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**PROCTER & GAMBLE:
COUNTRY COST OF CAPITAL**

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In mid-1996, as Procter & Gamble (P&G) continued expanding its business into new regions around the globe, Russell Hughes, P&G's Associate Director for Investment Analysis, was considering a question he had just been asked: "As we are putting more money into non-G7 countries, China, Russia, and so on, why are we not reflecting different hurdle rates?" The questioner was Corporate Treasurer, Chad Delaney, and the outcome was the beginning of discussions between Corporate Finance and Treasury on how to calculate P&G's weighted average cost of capital across countries.

BACKGROUND – PROCTER & GAMBLE

Procter & Gamble (P&G) began as a small, family-operated soap and candle company in 1837. By 1859 sales reached $1 million, and in 1879 the company developed Ivory Soap. It was incorporated in Cincinnati, Ohio in 1890, by which time it was selling more than thirty different types of soap. In 1996, P&G was manufacturing and marketing some of the world's most recognizable brands, including Tide, Pampers, Bounty, Pantene, Vicks, Pringles, and Crest.

P&G built its first manufacturing facility outside the U.S. in 1915 in Canada and established its first overseas subsidiary in 1930 with the purchase of a soap manufacturer in England **(see Table 1)**. Though P&G established an operation in the Philippines in 1935, the internationalization process began in earnest after the Second World War. In 1948, operations began in Mexico and an Overseas Division was established. In 1960, P&G opened its first office in Germany and in 1961 opened one in Saudi Arabia. It began manufacturing and selling in Japan much later, entering the country with an acquisition in 1973. Despite these efforts, P&G still considered itself a domestic company and focused relatively little attention on the global market.

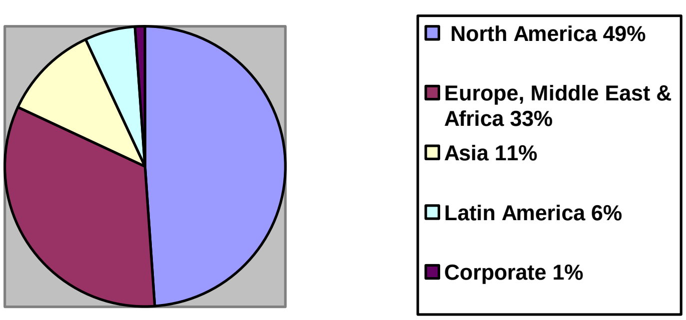
By the 1980s, P&G's strong position in the U.S., the availability of improved transportation and communication technologies, and continued economic growth in foreign markets led senior managers to focus greater attention on international markets. As noted by Hughes, "We needed to be where the world's consumers were," and the U.S. accounted for only 5% of the world's population. Based in part on the success of its Mexican subsidiary, P&G bought a soap business in Brazil and expanded into Colombia, Chile, Peru, and Argentina in the late 1980s and early 1990s. It also expanded its business in Japan and in 1988 started a joint venture to manufacture products in China. In 1991, P&G initiated operations in Eastern Europe – Czechoslovakia, Hungary, and Poland – and Russia.

TABLE 1: Procter & Gamble (P&G) Entry Into Selected Major Markets

Year	Region
1915	Canada
1930	United Kingdom
1935	Philippines
1948	Mexico
1950	Venezuela
1954	France
1956	Italy, Peru
1960	Germany
1961	Saudi Arabia
1968	Spain
1973	Japan
1983	Chile
1985	Australia, India, New Zealand, Taiwan
1987	Turkey, Colombia, Central America
1988	China, Brazil
1989	South Korea
1990	Argentina, Ukraine
1991	Russia, Poland, Czechoslovakia, Hungary, Pakistan
1992	Romania
1993	* over 50% of P&G revenues are earned outside the U.S. *
1995	Vietnam

By 1993, P&G's global sales were greater than $30 billion, with more than half coming from outside the U.S. The growing importance of P&G's international sales and desire to help it compete more effectively on a global basis led the company in 1995 to replace its organizational structure. Two regions - U.S. and International – were replaced by four – North America, Latin America, Asia, and Europe/Middle East/Africa – with all four regions reporting to the Chief Operating Officer **(see Tables 2 and 3)**.

TABLE 2: Net Sales by Geographic Segment*



*source: Procter & Gamble Company's Annual Report, 1996

TABLE 3: Geographic Segment Information*

		North America	Europe, Mid. East, and Africa	Asia	Latin America	Corp.	Total
Net Sales	**1996**	**$17,133**	**$11,719**	**$3,790**	**$2,173**	**$ 469**	**$35,284**
	1995	16,233	11,017	3,617	2,178	437	33,482
	1994	15,164	9,738	3,133	2,250	100	30,385
Net Earnings	**1996[1]**	**2,220**	**767**	**222**	**218**	**(381)**	**3,046**
	1995	1,872	675	199	213	(314)	2,645
	1994	1,713	581	132	157	(372)	2,211
Identifiable Assets	**1996**	**11,894**	**6,895**	**2,882**	**1,445**	**4,614**	**27,730**
	1995	11,375	7,446	3,311	1,305	4,688	28,125
	1994	10,699	5,576	2,690	1,302	5,268	25,535

[1] Includes a gain on the sale of the Company's share of a health care joint venture: North America - $120 after tax, Health Care - $185 before tax.

*source: Procter & Gamble Company's Annual Report, 1996

ESTIMATING THE WEIGHTED AVERAGE COST OF CAPITAL PRIOR TO 1996

In making investment decisions around the world, P&G relied on weighted average cost of capital (WACC) adjustments that were based on qualitative analyses. Because P&G products had similar risk characteristics, calculating a division or project WACC was not considered necessary. Investments in areas outside the United States were assigned a cost of capital essentially twice the company-wide WACC regardless of geographic region or type of project. Although the process was informal, it did provide a risk premium for international projects that compensated the company for the relative uncertainty of international investment in more volatile areas **(see Tables 4 and 5)**.

TABLE 4: Consolidated Statements of Earnings*
(Amounts in Millions Except Per Share Amounts)

Years Ended June 30	**1996**	1995	1994
Net Sales	**$35,284**	$33,482	$30,385
Cost of products sold	**20,762**	19,561	17,338
Marketing, research, and administrative expenses	**9,707**	9,677	9,377
Operating Income	**4,815**	4,244	3,670
Interest expense	**484**	488	482
Other income, net	**338**	244	158
Earnings Before Income Taxes	**4,669**	4,000	3,346
Incomes taxes	**1,623**	1,355	1,135
Net Earnings	**$ 3,046**	$ 2,645	$ 2,211
Net Earnings Per Common Share	**$ 4.29**	$ 3.71	$ 3.09
Dividends Per Common Share	**$ 1.60**	$ 1.40	$ 1.24
Average Common Shares Outstanding	**686.3**	686.0	683.1

*source: Procter & Gamble Company's Annual Report, 1996

TABLE 5: Financial Highlights*
(Millions of Dollars Except Per Share Amounts)

	1996	1995	1994
Net Sales	**35,284**	33,482	30,385
Operating Income	**4,815**	4,244	3,670
Net Earnings/(Loss)	**3,046**	2,645	2,211
Net Earnings Margin	**8.6%**	7.9%	7.3%
Net Earnings/(Loss) Per Common Share	**4.29**	3.71	3.09
Dividends Per Common Share	**1.60**	1.40	1.24
Research and Development Expense	**1,221**	1,148	964
Advertising Expense	**3,254**	3,284	2,996
Total Assets	**27,730**	28,125	25,535
Capital Expenditures	**2,179**	2,146	1,841
Long-Term Debt	**4,670**	5,161	4,980
Shareholders' Equity	**11,722**	10,589	8,832
Cash Flow From Operations	**4,158**	3,568	3,649

*source: Procter & Gamble Company's Annual Report, 1996

NOTE:
* P&G's before-tax cost of debt was 8% and its cost of equity capital was 11.5%
* Debt fair market value as of June 30, 1996 is $5,014 million; tax rate=35%
* P&G stock price for 1995-1996 high=$93.88, low=$79.38; June 28, 1996 close=$90.62

Prior to 1996, major innovative financial methodology came from the regions. For example, Michael Brown, Treasurer for Latin America, felt sure that a more specific adjustment to WACC was necessary to reflect the differential risk among the countries in Latin America. As a consequence, in the early 1990s P&G financial managers in Latin America began discussing how to adjust the WACC there to reflect country risk. Of course, managers in the region were not equally enthusiastic about the project; country risk varied greatly in the region, and an adjustment to WACC for country risk would force a higher hurdle rate for some managers than others.

CHANGING INVESTMENT OPPORTUNITIES

Although P&G had operations throughout the world, the traditionally risk-averse company was just beginning to feel the impact of venturing into more volatile markets. Early international investment had been concentrated in relatively stable regions, primarily Mexico, Europe, and Japan. Though Latin America was considered relatively risky, the region in 1993 contributed only seven to eight percent of P&G's earnings, so exposure was relatively modest.

As a result of its initiatives to increase overseas sales in the late 1980s and early 1990s, as well as the increasing realization of risk associated with ventures in Latin America and Eastern Europe, it became clear that new, global markets were offering P&G not only the potential for both greater profits, but also substantial risk.

RISK AND THE GLOBAL COST OF CAPITAL: 1996

Treasury had established working relationships with several investment banks and through these relationships had learned in the early 1990s about new techniques that substantially improved the cost of capital methodology. Delaney, as Corporate Treasurer, was aware of them. But Treasury and Corporate Finance worked independently at P&G so Hughes, as Director for Investment Analysis within Corporate Finance, was not. It was at this point in mid-1996 that Delaney approached Hughes to propose reassessing how P&G determined the country cost of capital. Hughes noted that, "What we realized … is that there had been a lot of development in financial instruments and so on that had taken place that we just frankly weren't aware of that let us quantify country risk more specifically than we had been able to do when we looked at this several years ago."

Hughes began spending time with Treasury and investment bankers from JP Morgan and Goldman Sachs to learn about quantifying country risk in a more rigorous, mathematical way. Both Goldman Sachs and JP Morgan recommended that P&G develop a more systematic approach to estimating risk premiums for different markets. Dennis Driscoll, who worked for Hughes on the project, recommended using sovereign spreads in the emerging bond market as a proxy for country risk, with the spread defined as the difference between the yield to maturity on a particular country's dollar-denominated bonds and the yields of US-Treasury bonds with comparable maturities. Driscoll knew this was already being done by Latin American financial managers, who had found, for example, that there might be as much of a differential as 8% on U.S. debt versus 45% or more on Brazilian debt **(see Tables 6 and 7)**.

TABLE 6: Moody's and Standard & Poor's Ratings Symbols for Long-term Debt

	Investment-Grade Ratings				**Speculative-Grade Ratings**	
Moody's	Aaa	Aa1	A1	Baa1	Ba1	B1
		Aa2	A2	Baa2	Ba2	B2
		Aa3	A3	Baa3	Ba3	B3
S & P's	AAA	AA+	A+	BBB+	BB+	B+
		AA	A	BBB	BB	B
		AA-	A-	BBB-	BB-	B-

TABLE 7: Country Risk and Sovereign Credit Ratings, mid-1996

	Sources			
Country	**Institutional Investor Country Credit Rating (March 1996)**	**Moody's (May 1996)**	**S&P (May 1996)**	**Euromoney (March 1996)**
Argentina	38.4	B1	BB-	57.24
Belgium	79.5	Aa1	AA+	93.11
Brazil	35.8	B1	B+	55.39
Chile	59.2	Baa1	A-	79.79
China	56.4	A3	BBB	70.81
Colombia	46.7	Baa3	BBB-	62.56
Germany	91.5	Aaa	AAA	96.64
Hong Kong	65.4	A3	A	85.39
India	45.8	Baa3	BB+	66.68
Indonesia	51.8	Baa3	BBB	73.23
Japan	91.0	Aaa	AAA	97.19
Kazakhstan	19.2	-	-	35.88
Korea	72.0	A1	AA-	85.04
Mexico	41.2	Ba2	BB	58.78
Peru	27.2	B2	BB-	47.51
Philippines	38.1	Ba2	BB	63.53
Poland	40.2	Baa3	BBB-	56.53
Romania	30.9	-	-	51.95
Russia	19.9	-	-	40.60
Ukraine	16.7	-	-	31.17
Venezuela	30.1	Ba2	B	44.68
United Kingdom	88.2	Aaa	AAA	95.85
United States	90.9	Aaa	AAA	97.17

Driscoll proposed to Hughes that P&G use sovereign debt spreads as a measure of risk globally, adding "Emerging markets have a whole new set of rules, versus Europe or Canada … the portfolio effect can spread our risk successfully while we go global." As a result, P&G decided to begin adjusting the WACC for countries upward based on sovereign debt spreads **(see Table 8)**. Although the new procedure would differentiate investments geographically, some in the company were concerned that it would result in higher costs of capital in more volatile countries, thus discriminating against investments in them. Because developing countries generally have more volatile economies, and volatility creates opportunity, forcing a higher cost of capital there would likely result in missed opportunities.

TABLE 8: Spreads between dollar-denominated sovereign debt and comparable U.S. government bonds, mid-1996

Country	Sovereign spread (basis points)*
Argentina	718
Belgium	-
Brazil	610
Chile	-
China	-
Colombia	150
Germany	-
Hong Kong	-
India	-
Indonesia	100
Japan	-
Kazakhstan	-
Korea	-
Mexico	597
Peru	434
Philippines	226
Poland	185
Romania	-
Russia	765
Ukraine	-
Venezuela	811

*Source: Bloomberg

WHERE DO WE GO FROM HERE?

As Corporate Finance began developing the methodology for quantifying the adjustment to the WACC discount rate, Hughes and his colleagues were mindful of both the benefits of increasing the accuracy of estimating hurdle-rates and the potential costs of missing profitable opportunities in developing countries. Should they adjust the cost of capital based on sovereign debt spread country by country, or by categories of countries? If the latter, how many categories should they create?