Hundred Group - Pensions working party: PPF risk based levy

Executive summary

Dun & Bradstreet's (D&B) credit scoring methodology appears to place a disproportionate weighting on small items such as county court judgments and the age of the company's directors in obtaining a credit score. This has led to disparities between D&B's credit assessment and that of public credit rating agencies, such as Standard & Poor's and Moody's.

Analysis of default probabilities for S&P rated credit supports a minimum D&B failure score of 98 for companies with investment grade public credit ratings. Furthermore, companies with an S&P rating of A- or higher should be awarded the highest failure score (currently 100) as default studies suggest that the risk of default in year 1 from these entities is close to zero. The Hundred Group therefore recommends that the Pension Protection Fund (PPF) recognises public credit ratings of groups/large corporations when determining the risk-based levy.

However, the PPF will only consider insolvency risk at group level if the parent company enters into a formal guarantee with the pension scheme, which may be unattractive given the onerous nature of the PPF approved guarantee. This is at odds with the Pensions Regulator who has stated his intention to intervene when actions taken at the group level are perceived to damage the pension covenant. These actions include the payment of special dividends and repurchase of company shares, which are unlikely to have any impact on the sponsoring (subsidiary) company. The Hundred Group therefore requests that a more consistent approach is taken by the PPF and Regulator whereby the PPF considers insolvency risk at the group level. This will also facilitate the use of credit ratings for large companies as opposed to D&B assessments. If the PPF is unwilling to amend its approach to risk assessment, the Hundred Group recommends that the terms of a PPF guarantee be simplified. In particular, the PPF should reconsider the required length of the guarantee and permit guarantees to the sponsoring employer.

Background

The PPF selection of D&B to assess the probability of individual company insolvency for their new risk based levy has caused widespread concern amongst large companies (public or private).

The decision to select D&B has been attributed in part to legal advice given to the PPF that the insolvency risk of the sponsoring (subsidiary) company rather than that of the parent/group must be assessed, given that D&B's methodology can be applied to all companies whereas the approaches of the public credit rating agencies are suitable for only large corporations or groups.

This paper seeks to explore further and suggest possible actions to address the issues outlined above, namely:

(i) The unsuitability of D&B's methodology when assessing large corporations for the PPF's risk based levy

(ii) The PPF's unwillingness to consider the financial stability of the parent company/group when assessing the employing entity.

Section 1: Comparison of D&B's methodology to other established credit rating agencies

Key elements of D&B assessment

D&B collects data on millions of companies in a global database, which is updated nearly one million times a day. Algorithms, which have been created through analysis of historical performance to determine data characteristics common to failing or successful companies, are applied to the data to calculate the failure scores. The data collected creates four main categories (see table 1 below) and is historical in nature.

Table 1: Data used by D&B

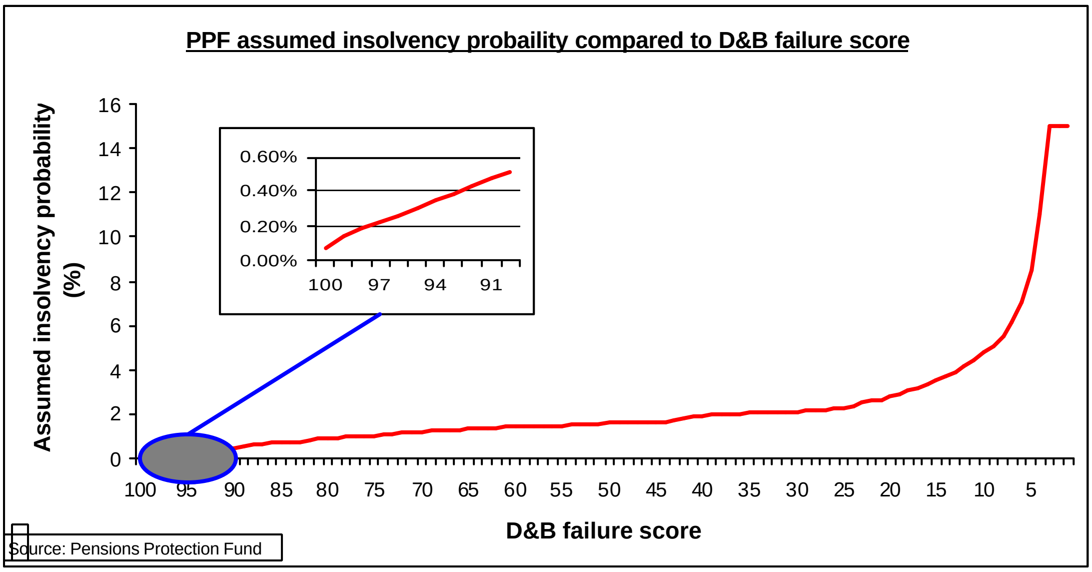
BUSINESS DEMOGRAPHICS • Age of business • Primary industry sector • Negative information (CCJs, Protested bills)	**TRADE INFORMATION** • Payment experience • No. of payment experiences • % of trade experiences paid prompt or late
PRINCIPALS • Number • Age and experience • Associated businesses • % of failed associations	**FINANCIAL INFORMATION** • Net worth • Net sales • Profit/Loss • Financial ratios • Age of financial information

The way in which the data collected is used to calculate the final credit score lacks transparency and as a result companies face difficulties when attempting to improve their rating. D&B offer a service whereby, for a fee, they will test scenarios to demonstrate which course of action will produce the best results.

Several members of the working party have indicated that the elimination of county court judgments (often very small exposures) and the appointment of additional experienced board members can have a significant impact on the failure score. This raises concerns as to the credibility of D&B's methodology with regard to large companies. D&B has highlighted the small difference in insolvency probability between scores as the reason for the movements in the failure score as a result of small changes in the underlying data.

The assumed insolvency probability corresponding to each failure score is demonstrated in Chart 1 below[1]. The probability of default remains low in absolute terms for much of the 100-point scale. However small movements in the upper end (say between 97 to 92) could result in a doubling of the insolvency probability. This would have a significant impact on the risk-based element of the final PPF levy payable (see appendix 3 for levy calculation). Therefore, small events, such as low value county court judgments, may introduce significant volatility to the levy amount payable and adversely impact pension funds.

Chart 1: D&B scoring and implied insolvency



[1] The full table of assumed insolvency for each D&B score is shown in appendix 1.

PPF insolvency probability compared to S&P/Moody's default rates

Moody's and S&P both publish information on the observed default rates for each credit rating. As shown in table 2 below, analysis indicates that the likelihood of default in year 1 for investment grade credit is close to zero. This suggests that any business with an investment grade credit rating should have a D&B score close to 100. The PPF have allocated a 0.074% probability of insolvency in year 1 to companies with a D&B score of 100.

Table 2: Credit rating agency default rates

S&P Cumulative Average Default Rates, 1981 to 2005
Moodys Cumulative default rates, 1985 to 2004

Rating	S&P Default rate in year 1 (%)	Moodys Default rate in year 1 (%)
AAA/Aaa	0.00	0.0
AA/Aa	0.00	0.0
A/A	0.00	0.0
BBB/Baa	0.26	0.2
BB/Ba	0.67	1.7
B/B	4.88	4.3
CCC/C	51.35	32.9
Investment Grade	*0.06*	*0.0*

Source: S&P and Moody's default rates - European Union

The PPF consultation document published in July 2005 issued guidance as to the expected relationship between credit ratings, D&B failure scores and the probability of insolvency[2] (Table 3). This confirms that 'A- to AAA' rated companies should expect a failure score of between 98 and 100. The sharp drop for the BBB rating seen in the PPF guidelines, however, is not supported by the S&P analysis.

Table 3: PPF guidelines for insolvency risk bands

Insolvency risk band	S&P rating	D&B failure score	Assumed probability of insolvency
1	aaa to a-	98 to 100	0.13%
2	bbb+ to bbb-	78 to 97	0.60%
3	bb+ to bb	55 to 77	1.25%
4	bb-	38 to 54	1.70%
5	-	20 to 37	2.35%
6	b+	13 to 19	3.40%
7	-	8 to 12	4.75%
8	b	6 to 7	6.60%
9	b-	4 to 5	9.75%
10	ccc	1 to 3	15.00%

Source: Board of Pension Protection Fund (consultation paper July 2005)

Experience within the working party

Analysis provided by the working group (see appendix 2 for summary) indicates that most of the sampled companies have received D&B scores of between 98 and 100 in line with their investment grade credit ratings, albeit in a number of cases after active management of the D&B score (eg through the elimination of CCJs or changes in directors). This is not universal however and furthermore there is evidence of discrepancies between the parent company and the sponsoring (subsidiary) company.

[2] The PPF's ten risk bands have been superseded – the PPF has now assigned an insolvency probability to all 100 D&B scores (see appendix 1).

Recommendation

Analysis of default probabilities for S&P/Moody's rated credit supports a minimum failure score of 98 for companies with investment grade public credit ratings. Furthermore, companies with an S&P rating of A- or higher should be awarded the highest failure score (currently 100) as default studies suggest that the risk of default in year 1 from these entities is close to zero. The Hundred Group therefore recommends that the Pension Protection Fund (PPF) recognises public credit ratings of groups/large corporations when determining the risk-based levy.

Section 2: Use of parent company/group vs employing entity for levy assessment

Group company guarantees

The PPF does not consider the financial strength of the parent company or wider group when assessing the insolvency probability for the risk based levy unless the parent/group company provides a guarantee to pension scheme. The PPF has laid down strict criteria, which must be met in order for the guarantee to be considered. These criteria include:

- Guarantee must be created per PPF's standard documentation
- Guarantee must be to the pension scheme, not the sponsoring employer
- Must guarantee either a fixed monetary amount, a specified percentage funding level or full section 75 buy-out debt
- If the scheme is less than 104% funded (PPF basis), group guarantee will only be given credit to the extent it covers up to 105% of liabilities.

If these criteria are met the PPF will use the parent/group company's D&B failure score to calculate the risk based levy, unless the sponsoring (subsidiary) company has a higher score[3]. However, the PPF approved guarantee has met with some objections. In particular the Hundred Group believes the following terms to be too onerous:

- The guarantee is required over the long term not just the year for which the levy would apply
- The guarantee must be made to the scheme not the sponsoring employer.

It is thought that these terms could permanently alter the relationship between the companies in a group. As such the use of a guarantee to enable the PPF to consider the financial strength of the parent/group company in the risk based assessment may not be attractive.

Given the power of the Pensions Regulator to pierce the corporate veil and issue a financial support direction against any company that is connected or associated with any employer in the Scheme, any pension deficit can already be seen in general terms as a "group" liability. However entering into a parent guarantee would to some extent create a new legal obligation for the group/parent company.

Impact on suggested action for credit ratings

Given the PPF's stance on the use of employer vs parent company for the risk based levy assessment, the solution suggested in section 1 above will have little value unless a mechanism is in place to enable the PPF to consider the financial strength of the parent company or, more likely, the overall group.

Pension regulator

The Pension Regulator is a separate entity to the PPF; however it is worth noting that the Regulator's attitude towards the pension covenant and the parent company differs significantly from that of the PPF. The Pensions Regulator has stated his intention to intervene when actions taken at the group level are perceived to damage the pension covenant. These actions include the payment of special dividends and share buybacks, which are unlikely to have any impact on the sponsoring (subsidiary) company. As noted above, the Pensions Regulator has the power to pierce the corporate veil and issue a financial support direction against any company that is connected or associated with any employer in the Scheme. The PPF and the Regulator are governed by different legislation and it is likely that both are acting consistently within their legislative framework. Therefore, a change in legislation may be required to ensure consistency between the PPF and the Regulator.

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[3] Even if these conditions are met, the D&B failure score for the parent/group company may not be representative of the financial strength of the wider group.

Recommendation

The Hundred Group therefore requests that a more consistent approach is taken by the PPF and Regulator whereby the PPF considers insolvency risk at the group level. This will also facilitate the use of credit ratings for large companies as opposed to D&B assessments. If the PPF is unwilling to amend its approach to risk assessment, the Hundred Group recommends that the terms of a PPF guarantee be simplified. In particular, the PPF should reconsider the required length of the guarantee and permit guarantees to the sponsoring employer.

Appendix 1: PPF insolvency probabilities

D&B Failure score	Assumed insolvency probability (%)
100	0.0740
99	0.1360
98	0.1804
97	0.2216
96	0.2621
95	0.3033
94	0.3454
93	0.3858
92	0.4286
91	0.4714
90	0.5133
89	0.5548
88	0.5943
87	0.6370
86	0.6827
85	0.7241
84	0.7619
83	0.8008
82	0.8351
81	0.8744
80	0.9047
79	0.9313
78	0.9609
77	1.0050
76	1.0384
75	1.0645
74	1.1190
73	1.1300
72	1.1566
71	1.1911
70	1.2112
69	1.2317
68	1.2400
67	1.2580

D&B Failure score	Assumed insolvency probability (%)
66	1.2800
65	1.3044
64	1.3340
63	1.3891
62	1.4123
61	1.4370
60	1.4620
59	1.4945
58	1.4950
57	1.4960
56	1.4970
55	1.4980
54	1.5384
53	1.5500
52	1.5650
51	1.5700
50	1.5800
49	1.5945
48	1.6474
47	1.6742
46	1.6800
45	1.6900
44	1.7077
43	1.7756
42	1.8367
41	1.9054
40	1.9200
39	1.9400
38	1.9590
37	2.0344
36	2.0570
35	2.0898
34	2.0990

D&B Failure score	Assumed insolvency probability (%)
33	2.1010
32	2.1120
31	2.1190
30	2.1240
29	2.1350
28	2.1460
27	2.1560
26	2.2344
25	2.2850
24	2.3853
23	2.4950
22	2.5844
21	2.6845
20	2.8018
19	2.9446
18	3.0801
17	3.1876
16	3.3358
15	3.5210
14	3.7079
13	3.9115
12	4.1610
11	4.3711
10	4.7612
9	5.0279
8	5.4906
7	6.1536
6	7.0235
5	8.4751
4	11.0298
3	15.0000
2	15.0000
1	15.0000

Source: Pension Protection Fund

Appendix 2: Working party experience

Parent D&B score	Sponsor D&B score	S&P / Moodys rating	Deficit (% market cap)
99	99	AA+	1%
99	64	BBB+/Baa1	3%
100	33	A-	0%
98	98	AA+/AA-	1%
100	100	A-/Baa1	0%
96	100	A-/A3	2%
90	99	A/A2	5%
90	95	A/A2	3%
90	81	NR	0%
93	97	A-/Baa1	5%
100	lower/guarantee	BBB/Baa2	9%

Source: 100 group - Pensions working party

Appendix 3: Calculation of the 2006/7 PPF levy

The 2006/7 levy will be made up of two parts:

- **Scheme based levy (20%)** – based on the level of a scheme's Pension Protection Fund liabilities.
- **Risk based levy (80%)** – based on scheme underfunding risk, and the insolvency risk of the sponsoring employer(s)

The scheme based levy is equal to Pension Protection Fund liabilities multiplied by a factor, which for the 2006/7 levy is 0.014%.

The risk based levy [4] is equal to 80% of:

	Underfunding risk	= (1.05 x liabilities) – assets
x	**Insolvency risk**	= Insolvency risk determined by D&B score (see appendix 1)
x	**Levy scaling factor**	= The levy scaling factor is 0.53 in 2006/7

[4] Where the scheme's assets exceed 104% of the PPF liabilities this calculation will differ.