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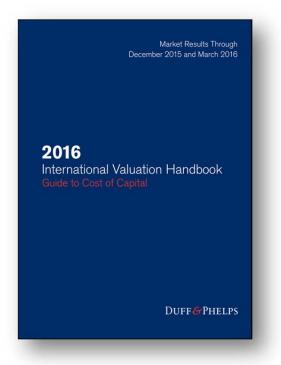
2016 International Valuation Handbook – Guide to Cost of Capital

Wiley & Sons has partnered with Duff & Phelps, the premier global valuation and corporate finance advisor with expertise in complex valuation, dispute and legal management consulting, M&A, restructuring, and compliance and regulatory consulting, to produce a new annual source for this data: the new *International Valuation Handbook – Guide to Cost of Capital*.

The 2016 International Valuation Handbook – Guide to Cost of Capital provides the same type of rigorous country-level analysis previously published in the former Morningstar/Ibbotson International Cost of Capital Report (discontinued), the former Morningstar/Ibbotson International Cost of Capital Perspectives Report (discontinued), and the former Morningstar/Ibbotson International Equity Risk Premia Report (discontinued). The 2016 International Valuation Handbook – Guide to Cost of Capital ships in August 2016, with data through December 2015 and March 2016, and includes an optional September Semi-annual Update, with data through June 2016 and September 2016.

The 2016 International Valuation Handbook – Guide to Cost of Capital provides data and methodology guidance that will enable the reader to assess risk and develop cost of capital estimates on a global scale.

This publication provides country-level country risk premia (CRPs), Relative Volatility (RV) factors, and equity risk premia (ERPs), which can be used to estimate country-level cost of equity capital globally, for up to 188 countries, from the perspective of investors based in up to 56 different countries.*



2016 International Valuation Handbook – Guide to Cost of Capital

Includes optional September Semi-annual Update

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*Depending on the estimation model being employed, and data availability. Some models do not include estimates for all countries.

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The data exhibits in the International Valuation Handbook – Guide to Cost of Capital include:

- International Equity Risk Premia (ERPs)
- Country Yield Spread Model: Country Risk Premia (CRPs)
- Relative Volatility Model: Relative Volatility (RV) Factors
- Erb-Harvey-Viskanta Country Credit Rating Model: Country Risk Premia (CRPs)

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Data Exhibit 2: Country Yield Spread Model: Country Risk Premia (CRPs)

Data Exhibit 3: Relative Volatility Model: Relative Volatility (RV) Factors

Data Exhibit 4: Erb-Harvey-Viskanta Country Credit Rating Model: Country Risk Premia (CRPs)

Data Exhibit 5: Study of Differences in Returns Between Large and Small Companies in Europe

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Sample Data Exhibits

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Representative data exhibits from last year's 2015 International Valuation Handbook – Guide to Cost of Capital is provided in the following seven pages, for evaluative purposes. The 2016 version of the book ships in August 2016 with data through December 2015 and March 2016.

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Source of underlying data: 1.) Morningstar Direct database. Used with permission. All rights reserved. All calculations performed by Duff & Phelps LLC.

Country Yield Spread Model: Country Risk Premia (CRPs)*

	Data Updated Throu	igh December 2014	Data Updated Through March 2015								
Investee Country	December 2014 Country Risk Premium (CRP) (%)	Tier Method*	March 2015 Country Risk Premium (CRP) (%)	Tier Method*	S&P Sovereign Credit Rating §	MSCI Market Classification †					
Afghanistan	10.7	4	11.1	4							
Albania	6.1	3	6.1	3	В						
Algeria	5.1	4	53	4							
Angola	39	3	4.9	3	B+						
Antigua & Barbuda	3.2	2	3.0	2							
Argentina	18.6	2	8.8	2	SD	Frontier					
Armenia	4.6	2	5.6	2	BB-						
Aruba	25	2	2.5	2	BBB+						
Australia	0.0	1	0.0	1	AAA	Developed					
Austria	0.1	2	0.1	2	AA+	Developed					
//	11	11	11	//	11	//					
Czech Republic	0.5	3	0.5	3	AA-	Emerging					
Denmark	0.0	1	0.0	1	AAA	Developed					
Djibouti	36.2	4	38.4	4							
Dominica	7.2	4	7.4	4							
	39	2	39	2	B+						

*This is an <u>abbreviated</u> version of the Country Yield Spread Model: Country Risk Premium (CRP) exhibit from the *International Valuation Handbook – Guide to Cost of Capital*. The hardcover book's Country Yield Model CRP exhibits provide country-level CRP estimates for up 188 different countries, from the perspective of investors in the U.S. and Germany.

Relative Standard Deviation Model: Relative Volatility (RV) Factors*

Investor Perspective: Germany

Currency: Euro (EUR)

Relative Volatility Model: Relative Volatility RV Factors

The RV Factor is to be multiplied to the ERP. See Chapter 5 for proper application.

Investee Country	December 2014 Relative Volatility Factor (RV)*	March 2015 Relative Volatility Factor (RV)*	S&P Sovereign Credit Rating §	MSCI Market Classification †
Argentina	2.4	25	SD	Frontier
Australia	1.0	1.0	AAA	Developed
Austria	1.1	1.2	AA+	Developed
Bahrain	0.9	0.9	BBB-	Frontier
Bangladesh	2.0	1.8	BB-	Frontier
Belgium	0.8	0.8	AA	Developed
Botswana	N/A	1.0	A-	Frontier
Brazil	1.2	1.1	BBB-	Emerging
Bulgaria	1.5	1.4	BB+	Frontier
Canada	1.0	1.0	AAA	Developed
//	11	//	//	//
Nigeria	1.5	1.4	B+	Frontier
Norway	1.0	1.0	AAA	Developed
Oman	0.9	0.9	A-	Frontier
Pakistan	1.3	1.3	B-	Frontier
Peru	1.3	1.2	BBB+	Emerging

*This is an <u>abbreviated</u> version of the Relative Standard Deviation Model: Relative Volatility (RV) Factors exhibit from the *International Valuation Handbook – Guide to Cost of Capital.* The hardcover book's Relative Standard Deviation Model RV Factor exhibits provide country-level relative volatility factor estimates for up 75 different countries, from the perspective of investors in the U.S. and Germany.

Investor Perspective: China

Currency: Chinese Yuan Renminbi (CNY)

Erb-Harvey-Viskanta Country Credit Rating (CCR) Model

The country risk premium (CRP) is not the cost of equity capital (COE). The CRP is to be added to base COE. See Chapter 6 for proper application.

Investee Country	December 2014 Country Risk Premium (CRP) (%)	March 2015 Country Risk Premium (CRP) (%)	S&P Sovereign Credit Rating §	World Rank Out of 179*	MSCI Market Classification †	Institutional Investor Region ‡	Regional Rank‡
Afghanistan	34.1	31.0		173		Asia/Pacific (South & East)	23 out of 24
Albania	13.7	13.4	В	91		Eastern Europe/Central Asia	20 out of 29
Algenia	7.6	7.3		71		North Africa/Middle East	9 out of 19
Angola	126	12.8	B+	87		Africa (Sub-Saharan)	7 out of 49
Argentina	19.1	21.4	SD	139	Frontier	Latin America/Caribbean	25 out of 29
Armenia	128	13.8		92		Eastern Europe/Central Asia	21 out of 29
Australia	-27	-2.7	AAA	12	Developed	Asia/Pacific (Far East)	2 out of 8
Austria	-2.6	-2.6	AA+	13	Developed	Western Europe	9 out of 19
Azerbaijan	7.3	8.0	BBB-	72		Eastern Europe/Central Asia	15 out of 29
Bahamas	4.5	4.7	BBB	52		Latin America/Caribbean	9 out of 29
11	11	11	11	//	11	//	//
Djibouti		20.9		133		Africa (Sub-Saharan)	22 out of 49
Dominican Republic	12.0	125	B+	84		Latin America/Caribbean	17 out of 29
East Timor	25.7	24.5		152		Asia/Pacific (South & East)	20 out of 24
Ecuador	168	17.5	B+	119		Latin America/Caribbean	20 out of 29
Egypt	17.5	169	B-	112	Emerging	North Africa/Middle East	15 out of 19

§ S&P Credit Rating based on long-term foreign currency issuer rating. See http://www.standardandpoors.com/

Vorld rank based on 179 countries covered by Institutional Investor. Banking based on ascending order in which 'I' equals the smallest country risk premium (CRP) and '179' equals the largest country risk premium (CRP). † MSCI Market Classification based on MSCI Market Classification Framework. See http://www.msci.com/products/indexes/market_classification.html

* Regional classification based on Institutional Investor. Regional rankings based on ascending order in which 't equals the smallest country risk premium (CRP) for each region.

*This is an <u>abbreviated</u> version of the Country Credit Rating Model: Country Risk Premium (CRP) exhibit from the *International Valuation Handbook – Guide to Cost of Capital*. The hardcover book's Country Credit Rating Model CRP exhibits provide country-level CRP estimates for up 179 different countries, from the perspective of 56 different countries.

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