

## Discount Rates

Discount rates are used to calculate the present value of benefit obligations and the service and interest cost portion of benefit expense. The disclosure of obligations in the financial statement is based on the discount rate selected at the current measurement date. This rate is also used to determine benefit expense for the following year.

Under ASC 715, the discount rate is intended to represent the rate at which benefit obligations could be settled. The standard does not explicitly define the quality of the bond yields. Most plan sponsors base their discount rate on AA-rated bonds. IAS 19 refers to high-quality corporate bond yields, which is generally interpreted to mean AA-rated or better. The primary focus for corporations has been placed on long-term, high-quality corporate bonds of appropriate duration. For countries with a deep market in corporate bonds, it has become increasingly common to match expected cash flows from the plan either to a portfolio of bonds that generate sufficient cash flows or a notional yield curve generated from available bond information. This is a common approach in the United States, United Kingdom, Canada, Japan and the Euro-zone countries.

Where there is no deep market in corporate bonds, it is typical for government bonds to be considered with a risk premium to approximate corporate bond yields (e.g., for ASC 715 discount rates). It should be noted, under IAS 19, for countries where there is no deep corporate bond market, the standard requires the use of government bonds with no additional risk premium when determining discount rates; therefore, we present IAS 19 results for discount rates separately.

Figure 3a and Figure 3b show the average discount rates for the 2011 expense and 2010 expense, and the 25th, 50th (median) and 75th percentiles for the 2011 expense for plans using ASC 715 and IAS 19 accounting standards, respectively. These tables include values for companies with December 31 measurement dates only.

**Figure 3a. Discount rates for plans using ASC 715 — Averages and percentiles**

	Averages*		2011 Percentiles		
	2011	2010	25th*	50th*	75th*
Argentina	16.78%	13.32%	10.25%	20.00%	21.90%
Australia	6.33%	6.60%	5.75%	6.18%	7.25%
Austria	4.94%	5.36%	4.70%	5.00%	5.25%
Belgium	4.93%	5.26%	4.50%	5.00%	5.25%
Brazil	10.58%	10.72%	10.17%	10.50%	10.75%
Canada	5.08%	5.53%	5.00%	5.10%	5.20%
China	3.95%	—	—	3.75%	—
Colombia	7.72%	8.80%	7.75%	7.78%	7.90%
Finland	5.00%	5.13%	—	5.00%	—
France	4.82%	5.16%	4.50%	5.00%	5.25%
Germany	5.18%	5.38%	5.00%	5.25%	5.50%
Greece	4.81%	5.15%	—	4.90%	—
Hong Kong	3.56%	2.98%	3.50%	3.50%	3.80%
India	8.44%	8.56%	8.00%	8.50%	8.75%
Indonesia	8.65%	10.75%	8.00%	8.75%	9.25%
Ireland	5.39%	5.62%	5.00%	5.50%	5.75%
Italy	4.40%	5.07%	4.19%	4.28%	4.73%
Japan	1.72%	1.99%	1.50%	1.75%	2.00%
Korea (South)	5.80%	6.55%	5.50%	6.00%	6.00%
Malaysia	5.50%	4.76%	—	5.50%	—
Mexico	7.97%	8.93%	7.75%	7.75%	8.50%
Netherlands	5.34%	5.54%	5.10%	5.50%	5.64%
New Zealand	4.57%	—	—	4.43%	—
Norway	4.75%	5.40%	4.50%	4.95%	5.00%
Philippines	7.58%	9.01%	7.50%	7.50%	8.00%
Poland	5.78%	6.77%	5.50%	5.70%	6.25%
Portugal	4.63%	5.17%	4.50%	4.55%	5.40%
South Africa	8.90%	9.42%	8.50%	9.00%	9.35%
Spain	5.39%	5.48%	5.30%	5.50%	5.60%
Sweden	4.50%	4.66%	4.00%	4.80%	4.90%
Switzerland	2.79%	3.24%	2.75%	2.75%	2.80%
Taiwan	2.04%	2.15%	2.00%	2.00%	2.00%
Thailand	4.13%	4.95%	3.90%	4.00%	4.30%
Turkey	11.00%	—	—	13.00%	—
UAE	5.06%	—	3.75%	5.38%	6.25%
United Kingdom	5.56%	5.75%	5.50%	5.50%	5.70%
United States	5.41%	5.87%	5.25%	5.41%	5.60%

\*Values are shown if there are five or more observations.

+Values are shown if there are 10 or more observations

**Figure 3b. Discount rates for plans using IAS 19 — Averages and percentiles**

	Averages*		2011 Percentiles		
	2011	2010	25th*	50th*	75th*
Argentina	18.63%	10.94%	14.00%	15.18%	26.60%
Australia	5.11%	5.20%	4.70%	4.75%	5.50%
Austria	4.78%	5.30%	4.50%	4.80%	5.00%
Belgium	4.65%	5.14%	4.45%	4.83%	4.95%
Brazil	10.50%	10.91%	10.30%	10.50%	10.75%
Canada	5.15%	5.83%	5.00%	5.20%	5.36%
China	3.97%	3.94%	3.88%	4.00%	4.25%
Colombia	8.04%	—	—	8.25%	—
France	4.53%	5.00%	4.00%	4.78%	4.90%
Germany	4.88%	5.32%	4.90%	5.00%	5.25%
Greece	4.62%	5.60%	4.48%	4.60%	4.90%
Hong Kong	3.09%	2.75%	2.83%	2.90%	3.00%
India	7.98%	7.98%	8.00%	8.05%	8.50%
Indonesia	8.23%	11.91%	—	8.00%	—
Ireland	5.23%	5.53%	4.75%	5.30%	5.60%
Italy	4.52%	4.93%	4.24%	4.50%	4.80%
Japan	1.47%	1.76%	1.25%	1.50%	1.75%
Korea (South)	5.69%	6.55%	5.38%	5.95%	6.25%
Luxembourg	4.45%	5.06%	4.40%	4.50%	4.50%
Mexico	7.45%	8.64%	—	7.50%	—
Netherlands	5.12%	5.17%	4.90%	5.25%	5.50%
New Zealand	4.34%	—	—	4.30%	—
Norway	3.94%	4.17%	3.75%	4.00%	4.00%
Pakistan	13.55%	13.47%	13.00%	14.00%	14.00%
Philippines	7.69%	9.14%	7.50%	7.75%	8.00%
Poland	5.76%	5.49%	5.50%	6.00%	6.00%
Portugal	5.06%	5.43%	4.90%	4.90%	5.30%
Singapore	3.77%	—	—	3.15%	—
South Africa	8.65%	9.30%	8.50%	8.60%	8.75%
Spain	4.93%	5.22%	4.90%	4.90%	5.30%
Sweden	4.02%	3.74%	3.75%	3.80%	4.75%
Switzerland	2.64%	3.05%	2.50%	2.75%	2.80%
Taiwan	1.81%	2.52%	1.75%	1.75%	2.00%
Thailand	4.02%	4.96%	3.90%	4.10%	4.20%
Turkey	8.96%	10.61%	—	10.00%	—
United Kingdom	5.44%	5.75%	5.40%	5.50%	5.50%
United States	5.42%	5.91%	5.30%	5.50%	5.50%

\*Values are shown if there are five or more observations.

+Values are shown if there are 10 or more observations.

It can be seen that the average discount rate is noticeably lower under IAS 19 than under ASC 715 in Australia, Mexico, Norway and Turkey. This is because the corporate bond market in these countries is not regarded as being "deep" enough; thus, IAS 19 requires the use of government bonds instead of corporate bonds. The similarity of ASC 715 and IAS 19 discount rates elsewhere suggests the countries are regarded as having a sufficiently "deep" corporate bond market (United States, United Kingdom, the Euro-zone and Canada).

Over the year, for countries that set discount rates using corporate bond yields, most long-term bond yields have trended downward; therefore, discount rates have also trended downward.