             | 0.0000000000000000000000000000000000000 | 1.32960640343370000000                  |
| Pre Tax<br>Margin                       | %          | 2 to 6         | -0.10021122021618400000                 | 1.53002884386607000000                  |
| Pre Tax<br>Margin                       | %          | 6 to 10        | -0.23219038064224200000                 | 2.32190380642242000000                  |
| Pre Tax<br>Margin                       | %          | >10            | 0.0000000000000000000000000000000000000 | 0.0000000000000000000000000000000000000 |
| Average<br>Remuneration<br>per Employee | £Thousands | Unknown        | 0.0000000000000000000000000000000000000 | 1.53020793691005000000                  |
| Average<br>Remuneration<br>per Employee | £Thousands | <7.5           | 0.0000000000000000000000000000000000000 | 1.53020793691005000000                  |
| Average<br>Remuneration<br>per Employee | £Thousands | 7.5 to<br>17.5 | -0.00329720691773492000                 | 1.55493698879306000000                  |
| Average<br>Remuneration<br>per Employee | £Thousands | 17.5 to 35     | -0.07380646967737340000                 | 2.78884908708673000000                  |
| Average<br>Remuneration<br>per Employee | £Thousands | 35 to 50       | -0.01370817655857750000                 | 0.68540882792887700000                  |

| Scorecard 3 -                           | Scorecard 3 - Group £50m+ |                     |   |   |  |
|---|---------------------------|---------------------|---|---|--|
| Variable                                | Unit                      | Band                | Gradient                                | Constant                                |  |
| Average<br>Remuneration<br>per Employee | £Thousands                | >50                 | 0.0000000000000000000000000000000000000 | 0.0000000000000000000000000000000000000 |  |
| Mortgage Age                            | Years                     | Unknown             | 0.0000000000000000000000000000000000000 | 1.25860760820654000000                  |  |
| Mortgage Age                            | Years                     | None                | 0.0000000000000000000000000000000000000 | 0.0000000000000000000000000000000000000 |  |
| Mortgage Age                            | Years                     | 0 to 1.5            | 0.00000000000000000000                  | 1.80635551381964000000                  |  |
| Mortgage Age                            | Years                     | 1.5 to 5            | -0.02684691718207970000                 | 1.84662588959276000000                  |  |
| Mortgage Age                            | Years                     | 5 to 7              | -0.85619565184117900000                 | 5.99336956288826000000                  |  |
| Mortgage Age                            | Years                     | >7                  | 0.0000000000000000000000000000000000000 | 0.0000000000000000000000000000000000000 |  |
| Change in<br>Turnover                   | Ratio                     | Unknown             | 0.0000000000000000000000000000000000000 | 0.57794182692327700000                  |  |
| Change in<br>Turnover                   | Ratio                     | <-0.625             | 0.0000000000000000000000000000000000000 | 1.47610914888338000000                  |  |
| Change in<br>Turnover                   | Ratio                     | -0.625 to<br>-0.175 | -0.83066692375223800000                 | 0.95694232153822900000                  |  |
| Change in<br>Turnover                   | Ratio                     | -0.175 to<br>0.05   | -1.87919490492926000000                 | 0.77344992483225000000                  |  |
| Change in<br>Turnover                   | Ratio                     | 0.05 to<br>0.2      | -4.52993453057191000000                 | 0.90598690611438200000                  |  |
| Change in<br>Turnover                   | Ratio                     | >0.2                | 0.0000000000000000000000000000000000000 | 0.0000000000000000000000000000000000000 |  |
| Parent<br>Strength                      | Score                     |                     | -0.01852533324005720000                 |   |  |

### Scorecard 4 - Group £10m to £50m

#### Scorecard 4 - Group £10m to £50m **Variable** Unit **Band** Gradient Constant Intercept -4.80943033510774000000 Mortgage Age Years Unknown -0.49723056159746300000 -1.47142928033267000000 Mortgage Age None Years < 0.5 0.000000000000000000000 Mortgage Age Years 0.5 to 2.5 -0.35264578836699500000 0.17632289418349700000 Mortgage Age Years 2.5 to 7 -0.15462782457365200000 -0.31872201529985900000 Mortgage Age Years 7 to 10 -0.02343749767241590000 -1.23705430360851000000 Mortgage Age Years 0.00000000000000000000 Mortgage Age Years >10 -1.47142928033267000000 Pre Tax Profit £Thousands Unknown 1.19543713038494000000 Pre Tax Profit £Thousands 0.00000000000000000000 1.19543713038494000000 <0 Pre Tax Profit £Thousands 0 to 250 -0.00006320000339169150 1.19543713038494000000 250 to Pre Tax Profit **£Thousands** -0.00048622418427667800 1.30119317560618000000 750 750 to Pre Tax Profit 3.74610014959470000000 £Thousands -0.00374610014959470000 1000 Pre Tax Profit £Thousands >1000 0.00000000000000000000Change in % Unknown Fixed Assets Change in % <-75 0.84800358089174600000 Fixed Assets

| Scorecard 4 - Group £10m to £50m    |            |            |   |   |
|-------------------------------------|------------|------------|---|---|
| Variable                            | Unit       | Band       | Gradient                                | Constant                                |
| Change in<br>Fixed Assets           | %          | -75 to -25 | -0.00529351429274873000                 | 0.45099000893559200000                  |
| Change in<br>Fixed Assets           | %          | -25 to 50  | 0.00011413868057498400                  | 0.58618133326868400000                  |
| Change in<br>Fixed Assets           | %          | 50 to 100  | -0.01183776534594870000                 | 1.18377653459487000000                  |
| Change in<br>Fixed Assets           | %          | >100       | 0.0000000000000000000000000000000000000 | 0.0000000000000000000000000000000000000 |
| Capital<br>Employed Per<br>Employee | £Thousands | Unknown    | 0.0000000000000000000000000000000000000 | 1.10489944079703000000                  |
| Capital<br>Employed Per<br>Employee | £Thousands | 0 to 10    | 0.0000000000000000000000000000000000000 | 1.10489944079703000000                  |
| Capital<br>Employed Per<br>Employee | £Thousands | 10 to 30   | -0.01719216052331670000                 | 1.27682104603020000000                  |
| Capital<br>Employed Per<br>Employee | £Thousands | 30 to 57.5 | -0.00037301453846788900                 | 0.77224666648473200000                  |
| Capital<br>Employed Per<br>Employee | £Thousands | 57.5 to 75 | -0.04290276174416160000                 | 3.21770713081212000000                  |
| Capital<br>Employed Per<br>Employee | £Thousands | >75        | 0.0000000000000000000000000000000000000 | 0.0000000000000000000000000000000000000 |
| Parent<br>Strength                  | Score      |            | -0.03277697266547760000                 |   |

# Scorecard 5 - Group < £10m

# Scorecard 5 - Group <10m

| Scorecard 5 - Group <10m |           |            |   |   |
|--------------------------|-----------|------------|---|---|
| Variable                 | Unit      | Band       | Gradient                                | Constant                                |
| Intercept                | -         | -          | -                                       | -3.38077850913273000000                 |
| Shareholders<br>Funds    | £Millions | Unknown    | 0.0000000000000000000000000000000000000 | 0.0000000000000000000000000000000000000 |
| Shareholders<br>Funds    | £Millions | <0         | 0.0000000000000000000000000000000000000 | 0.0000000000000000000000000000000000000 |
| Shareholders<br>Funds    | £Millions | 0 to 0.5   | -0.91206029956916500000                 | 0.0000000000000000000000000000000000000 |
| Shareholders<br>Funds    | £Millions | 0.5 to 3   | -0.10349585501941800000                 | -0.40428222227487300000                 |
| Shareholders<br>Funds    | £Millions | 3 to 27.5  | -0.00848947323523620000                 | -0.68930136762741900000                 |
| Shareholders<br>Funds    | £Millions | 27.5 to 50 | -0.02902450579496550000                 | -0.12458797223486400000                 |
| Shareholders<br>Funds    | £Millions | >50        | 0.0000000000000000000000000000000000000 | -1.57581326198314000000                 |
| Return on<br>Capital     | %         | Unknown    | 0.0000000000000000000000000000000000000 | 0.41340558608153200000                  |
| Return on<br>Capital     | %         | <0         | 0.0000000000000000000000000000000000000 | 0.41340558608153200000                  |
| Return on<br>Capital     | %         | 0 to 2.5   | -0.01860038381795590000                 | 0.41340558608153200000                  |
| Return on<br>Capital     | %         | 2.5 to 10  | -0.02461476240704040000                 | 0.42844153255424300000                  |
| Return on<br>Capital     | %         | 10 to 15   | -0.03645878169676780000                 | 0.54688172545151600000                  |

| Scorecard 5 - Group <10m              |      |             |   |   |
|---------------------------------------|------|-------------|---|---|
| Variable                              | Unit | Band        | Gradient                                | Constant                                |
| Return on<br>Capital                  | %    | >15         | 0.0000000000000000000000000000000000000 | 0.0000000000000000000000000000000000000 |
| Creditor Days<br>(Sales Based)        | Days | Unknown     | 0.0000000000000000000000000000000000000 | 0.0000000000000000000000000000000000000 |
| Creditor Days<br>(Sales Based)        | Days | 0 to 2.5    | 0.0000000000000000000000000000000000000 | -1.27904322731378000000                 |
| Creditor Days<br>(Sales Based)        | Days | 2.5 to 12.5 | 0.10270413882800100000                  | -1.53580357438378000000                 |
| Creditor Days<br>(Sales Based)        | Days | 12.5 to 30  | 0.02073595775533760000                  | -0.51120131097549100000                 |
| Creditor Days<br>(Sales Based)        | Days | 30 to 40    | 0.00949512138266521000                  | -0.17397621979531900000                 |
| Creditor Days<br>(Sales Based)        | Days | >40         | 0.0000000000000000000000000000000000000 | 0.20582863551128900000                  |
| Change in<br>Employee<br>Remuneration | %    | Unknown     | 0.0000000000000000000000000000000000000 | 0.0000000000000000000000000000000000000 |
| Change in<br>Employee<br>Remuneration | %    | <-60        | 0.0000000000000000000000000000000000000 | 0.25990254479020700000                  |
| Change in<br>Employee<br>Remuneration | %    | -60 to -10  | -0.00908300227157929000                 | -0.28507759150455100000                 |
| Change in<br>Employee<br>Remuneration | %    | -10 to 20   | -0.01475304500820340000                 | -0.34177801887079100000                 |
| Change in<br>Employee<br>Remuneration | %    | 20 to 40    | -0.00947282410672507000                 | -0.44738243690035700000                 |

| Scorecard 5 - Group <10m              |       |         |   |   |
|---------------------------------------|-------|---------|---|---|
| Variable                              | Unit  | Band    | Gradient                                | Constant                                |
| Change in<br>Employee<br>Remuneration | %     | >40     | 0.0000000000000000000000000000000000000 | -0.82629540116936000000                 |
| Mortgage Age                          | Years | Unknown | 0.0000000000000000000000000000000000000 | 0.49506133695288800000                  |
| Mortgage Age                          | Years | None    | 0.0000000000000000000000000000000000000 | 0.0000000000000000000000000000000000000 |
| Mortgage Age                          | Years | <1      | 0.0000000000000000000000000000000000000 | 0.82662297743542800000                  |
| Mortgage Age                          | Years | 1 to 6  | -0.02548354216567390000                 | 0.85210651960110200000                  |
| Mortgage Age                          | Years | 6 to 10 | -0.13256099328193000000                 | 1.49457122629864000000                  |
| Mortgage Age                          | Years | >10     | 0.0000000000000000000000000000000000000 | 0.16896129347933900000                  |
| Parent<br>Strength                    | Score |         | -0.01744964317425120000                 |   |

# Scorecard 6 - Group Small

| Scorecard 6 - Group Small |         |                       |                   |  |
|---------------------------|---------|-----------------------|-------------------|--|
| Variable                  | Unit    | Coefficient           | Replacement Value |  |
| Intercept                 | -       | -5.78701534836878     | -                 |  |
| Parent Strength           | Score   | 3.04538813366191      | 0                 |  |
| Log Current Liabilities   | £ (GBP) | 0.207285140564088     | 5.836             |  |
| Cash                      | £ (GBP) | -1.49239377138899E-06 | 0                 |  |
| Log Retained Earnings     | £ (GBP) | -0.0522723105032014   | -8.909            |  |
| Log Debtors               | £ (GBP) | 0.218823694904031     | 10.29             |  |
| Log Net Worth             | £ (GBP) | -0.0698218537549641   | -8.579            |  |

# Scorecard 7 - Independent Small

| Scorecard 7 – Independent Small |         |                       |                   |  |
|---------------------------------|---------|-----------------------|-------------------|--|
| Variable                        | Unit    | Coefficient           | Replacement Value |  |
| Intercept                       | -       | -6.22659047988968     | -                 |  |
| Log Retained Earnings           | £ (GBP) | -0.0361652597898648   | 0                 |  |
| Cash                            | £ (GBP) | -3.01137649578911e-06 | 0                 |  |
| Total Assets                    | £ (GBP) | -2.90101594123924e-07 | 0                 |  |
| Change in Total Assets          | Ratio   | -0.762472561907129    | 0.2               |  |
| Log Total Liabilities           | £ (GBP) | 0.619659924138246     | 1.505             |  |

# **Scorecard 8 – Not For Profit**

| Scorecard 8 - Not for Profit       |         |                       |                   |  |
|------------------------------------|---------|-----------------------|-------------------|--|
| Variable                           | Unit    | Coefficient           | Replacement Value |  |
| Intercept                          |         | -5.13074360579722     | -                 |  |
| Log Current Assets                 | £ (GBP) | -0.350195037537332    | 0                 |  |
| Equity Gearing                     | %       | -0.000818078409419197 | 0                 |  |
| Log Profit or Surplus <sup>1</sup> | £ (GBP) | -0.0942328758326361   | 0                 |  |
| Total Assets                       | £ (GBP) | -1.29164526087994e-07 | 0                 |  |
| Log Total Liabilities              | £ (GBP) | 0.45522572693158      | 0.3               |  |

12

Pension Protection Fund September 2018

-

 $<sup>^{1}</sup>$  "Surplus" means net movement of funds, where this figure is taken from annual reports filed with the Charities Commission.

# **Scorecard 9 - Credit Rated**

The Monthly Score for a CRA Rated Employer shall be calculated in accordance with paragraph 4.15 below.

# Scorecard 10 - Industry-Specific

The Monthly Score for an Industry-Specific Employer shall be calculated in accordance with paragraph 4.16 below.



13

# Part 3: Variables - Calculation Principles

#### 3.1. Variable Values Table

Table 1 below and paragraphs 3.2 – 3.11 of this Part 3 set out how the Variable Values (as defined in Part 4 of this Appendix) set out in each Scorecard will be calculated by using data collected or received in accordance with Rule E2. To the extent that the method of calculation of any Variable Value (or the inputs to that calculation) are not expressly set out (or, as the case may be, defined) in this Part 3, the method of calculation (or definition, as the case may be) shall be in accordance with Experian's ordinary course of business from time to time.

Table 1

| Variable                                | Source   | Calculation  | Notes   |
|---|----------|--|---|
| Average<br>Remuneration per<br>Employee | Accounts | Total Employee<br>Remuneration<br>divided by Total<br>Number of<br>Employees | Total Employee Remuneration includes wages, social security and pensions payments and the figure is annualised if accounting period is not 52 weeks. See paragraph 8 of this Part 3 in relation to Total Number of Employees. |
| Capital Employed                        | Accounts | Taken directly from<br>Accounts  | If not stated in Accounts, calculated as Total Assets minus Current Liabilities.  |
|   |          |  | If primary financial statements do not identify current liabilities, this is derived from the notes. Current Liabilities are those due within 12 months of the Year End Date.   |
|   |          |  | If the above does not create a Variable Value for this Variable, Shareholder Funds / Total Net  |

| Variable                           | Source   | Calculation   | Notes   |
|------------------------------------|----------|---|---|
|                                    |          |   | Assets will be used in substitution for it.   |
| Capital Employed<br>Per Employee   | Accounts | Capital Employed<br>divided by Total<br>Number of<br>Employees  | If not stated on Accounts, Capital Employed is calculated as Total Assets minus Current Liabilities                                   |
|                                    |          |   | If primary financial statements do not identify current liabilities, this is derived from the notes.                                  |
|                                    |          |   | If the above does not create a figure for Capital Employed, Shareholder Funds / Total Net Assets will be used in substitution for it. |
|                                    |          |   | See paragraph 8 of<br>this Part 3 in relation<br>to Total Number of<br>Employees.   |
| Cash                               | Accounts | Taken directly from<br>Accounts   |   |
| Cash by Liabilities                | Accounts | Cash divided by<br>Current Liabilities  | If current liabilities is unknown or 0, or if cash is unknown then this taken as unknown  |
| Change in Employee<br>Remuneration | Accounts | [Total Employee<br>Remuneration in<br>Year N minus Total<br>Employee<br>Remuneration in<br>Year N-3] divided by<br>Employee | Year N figure taken from Latest Accounts. Year N-3 figure taken from the N-3 Accounts. Total Employee Remuneration                    |

| Variable                  | Source   | Calculation   | Notes  |
|---------------------------|----------|---|--|
|                           |          | Remuneration in<br>Year N-3 and<br>expressed as a   | Includes wages, social security and pensions payments.   |
|                           |          | percentage  | Figure is annualised if accounting period is not 52 weeks.   |
|                           |          |   | See further paragraphs 8 and 9 below.  |
|                           |          |   | See also Part 4 of this<br>Appendix re<br>missing/disregarded<br>data.                             |
| Change in Fixed<br>Assets | Accounts | [Fixed Assets in Year N minus Fixed Assets in Year N-3] divided by Fixed Assets in Year N-3 | Year N figure taken<br>from Latest Accounts.<br>Year N-3 figure taken<br>from the N-3<br>Accounts. |
|                           |          | and expressed as a percentage   | See further paragraph 9 below.   |
|                           |          |   | See also Part 4 of this<br>Appendix re<br>missing/disregarded<br>data                              |
| Change in Total<br>Assets | Accounts | [Total Assets in Year N minus Total Assets in Year N-3] divided by Total Assets in Year N-3 | Year N figure taken<br>from Latest Accounts.<br>Year N-3 figure taken<br>from the N-3<br>Accounts  |
|                           |          |   | Figure is annualised if accounting period is not 52 weeks.   |
|                           |          |   | See further paragraph 9 below.   |
|                           |          |   | See also Part 4 of this<br>Appendix re<br>missing/disregarded<br>data                              |

| Variable                       | Source   | Calculation  | Notes   |
|--------------------------------|----------|--|---|
| Change in Turnover             | Accounts | [Turnover in Year N<br>minus Turnover in<br>Year N-3] divided by<br>Turnover in Year N-3 | Year N figure taken<br>from Latest Accounts.<br>Year N-3 figure taken<br>from the N-3<br>Accounts   |
|                                |          |  | Figure is annualised if accounting period is not 52 weeks.  |
|                                |          |  | See further paragraph 9 below.  |
|                                |          |  | See also Part 4 of this<br>Appendix re<br>missing/disregarded<br>data   |
|                                |          |  | If reported turnover figure is 0, or null but Other Income figure is positive, the Other Income figure is used in place of Turnover   |
| Creditor Days (Sales<br>Based) | Accounts | [Trade Creditors divided by Turnover] x 365  | Trade Creditors can include Accounts Payable.   |
|                                |          |  | Turnover figure annualised if accounting period is not 52 weeks. If reported turnover figure is 0, or null but Other Income figure is positive, the Other Income figure is used in place of Turnover. |
| Current Assets                 | Accounts |  | If primary financial statements do not identify current assets, this is derived from the notes.   |

| Variable            | Source  | Calculation   | Notes   |
|---------------------|---|---|---|
| Current Liabilities | Accounts  | Taken directly from<br>Accounts   | If primary financial statements do not identify current liabilities, this is derived from the notes.            |
| Equity Gearing      | Accounts  | Total Assets Divided<br>by Shareholders<br>Funds and expressed<br>as a percentage   | If Total Assets is<br>unknown or 0, or if<br>Shareholders Funds is<br>unknown, then this is<br>taken as unknown |
| Fixed Assets        | Accounts  | Taken directly from Accounts  |   |
| Mortgage Age        | UK Companies House (and other overseas electronic public registries in the following countries: Australia, Gibraltar, Hong Kong, India, Ireland, Isle of Man, Malaysia, New Zealand and Singapore) mortgages and charges data | Time elapsed between most recently registered mortgage or charge at UK Companies House (or other overseas electronic public registries in the following countries: Australia, Gibraltar, Hong Kong, India, Ireland, Isle of Man, Malaysia, New Zealand and Singapore) and Score Measurement Date. Only charges where the chargor is the Employer are taken into account, even where Consolidated Accounts are used. |   |
| Net Worth           | Accounts  | Shareholders Funds<br>less Intangible<br>Assets   |   |

| Variable          | Source   | Calculation  | Notes  |
|-------------------|----------|--|--|
| Parent Strength   | Various  | See paragraph 3 below for details  |  |
| Pre Tax Margin    | Accounts | Pre-Tax Profit<br>divided by Turnover<br>and expressed as a<br>percentage  | Turnover and Pre-Tax Profit figures annualised if accounting period is not 52 weeks. If reported turnover figure is 0, or null but Other Income figure is positive, the Other Income figure is used in place of Turnover |
| Pre Tax Profit    | Accounts | Taken directly from Accounts, or established as zero in accordance with Experian's ordinary course of business from time to time | Pre-Tax Profit figure<br>annualised if<br>accounting period is<br>not 52 weeks   |
| Retained Earnings | Accounts | Taken directly from Accounts   |  |
| Return on Capital | Accounts | Pre-Tax Profit divided by Capital Employed and expressed as a percentage   | Pre-Tax Profit figure annualised if accounting period is not 52 weeks. If not stated on Accounts, Capital Employed calculated as Total Assets minus Current Liabilities If primary financial statements do not           |
|                   |          |  | identify current liabilities, this is derived from the notes.  Current Liabilities are liabilities due within  |

| Variable           | Source   | Calculation  | Notes   |
|--------------------|----------|--|---|
|                    |          |  | 12 months of the Year End Date.See further, paragraph 3.11 below.   |
| Shareholders Funds | Accounts | Taken directly from<br>Accounts                      |   |
| Total Net Assets   | Accounts | Taken directly from<br>Accounts                      | Includes tangibles and intangibles  |
| Total Assets       | Accounts | Taken directly from Accounts                         |   |
| Total Liabilities  | Accounts | Current Liabilities<br>plus Long Term<br>Liabilities | Long Term Liabilities<br>means the total of all<br>debts not due within<br>12 months of the Year<br>End Date.   |
| Turnover           | Accounts | Taken directly from Accounts                         | Turnover includes Revenue and Sales. Turnover figure annualised if accounting period is not 52 weeks. If reported turnover figure is 0, or null but Other Income figure is positive, the Other Income figure is used in place of Turnover |

# 3.2. Log Transformations

- (1) The identification of a Variable in Part 2 above with the 'Log' prefix refers to the use of the common logarithm of the raw value of that Variable. In the case of a log transformation, the common logarithm of a raw value x is the power to which "10" would have to be raised to equal x.
- (2) The following rules are applied to the calculation of all variables which require a log transformation:
  - (a) if the variable value =0 and the variable is not Creditor Days Sales Based, then calculate *log (variable+1)*; else
  - (b) if the variable value =0and the variable is Creditor Days Sales-Based, then it is treated as unknown; else
  - (c) if Variable value ≥ 10,000, and the variable is not Creditor Days Sales Based, then calculate *log (variable+1)*; else
  - (d) if Variable value < 10,000 and >0, and the variable is not Creditor Days Sales Based, then calculate *log* (10000); else
  - (e) if Variable value =< -10,000 and the variable is not one of the following: Current Assets, Total Assets, Current Liabilities, Total Liabilities, Cash, Creditors days Sales Based, then calculate log (|variable|+1) \* (-1); else
  - (f) if Variable value <0 and >-10,000 and the variable is not one of the following: Current Assets, Total Assets, Current Liabilities, Total Liabilities, Cash, Creditors days Sales Based, then calculate log (10000) \* (-1); else
  - (g) if Variable value < 0 and one of the following: Current Assets, Total Assets, Total Liabilities, Cash, Creditors Days Sales Based, then it is treated as unknown; else
  - (h) If the variable is Creditor Days Sales Based and the value > 365 then calculate log (365); else
  - (i) If the variable is Creditor Days Sales Based and the value >=1 then calculate log (variable); else
  - (j) If the variable is Creditor Days Sales Based and the value <1 and >0 then calculate log (1);

### 3.3. Days Beyond Terms

For the avoidance of doubt, this Variable will be calculated in accordance with Experian's ordinary course of business from time to time using its Payment Performance Programme<sup>2</sup>.

### 3.4. Parent Strength

- (1) The Parent Strength Variable is calculated by generating an Adjusted Monthly Score for the Ultimate Parent (as defined in these Rules) of the Employer, using the same procedures as set out in these Rules as if that Ultimate Parent were an Employer provided that, for these purposes:
  - (a) Notwithstanding the provisions of Rule E3 and Part 1 of this Appendix, the Ultimate Parent will always be allocated to either:
    - (i) Scorecard 9 (CRA Rated) if it is CRA Rated;
    - (ii) Scorecard 10 (Industry-Specific) if (i) does not apply but it meets the criteria under Rule E3.1(10);
    - (iii) Unless paragraph 3.4(1)(b) applies, Scorecard 1 (Non-Subsidiaries £30m+ and Large Subsidiaries) if neither (i) nor (ii) applies and its Latest Accounts show a Turnover of above £30 million;
    - (iv) Unless paragraph 3.4(1)(b) applies, Scorecard 2 if neither (i) nor (ii) applies and its Latest Accounts show a Turnover of less than or equal to £30 million; or
    - (v) Scorecard 11 if it is a Special Category Employer.
  - (b) In circumstances where the Latest Accounts Filed by the Ultimate Parent (or otherwise collected by Experian pursuant to Rule E2.2(1) in respect of the Ultimate Parent) are not Consolidated Accounts:
    - (i) where the Latest Accounts Filed by (or otherwise collected by Experian pursuant to Rule E2.2(1) in respect of) the entity which would be the Ultimate Parent if any Non-UK Group members were disregarded are Consolidated Accounts, the Latest Accounts of that entity will be used and treated as if they were the Latest Accounts of the Ultimate Parent; and
    - (ii) where (i) does not apply, Variable Values calculated by reference to the Latest Accounts filed at Companies House in the UK of each member of the Group (excluding any

\_

 $<sup>^2</sup>$  For the purposes of information only, a summary of the current methodology is available on request from Experian.

Consolidated Accounts Filed by any member of the Group other than the Ultimate Parent, where Experian is satisfied that to include them would cause double counting) will be summed to create the Variable Value attributable to the Ultimate Parent.

- (c) For the purposes of calculating the Mortgage Age Variable, any charge where the Ultimate Parent or any Group Subsidiary is chargor is taken into account notwithstanding the definition of Mortgage Age in Table 1 above.
- (2) Except where paragraph 3.4(3) or 3.4(4) applies, that Ultimate Parent's Adjusted Monthly Score is then converted into a 1-100 Score as set out in Table 2 below and that 1-100 Score is the Variable Value for the Parent Strength Variable (where applicable) of the Employer.
- (3) This paragraph 3.4(3) applies where the Ultimate Parent is assigned to Scorecard 11 (Special Category Employer).
  - (a) Where an Employer is assigned to Scorecard 6 (Group Small), a rate of zero is applied as the Variable Value;
  - (b) In any other case, when calculating the Monthly Score for the Employers in the scheme in respect of which the Ultimate Parent relates the Ultimate Parent's Adjusted Monthly Score shall be converted into 1-100 Score 100 as set out in Table 2 below
- (4) Where the Employer in question is assigned to Scorecard 6 (Group Small) and paragraph 3.4(3) above does not apply, the Ultimate Parent's Adjusted Monthly Score is applied as the Variable Value.

#### Table 2:

| 1-100<br>Score | Minimum Score (the numbers in this column are inclusive) | Maximum Score (the numbers in this column are not inclusive, except for score 1) |
|----------------|--|--|
| 1              | 0.039463241  | 1  |
| 2              | 0.029187329  | 0.039463241  |
| 3              | 0.023841445  | 0.029187329  |
| 4              | 0.020144396  | 0.023841445  |

| 1-100<br>Score | Minimum Score (the numbers in this column are inclusive) | Maximum Score (the numbers in this column are not inclusive, except for score 1) |
|----------------|--|--|
| 5              | 0.017682923  | 0.020144396  |
| 6              | 0.015770161  | 0.017682923  |
| 7              | 0.014284768  | 0.015770161  |
| 8              | 0.012996069  | 0.014284768  |
| 9              | 0.012003383  | 0.012996069  |
| 10             | 0.010975772  | 0.012003383  |
| 11             | 0.010014898  | 0.010975772  |
| 12             | 0.009215554  | 0.010014898  |
| 13             | 0.008466763  | 0.009215554  |
| 14             | 0.00786111   | 0.008466763  |
| 15             | 0.007270592  | 0.00786111   |
| 16             | 0.006738982  | 0.007270592  |
| 17             | 0.006237263  | 0.006738982  |
| 18             | 0.005814188  | 0.006237263  |
| 19             | 0.00546476   | 0.005814188  |
| 20             | 0.005139028  | 0.00546476   |
| 21             | 0.004841226  | 0.005139028  |
| 22             | 0.004560466  | 0.004841226  |
| 23             | 0.004298539  | 0.004560466  |
| 24             | 0.004078565  | 0.004298539  |

| 1-100<br>Score | Minimum Score (the numbers in this column are inclusive) | Maximum Score (the numbers in this column are not inclusive, except for score 1) |
|----------------|--|--|
| 25             | 0.003872181  | 0.004078565  |
| 26             | 0.003687459  | 0.003872181  |
| 27             | 0.003505536  | 0.003687459  |
| 28             | 0.003326618  | 0.003505536  |
| 29             | 0.003167479  | 0.003326618  |
| 30             | 0.003036272  | 0.003167479  |
| 31             | 0.002906319  | 0.003036272  |
| 32             | 0.002773755  | 0.002906319  |
| 33             | 0.002651118  | 0.002773755  |
| 34             | 0.002519154  | 0.002651118  |
| 35             | 0.002401307  | 0.002519154  |
| 36             | 0.002292955  | 0.002401307  |
| 37             | 0.002184461  | 0.002292955  |
| 38             | 0.002081722  | 0.002184461  |
| 39             | 0.001990541  | 0.002081722  |
| 40             | 0.001914589  | 0.001990541  |
| 41             | 0.001836204  | 0.001914589  |
| 42             | 0.001759802  | 0.001836204  |
| 43             | 0.001685558  | 0.001759802  |
| 44             | 0.001618604  | 0.001685558  |

| 1-100<br>Score | Minimum Score (the numbers in this column are inclusive) | Maximum Score (the numbers in this column are not inclusive, except for score 1) |
|----------------|--|--|
| 45             | 0.001550721  | 0.001618604  |
| 46             | 0.001491213  | 0.001550721  |
| 47             | 0.001426642  | 0.001491213  |
| 48             | 0.001370278  | 0.001426642  |
| 49             | 0.001311131  | 0.001370278  |
| 50             | 0.001256508  | 0.001311131  |
| 51             | 0.001204495  | 0.001256508  |
| 52             | 0.001154751  | 0.001204495  |
| 53             | 0.001104645  | 0.001154751  |
| 54             | 0.001064693  | 0.001104645  |
| 55             | 0.001020826  | 0.001064693  |
| 56             | 0.000975639  | 0.001020826  |
| 57             | 0.000935219  | 0.000975639  |
| 58             | 0.000894632  | 0.000935219  |
| 59             | 0.000854116  | 0.000894632  |
| 60             | 0.000818508  | 0.000854116  |
| 61             | 0.000779661  | 0.000818508  |
| 62             | 0.000744607  | 0.000779661  |
| 63             | 0.000709087  | 0.000744607  |
| 64             | 0.000675719  | 0.000709087  |

| 1-100<br>Score | Minimum Score (the numbers in this column are inclusive) | Maximum Score (the numbers in this column are not inclusive, except for score 1) |
|----------------|--|--|
| 65             | 0.000647486  | 0.000675719  |
| 66             | 0.000622072  | 0.000647486  |
| 67             | 0.000592802  | 0.000622072  |
| 68             | 0.000563914  | 0.000592802  |
| 69             | 0.000537663  | 0.000563914  |
| 70             | 0.000511018  | 0.000537663  |
| 71             | 0.000488071  | 0.000511018  |
| 72             | 0.000466564  | 0.000488071  |
| 73             | 0.000448275  | 0.000466564  |
| 74             | 0.000425953  | 0.000448275  |
| 75             | 0.000401792  | 0.000425953  |
| 76             | 0.000377299  | 0.000401792  |
| 77             | 0.000354191  | 0.000377299  |
| 78             | 0.000332131  | 0.000354191  |
| 79             | 0.000311124  | 0.000332131  |
| 80             | 0.000291257  | 0.000311124  |
| 81             | 0.000275101  | 0.000291257  |
| 82             | 0.000259524  | 0.000275101  |
| 83             | 0.00024539   | 0.000259524  |
| 84             | 0.00022919   | 0.00024539   |

| 1-100<br>Score | Minimum Score (the numbers in this column are inclusive) | Maximum Score (the numbers in this column are not inclusive, except for score 1) |
|----------------|--|--|
| 85             | 0.000214653  | 0.00022919   |
| 86             | 0.000203362  | 0.000214653  |
| 87             | 0.000193315  | 0.000203362  |
| 88             | 0.000181695  | 0.000193315  |
| 89             | 0.000168629  | 0.000181695  |
| 90             | 0.000156772  | 0.000168629  |
| 91             | 0.000150499  | 0.000156772  |
| 92             | 0.000144854  | 0.000150499  |
| 93             | 0.000140184  | 0.000144854  |
| 94             | 0.000131295  | 0.000140184  |
| 95             | 0.000112559  | 0.000131295  |
| 96             | 0.0000900  | 0.000112559  |
| 97             | 0.0000704  | 0.0000900  |
| 98             | 0.0000563  | 0.0000704  |
| 99             | 0.0000399  | 0.0000563  |
| 100            | 0  | 0.0000399  |

# 3.5. Consolidated Accounts

For the avoidance of doubt, where Accounts are Consolidated Accounts, the Variable Value will be calculated on the basis of the consolidated position in relation to all entities in respect of which the Consolidated Accounts are prepared.

## 3.6. Currency Conversion

- (1) Except where paragraph 3.6(2) applies, in any case where Accounts are expressed in a currency other than sterling, the currency conversion rate which would be used by Experian at the closing rate as at the date of those Accounts is used to convert the currency of the Accounts to sterling for the purposes of assessing the Variable Value.
- (2) In any case where N-3 Accounts are expressed in a currency other than sterling, the currency conversion rate which would be used by Experian at the closing rate as at the date of the Scheme's Latest Accounts is used to convert the currency of the N-3 Accounts to sterling for the purposes of assessing the Variable Value.

# 3.7. Data collection, provision and use

For the avoidance of doubt, Rule E2 will apply for the purposes of assessing which set of Accounts are to be used to calculate each Variable Value.

### 3.8. Total Number of Employees

- (1) Save where paragraph 3.8(3) or 3.8(4) applies, the Total Number of Employees will be assessed without reference to the number of hours ordinarily worked by those employees.
- (2) Where Experian has, by the Measurement Time, received a written statement, signed by the Employer(s) (or, as the case may be, Group Subsidiary or Ultimate Parent's) auditor which complies with guidance issued by the Board from time to time and confirms:
  - (a) that the Employer, Group Subsidiary or Ultimate Parent (as the case may be), has not stated (and is not required by law to state) in its Accounts the number of its employees; and
  - (b) the number of its employees, as at the date of its Latest Accounts (calculated in accordance with paragraph 3.8(1) above unless paragraph 3.8(4) below applies),

Experian will use that data to calculate the Variable Value in respect of the Variables, which depend on Total Number of Employees, from the date on which the Employer's Latest Accounts were Filed.

(3) Where Experian has, by the Measurement Time, received a written request from an Employer, Group Subsidiary or Ultimate Parent (as the case may be), that it should use the number of employees which appears in the Latest Accounts and is calculated on a FTE Basis for the purposes of calculating all relevant Variable Values, Experian will (subject to Rule E2.6) use that data to calculate the Variable Values which depend on Total

Number of Employees, from the date on which the Employer's Latest Accounts were Filed.

- (4) Where Experian has, by the Measurement Time, received a written statement, signed by the Employer's (or, as the case may be, Group Subsidiary or Ultimate Parent's) auditor which complies with guidance issued by the Board from time to time and confirms:
  - (a) that the Employer, Group Subsidiary or Ultimate Parent (as the case may be), has not stated (and is not required by law to state) in its Accounts the number of its employees; and
  - (b) the number of its employees, as at the date of its Latest Accounts calculated on a FTE Basis,

Experian will use that data to calculate the Variable Values, which depend on Total Number of Employees, from the date on which the Employer's Latest Accounts were Filed.

## 3.9. Change Variables

- (1) This paragraph 3.9 applies for the purposes of calculating the following Variable Values:
  - (a) Change in Employee Remuneration;
  - (b) Change in Fixed Assets;
  - (c) Change in Total Assets;
  - (d) Change in Turnover.
- (2) Where this paragraph applies, subject to paragraph 4.8(3) of Part 4 of this Appendix, in the event that the figure in the N-3 Accounts which is to be used as the denominator of the fraction to calculate the relevant Variable Value is negative, that figure shall be converted to its absolute (or modulus) value for the purposes of using it as the denominator.

#### 3.10. Change in Accounting Standard

- (1) Where F Accounts are Filed in respect of an Employer or Ultimate Parent, and an Accounting Standard Change Certificate has been provided, and
- (2) the Year End Date of the F Accounts is later than the Year End Date of the N-3 Accounts,

any Change Variable impacted by the Change in Accounting Standard in respect of that Employer or Ultimate Parent will be adjusted in the manner set out in paragraph 3.10(3).

(3) 
$$C = Q_{F-1} - Q_{F-1 \text{ adj}} + Other_{F-1 \text{ adj}}$$

Change Variable = 
$$(Q_N - Q_{N-3} + C) / |(Q_{N-3} - C)|$$

Where

C is the change in the relevant Variable figure as at the Year End Date of the F-1 Accounts that is due to the impact of the change in Accounting Standard.

Other  $F_{-1 \ adj}$  is the change in the relevant Variable figure as at the Year End Date of the  $F_{-1}$  Accounts that is not due to the impact of the change in Accounting Standard.

 $Q_{F-1}$  is the relevant Variable figure stated in the Employer's F-1 Accounts as at the Year End Date of the F-1 Accounts.

 $Q_{F-1 \text{ adj}}$  is the relevant Variable figure stated in the Employer's F Accounts as at the Year End Date of the F-1 Accounts.

 $Q_N$  is the relevant Variable figure stated in the Employer's N Accounts as at the Year End Date of the N Accounts.

 $Q_{N-3}$  is the relevant Variable figure stated in the Employer's N-3 Accounts as at the Year End Date of the N-3 Accounts.

Where the value of ( $Q_{N-3}-C$ ) is negative, that value shall be converted to its absolute (or modulus) value for the purposes of using it as the denominator to calculate the Change Variable.

References to an Employer in the above paragraph shall include an Ultimate Parent where that is the entity certified.

"F-1 Accounts" – means the set of Accounts having a Year End Date that is one calendar year before the Year End Date of the Employer, or Ultimate Parent's (as the case may be) F Accounts.

"F Accounts" – means a set of an Employer, or Ultimate Parent's Accounts in which a change in Accounting Standard is reflected for the first time in respect of that Employer or Ultimate Parent (as the case may be).

"N Accounts" – means the Employer or Ultimate Parent's (as the case may be) Latest Accounts.

- 3.11. Return on Shareholder Funds and Capital
  - (1) This paragraph 3.11 applies for the purposes of calculating the following Variables:
    - (a) [Return on Shareholder Funds]<sup>3</sup>; and
    - (b) Return on Capital.
  - (2) Where this paragraph applies, in the event that the figures in the Accounts which are to be used as inputs to the calculation of the Variable Value (as set out in Table 1) are both negative, the figure used as the denominator of the fraction to calculate the relevant Variable Value shall be converted to its absolute (or modulus) value for the purposes of using it as the denominator.

<sup>&</sup>lt;sup>3</sup> It is anticipated that this Change Variable will no longer be needed, however it is retained here for reference.

## Part 4: Monthly Score Methodology

Once data has been applied to the relevant Scorecard, the Monthly Score is calculated by applying the following processes:

## Scoring Methodology A

- 4.1. This methodology for calculating Monthly Scores applies to Employers categorised on the following Scorecards:
  - (1) Scorecard 1 Non-Subsidiaries £30m+ and Large Subsidiaries;
  - (2) Scorecard 2 Non-Subsidiaries <£30m;
  - (3) Scorecard 6 Group Small;
  - (4) Scorecard 7 Independent Small; and
  - (5) Scorecard 8 Not For Profit.
- 4.2. Subject to paragraph 4.3, the Adjusted Variable Value is calculated for each Variable within the Scorecard by using the following formula:

Adjusted Variable Value = Coefficient x Variable Value, where:

"Coefficient" is the number which appears in the Coefficient column of the Scorecard for the relevant Variable; and

"Variable Value" is the value of that Variable for the Employer in question, calculated in accordance with Part 3 of this Appendix and converted to the unit of measurement set out in the unit column of the relevant part of the relevant Scorecard<sup>4</sup>.

- 4.3. In the case of any Variable which measures a change in value over time, the Coefficient will be the number which appears in the Constant column corresponding to the band which relates to that Variable and is marked as "unknown" in any case where one or more of the following applies:
  - (a) there are no Accounts meeting the definition of N-3 Accounts;
  - (b) where the figure used to calculate the Variable Value and which would fall to be used in the calculation of the Variable Value as one of the inputs to the calculation (set out in the Calculation column of

Would fall Within this barid and its

Pension Protection Fund

 $<sup>^4</sup>$  For example, if a band, expressed in units of £millions, is 0-3.75 (see fifth row of scorecard 1), a value of £2,500,000 would fall within this band and its Variable Value would be 2.5.

Table 1 in part 3 of this Appendix as read with the Notes column to that table) is zero in the Latest Accounts or the N-3 Accounts.

- 4.4. Where the data collected or received pursuant to Rule E2 do not include a figure for a given Variable Value or the relevant figure is reported as unknown the Variable Value shall instead be the number which appears in the Replacement Value column of the Scorecard for the Variable.
- 4.5. The Adjusted Variable Values are summed together with the Intercept which appears in the relevant Scorecard.
- 4.6. An algorithm is applied to transform the sum of the Adjusted Variable Value and the Intercept, as follows:

```
e^{X}/(1+e^{X}), where:
```

X is the sum of the Adjusted Variable Value and the Intercept; and

"e" is "Euler's number", a mathematical constant.

4.7. The result of the calculation in paragraph 4.5 above generates the Monthly Score.

### Scoring Methodology B

- 4.8. This methodology for calculating Monthly Scores applies to Employers categorised on the following Scorecards:
  - (1) Scorecard 3 Group, £50m+;
  - (2) Scorecard 4 Group, £10m to £50m; and
  - (3) Scorecard 5 Group, < £10m.
- 4.9. Coefficients are created for each Variable within the Scorecard:
  - (1) Subject to paragraphs 4.8(2) and 4.8(3) below, the Coefficient for any Variable is calculated by using the following formula:

Coefficient = (Variable Value x Gradient) + Constant, where:

"Variable Value" is the value of that Variable for the Employer in question, calculated in accordance with Part 3 of this Appendix and converted to the unit of measurement set out in the unit column of the relevant part of the relevant Scorecard;

"Gradient" is the number which appears in the Gradient column of the relevant Scorecard which corresponds to the band within which the Variable Value falls; and

"Constant" is the number which appears in the Constant column of the relevant Scorecard which corresponds to the band in which the Variable Value falls.

- (2) Where paragraph (a) or (b) applies (or they both apply), the Coefficient will be the number which appears in the Constant column corresponding to the band which relates to that Variable and is marked as "unknown":
  - (a) This paragraph (a) applies where the data collected or received pursuant to Rule E2 are insufficient for Experian to calculate a given Variable Value. For the purposes of the Mortgage Age Variable:
    - (i) without prejudice to the generality of the foregoing, such data will be deemed to be insufficient where the Employer (or, for the purposes of the Parent Strength Score, the Ultimate Parent) is neither of the following:
      - (A) an entity to which sections 859A-859Q of the Companies Act applies (with or without modification) whether directly or by virtue of any other legislation;
      - (B) a company registered in Australia, Gibraltar, Hong Kong, India, Ireland, Isle of Man, Malaysia, New Zealand or Singapore;
    - (ii) such data will be deemed to be sufficient where Experian has received by the Measurement Time evidence that in the opinion of the Board (and in accordance with any guidance published by the Board) demonstrates that the Employer (or, for the purposes of the Parent Strength Score, the Ultimate Parent) may not by law grant security over any of its (or their) assets.
  - (b) This paragraph (b) applies where a figure which appears in the Latest Accounts and which would fall to be used in the calculation of the Variable Value as one of the inputs to the calculation (set out in the Calculation column of Table 1 in part 3 of this Appendix as read with the Notes column of that table) is zero.
- (3) In the case of any Variable which measures a change in value over time, the Coefficient will be the number which appears in the Constant column corresponding to the band which relates to that Variable and is marked as "unknown" in any case where one or more of the following applies:

- (a) there are no Accounts meeting the definition of N-3 Accounts;
- (b) where the figure used to calculate the Variable Value and which would fall to be used in the calculation of the Variable Value as one of the inputs to the calculation (set out in the Calculation column of Table 1 in part 3 of this Appendix as read with the Notes column to that table) is zero in the Latest Accounts or the N-3 Accounts.
- 4.10. The Coefficients are summed together with the Intercept which appears in the relevant Scorecard.
- 4.11. An algorithm is applied to transform the sum of the Coefficients and the Intercept, as follows:

$$e^{X}/(1+e^{X})$$
, where:

X is the sum of the Coefficients and the Intercept; and

"e" is "Euler's number", a mathematical constant<sup>5</sup>

4.12. The value obtained at paragraph 4.10 is multiplied by the Adjustment Multiplier which applies to the relevant Scorecard as set out in Table 3 below:

Table 3

| Scorecard         | Adjustment Multiplier |
|-------------------|-----------------------|
| 3: Group £50m+    | 0.645891243861122     |
| 4: Group £10m-50m | 0.934907280339482     |
| 5: Group <£10m    | 0.596408095011219     |

4.13. The value obtained at paragraph 4.12 is multiplied by a 2<sup>nd</sup> Adjustment Multiplier which applies to the relevant Scorecard as set out in Table 4 below:

Table 4

Scorecard2nd Adjustment Multiplier3: Group £50m+1.064: Group £10m-50m1.43

<sup>&</sup>lt;sup>5</sup> For the purposes of information only, "e", to 10 decimal places is: 2.71828182845.

| 5: Group <£10m | 0.91 |
|----------------|------|
|                |      |

4.14. The result of the calculation at paragraph 4.11 above generates the Monthly Score.

# Scoring Methodology C

- 4.15. This methodology for calculating Monthly Scores applies to Employers categorised on the following Scorecards:
  - (1) Scorecard 9 Credit Rated; and
  - (2) Scorecard 10 Industry-Specific.
- 4.16. For a CRA Rated Employer, the Monthly Score shall be the Monthly Score attributed in Table 5 below to the CRA Rating for that Employer.
- 4.17. For an Employer scored on the Industry-Specific Scorecard, the Monthly Score shall be the Monthly Score attributed in Table 5 to the Credit Model Score for that Employer.

# Table 5

| CRA<br>Rating/Letter<br>Grade Score | Monthly Score | CRA<br>Rating/Letter<br>Grade Score | Monthly Score |
|-------------------------------------|---------------|-------------------------------------|---------------|
| AAA/Aaa                             | 0.0002%       | BB/Ba2                              | 0.2788%       |
| AA+/Aa1                             | 0.0020%       | BB-/Ba3                             | 0.4922%       |
| AA/Aa2                              | 0.0031%       | B+/B1                               | 0.8750%       |
| AA-/Aa3                             | 0.0106%       | B/B2                                | 1.5302%       |
| A+/A1                               | 0.0165%       | B-/B3                               | 2.7007%       |
| A/A2                                | 0.0167%       | CCC+/Caa1                           | 4.2786%       |
| A-/A3                               | 0.0258%       | CCC/Caa2                            | 7.7381%       |
| BBB+/Baa1                           | 0.0433%       | CCC-/Caa3                           | 14.4170%      |
| BBB/Baa2                            | 0.0546%       | CC                                  | 31.2570%      |

| BBB-/Baa3 | 0.1113% | С           | 29.9233% |
|-----------|---------|-------------|----------|
| BB+/Ba1   | 0.1880% | D/Ca-C/SD/R | 42.1400% |

# <u>General</u>

4.18. In calculating the Monthly Score pursuant to this Part 4, figures will not be rounded.



## Part 5: **Adjustments**

The following adjustments will be applied to any Monthly Scores calculated by Experian to produce the Adjusted Monthly Score, PROVIDED THAT, where the data collected pursuant to Rule E2 are insufficient to allow Experian to independently verify that these adjustments should be made, no such adjustments will be made.

- 5.1. This paragraph applies in the case of any Employer or, as the case may be, Ultimate Parent, where, as at the Measurement Time:
  - (1) it has already suffered an insolvency event for the purposes of section 121 of the Act; or
  - (2) it is already the subject of another insolvency procedure or another procedure analogous to an insolvency event under section 121 of the Act in a non-UK jurisdiction including, without limitation, proceedings under Chapter 7 or 11 of the United States Bankruptcy Code.

In a case to which this paragraph applies, each Monthly Score shall be adjusted so that it is 100%.

- 5.2. Each Monthly Score shall be adjusted to what it would have been if the existence of the following were disregarded:
  - (1) Any Pension Scheme Mortgage(s);
  - (2) Any Rent Deposit(s); and
  - (3) Any Immaterial Mortgage(s),

PROVIDED THAT such adjustments shall only be made to the extent that any relevant guidance issued by the Board has been complied with and PROVIDED FURTHER THAT, where an adjustment is made pursuant to paragraph 5.4 below, the Refinance Mortgage in respect of which that adjustment has been made is treated in the adjusted manner for the purposes of the definition of an Immaterial Mortgage pursuant to this paragraph 5.2.

- 5.3. Where the Group CRA Test is met:
  - in relation to an Employer, the Monthly Score of that Employer will be adjusted to what it would have been if Experian were satisfied that the Employer had no mortgages or other charges;
  - (2) in relation to the Ultimate Parent, the Monthly Score of that Ultimate Parent, for the purposes of calculating the Parent Strength Score, will be adjusted to what it would have been if Experian were satisfied that all members of the Employer's Group had no mortgages or other charges;

PROVIDED THAT such adjustments shall only be made to the extent that any relevant guidance issued by the Board has been complied with.

- 5.4. Each Monthly Score shall be adjusted to what it would have been if the age of any Refinance Mortgage were deemed to be the age of the corresponding Original Mortgage, PROVIDED THAT:
  - (1) where the Refinance Mortgage replaces more than one Original Mortgage, for the purposes of this paragraph 5.4 the Refinance Mortgage will be deemed to be the age of the most recent of the Original Mortgages; and
  - (2) adjustments under this paragraph 5.4 shall only be made to the extent that any relevant guidance issued by the Board has been complied with.
- 5.5. Where Revised Accounts are Filed before 28 February 2019, each Monthly Score used to calculated the 2019/20 levy shall be adjusted to what it would have been if the Revised Accounts had been Filed at the time when the set of Accounts that is revised was Filed. For example, if Revised Accounts are Filed on 28 February 2019 for a set of Accounts originally Filed on 31 December 2018, Monthly Scores will reflect the figures in the Revised Accounts on and after 31 December 2018.

Where Revised Accounts are submitted after 28 February 2019, Monthly Scores for the 2019/20 levy year may be adjusted in accordance with the Data Corrections Principles.

- 5.6. Each Monthly Score shall be adjusted to what it would have been if any statement received by Experian pursuant to paragraph 3.8(2) or paragraph 3.8(4) of this Appendix had been received at the date when the Latest Accounts of the Employer, Group Subsidiary or Ultimate Parent in question were filed or otherwise collected by Experian.
- 5.7. Where an Accounting Standard Change Certificate has been received in respect of an Employer, Group Subsidiary or Ultimate Parent, each Monthly Score shall be adjusted in accordance with paragraph 3.10 of this Appendix.

## Part 6: Calculation Principles

- 6.1. Unless otherwise specified in the Rules or in this Appendix, the Board shall round all figures representing a measure of insolvency risk to six decimal places (that is, to four decimal places when expressed as a percentage) at each stage of the calculation. Without limitation, this shall apply to (i) all figures derived by taking the average of LRs and to (ii) the product of the weighted LRs and a scaling factor based on Scheme structure in accordance with Rule E6.
- 6.2. Where an Employer has become an Employer in respect of a Scheme part way through the Levy Year immediately preceding the 2019/20 Levy Year, Rule E5.1 applies notwithstanding that the Employer was not an Employer in respect of the Scheme in question for some or all of the Score Measurement Dates during the 6-month period immediately preceding the start of the 2019/20 Levy Year.
- 6.3. Where an Employer in respect of a Scheme has come into existence as an entirely new entity part way through a Levy Year, the Mean Score which applies to the Employer shall be the value constituting the mean average of the Adjusted Monthly Scores that Experian informs the Board had been assigned to that Employer at each Score Measurement Date for which the Employer was in existence, provided that if a Monthly Score is not available as at each such Score Measurement Date, the Mean Score shall be the mean average of the Adjusted Monthly Scores derived from the Monthly Scores that are available.
- 6.4. For the purposes of Rule E5.3 and E5:
  - (1) Medians shall be based on a set of Levy Rate data that is supplied by Experian to the Board for the purposes of calculating the Levies in the 2019/20 Levy Year and that is designated by the Board (by reference to the date of its provision) as the appropriate data set for the purposes of this paragraph 6.4.
  - (2) The Board may revise its designation of any data set for the purposes of this paragraph 6.4, in respect of any Median, if in the opinion of the Board it would be appropriate to do so in order to ensure that the calculation of the Levies is prudent and reasonably practicable for the Board and best gives effect to the general approach laid down by the Levy Rules.
- 6.5. The Board may instruct Experian to exclude specified classes of Score which it regards as unrepresentative when calculating the relevant Medians.
- 6.6. For the avoidance of doubt, in determining such Medians Experian shall not include any Employer to which a Scheme average LR has been applied in accordance with Rule E5.3.
- 6.7. For the purposes of Rule E5.3, where the mean average LR falls between two Levy Bands, the mean average is that point at which the average falls

41

- notwithstanding that this mean average would not correspond with a LR contained within Table 6 of Part 7 of this Appendix.
- 6.8. For the purposes of Rule E5.4 and E5.5, where the Median LR falls between two Levy Bands, the Median is the mid-point between those two Levy Bands notwithstanding that this Median would not correspond with a LR contained within Table 6 of Part 7 of this Appendix.



42

# Part 7: Levy Rate Table

**Table 6**: Levy Bands and Levy Rates calculated by reference to Minimum and Maximum Mean Scores.

| Minimum Mean<br>Score | Maximum Mean<br>Score | Levy Band | Levy Rate (LR) |
|-----------------------|-----------------------|-----------|----------------|
| 0.000%                | <0.030%               | 1         | 0.28%          |
| 0.030%                | <0.049%               | 2         | 0.31%          |
| 0.049%                | <0.086%               | 3         | 0.35%          |
| 0.086%                | <0.143%               | 4         | 0.40%          |
| 0.143%                | <0.243%               | 5         | 0.53%          |
| 0.243%                | <0.488%               | 6         | 0.81%          |
| 0.488%                | <1.049%               | 7         | 1.26%          |
| 1.049%                | <1.595%               | 8         | 1.76%          |
| 1.595%                | <2.986%               | 9         | 2.39%          |
| 2.986%                | 100.000%              | 10        | 3.83%          |

#### ANNEX I: ASSIGNMENT OF CRA RATINGS

- 1. Scope
- 1.1. This Annex applies to Employers which meet the criteria for the CRA Rated category under Rule E3.1(9) of the Levy Rules.
- 2. <u>Assignment of CRA Ratings</u>
- 2.1. For the purposes of the Determination, the CRA Rating in respect of an Employer shall be assessed by reference to the S&P Rating, Moody's Rating and Fitch Rating for that Employer, as defined below.
- 2.2. Where the Employer -
  - (1) has been assigned only one rating, the Employer's CRA Rating shall be that rating;
  - (2) has been assigned more than one rating, the Employer's CRA Rating shall be the second most favourable rating.
- 3. S&P Global Ratings
- 3.1. The S&P Rating for the Employer shall be:
  - If S&P has made publicly available a global long-term senior unsecured and unsupported senior debt rating in respect of the Employer, that rating; else,
  - (2) If S&P has made publicly available a global long-term insurer financial strength rating in respect of the Employer, the rating one notch below the published rating; else,
  - (3) If S&P has made publicly available a global long-term issuer credit rating in respect of the Employer, that rating; else,
  - (4) The Employer shall not be assigned an S&P Rating.
- 4. <u>Moody's Investor Services</u>
- 4.1. The Moody's Rating for the Employer shall be:
  - If Moody's has made publicly available a global long-term senior unsecured and unsupported senior debt rating in respect of the Employer, that rating; else,

44

- (2) If Moody's has made publicly available a global long-term insurer financial strength rating in respect of the Employer, the rating one notch below the published rating; else,
- (3) If Moody's has made publicly available a global long-term issuer credit rating in respect of the Employer, that rating; else,
- (4) If Moody's has made publicly available a global corporate family rating in respect of the Employer, that rating; else,
- (5) The Employer shall not be assigned a Moody's Rating.

# 5. <u>Fitch Ratings</u>

- 5.1. The Fitch Rating for the Employer shall be:
  - (1) If Fitch has made publicly available an international long-term senior unsecured and unsupported senior debt rating in respect of the Employer, that rating; else,
  - (2) If Fitch has made publicly available an international long-term insurer financial strength rating in respect of the Employer, the rating one notch below the published rating; else,
  - (3) If Fitch has made publicly available an international long-term issuer credit rating in respect of the Employer, that rating; else,
  - (4) The Employer shall not be assigned a Fitch Rating.

#### ANNEX II: CALCULATION OF CREDIT MODEL SCORES

### 1. Scope

1.1. This Annex applies to Employers that meet the criteria for the Industry Specific category under Rule E3.1(10) of the Levy Rules.

### 2. Calculation of Credit Model Scores

- 2.1. An Employer's Credit Model Score shall be the letter grade score calculated in respect of that Employer by applying the Credit Model<sup>6</sup> (as amended from time to time) in the manner ordinarily applicable to the calculation of letter grade scores for financial institutions in the sub-industry to which the Employer is allocated under Rule E3.1(10)(c).
- 2.2. The calculation will be undertaken by the Board, or a third party appointed by the Board to undertake the calculation. References to the Board in this Annex shall also be references to any third party appointed for these purposes.
- 2.3. The Board will select, from the options available within the Credit Model, the most appropriate industry, sub-industry, and regional model for applying the Credit Model to each Employer.
- 2.4. The Board (or its appointed third party provider) will collect Employers' Latest Accounts in accordance with Rule E2.6 and will extract and apply such financial data from those Accounts as is ordinarily required as an input to the calculation of the Credit Model Score in accordance with paragraph 2.1 above. Where the application of a currency conversion rate to Accounts is required for the purposes of calculating a Credit Model Score, the currency conversion rate will be the rate used, as at the date of those Accounts, in accordance with S&P's ordinary course of business from time to time.

\_

<sup>&</sup>lt;sup>6</sup> Further information about the CreditModel™ Financial Institutions model can be found on the PPF website at <a href="http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/SP">http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/SP</a> Global Mark et Intelligence Credit Model Financial Institutions White Paper.pdf

# **Legal notice -** CreditModel<sup>™</sup> Financial Institutions

Copyright © 2017 by S&P Global Market Intelligence, a division of S&P Global Inc. All rights reserved.

These materials have been prepared solely for information purposes based upon information generally available to the public and from sources believed to be reliable. No content (including index data, ratings, credit-related analyses and data, research, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P Global Market Intelligence or its affiliates (collectively, S&P Global). The Content shall not be used for any unlawful or unauthorized purposes. S&P Global and any third-party providers, (collectively S&P Global Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Global Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON "AS IS" BASIS. S&P GLOBAL PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Global Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

S&P Global Market Intelligence's opinions, quotes and credit-related and other analyses are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Global Market Intelligence assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P Global Market Intelligence does not act as a fiduciary or an investment advisor except where registered as such. S&P Global keeps certain activities of its divisions separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions of S&P Global may have information that is not available to other S&P Global divisions. S&P Global has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P Global Ratings does not contribute to or participate in the creation of credit scores generated by S&P Global Market Intelligence. Lowercase nomenclature is used to differentiate S&P Global Market Intelligence PD credit model scores from the credit ratings issued by S&P Global Ratings.

S&P Global may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P Global reserves the right to disseminate its opinions and analyses. S&P Global's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P Global publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.