

## Referências Bibliográficas

ANEEL – Agência Nacional de Energia Elétrica. **Segunda revisão tarifária periódica da Espírito Santo Centrais Elétricas S/A (Escelsa).** Nota Técnica nº 097/2001/SRE/ANEEL, 2001.

BELLAMY, D.; RICHARD H. **An examination of variation in the equity market risk premium.** Working paper.

BENARTZI, S.; RICHARD H. T. **Myopic loss aversion and the equity premium puzzle.** Quarterly Journal of Economics 110(1), 73-92. 1995.

BERNSTEIN, P. L.; ARNOTT, R. D. **What risk premium is normal?.** Financial Analyst Journal, March/April 2002. AIMR.

BLACK, F. **Studies of stock price volatility changes.** (pp.177-181). In: Proceedings of the 1976 Meetings of the American Statistical Society, Business and Economics Statistics Section, 1976.

BREEN, W.; GLOSTEN, L. R. G.; JAGANNATHAN, R. **Economic significance of predictable variations in stock index returns.** Journal of Finance 44(4):1177-1189, 1989.

BRENNAN, M. J.; XIA, Y. **Stock price volatility, learning and the equity premium.** 1998.

BROWN, S. J.; GOETZMANN W. N.; ROSS S. A. **Survival.** The Journal of Finance 50(3):353-873. 1995.

CAMPBELL, J. Y.; COCHRANE, J. H. **By force of habit:** a consumption-based explanation of aggregate stock market behavior. Unpublished working paper, Graduate School of Business, University of Chicago, Chicago. 1997.

CAMPELL, J. Y.; HENTSCHEL, L. **No news is good news:** an asymmetric model of changing volatility in stock returns. Journal of Financial Economics 31(2):281-318. 1992.

CLAUS, J.; THOMAS, J. **The equity risk premium is much lower than what you think it is:** empirical

estimates form a new approach. Working paper. Columbia Business School, 1999.

\_\_\_\_\_. **Equity Premia as low as three percent?** Empirical evidence from analysts' earnings forecasts for domestic and international stock. Working paper. 2000.

COCHRANE, J. **Where is the market going?** Uncertain facts and novel theories. *Economic Perspectives* 21(6):3-37. 1997.

\_\_\_\_\_. **New facts in finance.** Working paper. 1999.

\_\_\_\_\_. **Portfolio advice for a multifactor world.** Working paper. 1999.

COPELAND, T.; KOLLER, T.; MURRIN, J. **Valuation.** Measuring and managing the value of companies. New York: John Wiley & Sons, 1994

CORNELL, B. **Corporate valuation.** New York: Business One Irwin, 1993.

\_\_\_\_\_. **The equity risk premium:** The long run future of the stock market. John Wiley & Sons, 1999.

CORRÊA, L. S. **Crescimento sustentável.** 1994. 51 f. Monografia - Depto. de Engenharia Industrial, PUC-Rio, 1994.

DAMODARAN, A. **Damodaran on valuation.** New York: John Wiley & Sons, 1994.

\_\_\_\_\_. **Estimating equity risk premiums.** Working paper. 1998.

DAVIDSON, I.; OKUNEV, J. **Modelling the equity risk premium in the long term.** Working paper (University of Warwick) and (University of New South Wales). 2000.

FAMA, E. F.; FRENCH, K. R. **Dividend yields and expected stock returns.** *Journal of Financial Economics*. 22(1):3-27. 1988a.

\_\_\_\_\_. **Permanent and temporary components of stock prices.** *Journal of Political Economy* 96(2):246-273. 1988b.

\_\_\_\_\_. **Business conditions and the expected returns on stocks and bonds.** *Journal of Financial Economics* 25(1):23-50. 1989.

\_\_\_\_\_. **The cross-section of expected stock returns.** *Journal of Finance* 47(2):427-466. 1992.

\_\_\_\_\_. **Industry costs of equity.** *Journal of Financial Economics* 43: 153-193. 1997.

\_\_\_\_\_. **The corporate cost of capital and the return on corporate investment.** Working Paper. 1998.

\_\_\_\_\_. **The equity premium.** Working paper. 2001.

FAMA, E. F.; SCHWERT, G. W. **Asset returns and inflation.** Journal of Financial Economics 5(2):115-146. 1977.

FERSON, W. E.; HARVEY, C. R. **The variation of economic risk premiums.** Journal of Political Economy, vol. 99, no. 2: 385-415. 1991.

FRENCH, K. R.; ROLL, R. **Stock return variances:** The arrival of information and the reaction of traders. Journal of Financial Economics 19(1):2-29.1986.

FRENCH, K. R.; SCHWERT, G. W.; STAMBAUGH, R. F.. **Expected stock returns and variance.** Journal of Financial Economics 17(1):5-26. 1987.

GLASSMAN, J. K.; HASSETT K. A. **Are stocks overvalued? Not a chance.** Wall Street Journal, March 30. p.28, section 1. 1998.

GLOSTEN, L. R.; JAGANNATHAN, R.; RUNKLE, D. E. **On the relation between expected value and the variance of the nominal excess return on stocks.** Journal of Finance 48(5):1779-1801. 1993.

GOETZMANN, W. N.; JORION, P. **A century of global stock markets.** Working paper 5901. New York: National Bureau of Economic Research. 1997.

GOYAL, A.; WELCH, I. **Predicting the equity premium.** Working paper. 1999.

HARVEY, C. R. **The risk exposure of emerging equity.** The World Bank Economic Review, vol. 9, no. 1: 19-50. 1997.

IBBOTSON, R. G.; PENG, C. **The supply of stock market returns.** Working paper. 2001.

JAGANNATHAN, R.; MCGRATTAN, E. R.; SCHERBINA, A. **The declining U.S. equity premium.** Federal Reserve Bank of Minneapolis Quarterly Review Vol.24, No.4, Fall 2000, p. 3-19. 2000.

JP MORGAN'S "Modified World CAPM". 2000.

KURZ, M. **Social states of belief and the determinants of the equity risk premium in a rational belief equilibrium.** Working paper (Stanford University), 1998.

LAKONISHOK, J.; SHLEIFER, A.; VISHNY, R. W. **Contrarian investment, extrapolation, and risk.** Journal of Finance 49 (5). 1994.

LEIBOWTZ, M. L. **Equity risk premium forum.** AIMR. 2001.

McKINSEY&COMPANY, INC. **Cost of capital in Brazil.** 1993.

MEHRA, R.; PRESCOTT, E. **The equity premium:** a puzzle. *Journal of Monetary Economics* 15(2):145-161. 1985.

—. **The equity premium:** a solution? *Journal of Monetary Economics* 22. 1988.

MEHRA, R. **The equity premium.** Working Paper. 2001.

MERTON, R. C. **On estimating the expected return on the market:** an explanatory investigation. *Journal of Financial Economics* 8(3):323-361. 1980.

MILLER, M.; FRANCO, M. **Dividend policy, growth and the valuation of shares.** *Journal of Business*, 1961.

NELSON, D. B. **Conditional heteroskedasticity in asset returns:** a new approach. *Econometrica* 59(2):347-370. 1991.

POTERBA, J.; SUMMERS, L. J. **The persistence of volatility and stock market fluctuations.** *American Economic Review* 75(5):1142-1151. 1986.

SAMPAIO, F. S. **Existe equity premium puzzle no Brasil?** Monografia - Depto. de Economia, PUC-Rio, 1999.

SANVICENTE, A. Z.; MINARDI, A. M. A. F. **Problemas de estimação do custo de capital no Brasil.** Monografia - Depto. de Economia, PUC-Rio, 1999.

SHARPE, W. F.; ALEXANDER, G. J.; BAILEY, J. V. **Investments.** 5. ed. Englewood Cliffs, NJ: Prentice-Hall. 1995.

SHILLER, R. **Capital asset prices:** a theory of market equilibrium under conditions of risk. *Journal of Finance* 19(3): 425-442. 1981.

SIEGEL, J. **Stocks for the long run.** 2. ed. New York: Irwin, 1998.

**The Equity Risk Premium: Dead, sleeping or ready to bite back?** – transcrição de um seminário realizado pela Merrill Lynch realizado em Londres, 1999.

TURNER, C. M.; STARTZ, R.; NELSON, C. R. **A Markov model of heteroskedasticity, risk and learning in the stock market.** *Journal of Financial Economics* 25(1):3-22. 1989.

**UNIBANCO. Relatório de avaliação econômico-financeira da Empresa de Infovias S.A. 2002.**

**WELCH, I. Views of financial economists on the equity premium and on professional controversies.** Journal of Business, 2000.

## APÊNDICE

TABLE 1: Retorno Anual das Ações, Bonds, Bills e Inflação nos EUA

Year	Retorno do S&P 500	Retorno do 20-Year Treasury Bond	Retorno do 1-Month Treasury Bill	Inflação	Acumulação de Riqueza das Ações	Acumulação de Riqueza dos Bonds	Acumulação de Riqueza das Bills	Acumulação de Riqueza da Inflação	Equity Premium sobre Bonds	Equity Premium sobre Bills
1926	11.61%	7.77%	3.27%	-1.49%	1.00	1.00	1.00	1.00	3.84%	8.34%
1927	37.48%	8.94%	3.13%	-2.09%	1.12	1.08	1.03	0.99	28.54%	34.35%
1928	43.61%	0.08%	3.23%	-0.96%	2.20	1.17	1.10	0.96	43.53%	40.38%
1929	-8.41%	3.42%	4.74%	0.21%	2.02	1.22	1.15	0.96	-11.83%	-13.15%
1930	-24.90%	4.65%	2.43%	-6.03%	1.52	1.27	1.18	0.90	-29.55%	-27.33%
1931	-43.35%	-5.32%	1.09%	-9.52%	0.86	1.20	1.19	0.81	-38.03%	-44.44%
1932	-8.20%	16.84%	0.95%	-10.30%	0.79	1.41	1.20	0.73	-25.04%	-9.15%
1933	53.97%	-0.07%	0.30%	0.51%	1.21	1.41	1.21	0.73	54.04%	53.67%
1934	-1.43%	10.02%	0.18%	2.03%	1.20	1.55	1.21	0.75	-11.45%	-1.61%
1935	47.66%	5.00%	0.14%	3.00%	1.77	1.62	1.21	0.77	42.66%	47.52%
1936	33.92%	7.50%	0.19%	1.21%	2.37	1.75	1.21	0.78	26.42%	33.73%
1937	-35.02%	0.22%	0.29%	3.10%	1.54	1.75	1.22	0.80	-35.24%	-35.31%
1938	31.14%	5.51%	-0.04%	-2.78%	2.02	1.85	1.22	0.78	25.63%	31.18%
1939	-0.42%	5.95%	0.01%	-0.48%	2.01	1.96	1.22	0.78	-6.37%	-0.43%
1940	-9.78%	6.09%	-0.02%	0.96%	1.81	2.07	1.22	0.79	-15.87%	-9.76%
1941	-11.58%	0.93%	0.04%	9.72%	1.60	2.09	1.22	0.86	-12.51%	-11.62%
1942	20.33%	3.22%	0.28%	9.30%	1.93	2.16	1.22	0.94	17.11%	20.05%
1943	25.91%	2.07%	0.35%	3.18%	2.43	2.21	1.22	0.97	23.84%	25.56%
1944	19.73%	2.82%	0.33%	2.12%	2.90	2.27	1.23	0.99	16.91%	19.40%
1945	36.41%	10.73%	0.32%	2.25%	3.96	2.51	1.23	1.02	25.68%	36.09%
1946	-8.07%	-0.09%	0.36%	18.16%	3.64	2.51	1.24	1.20	-7.98%	-8.43%
1947	5.70%	-2.63%	0.50%	9.01%	3.85	2.44	1.24	1.31	8.33%	5.20%
1948	5.51%	3.38%	0.81%	2.71%	4.06	2.53	1.25	1.34	2.13%	4.70%
1949	18.79%	6.44%	1.12%	-1.81%	4.83	2.69	1.27	1.32	12.35%	17.67%
1950	31.74%	0.05%	1.22%	5.79%	6.36	2.69	1.28	1.40	31.69%	30.52%
1951	24.02%	-3.94%	1.49%	5.87%	7.88	2.58	1.30	1.48	27.96%	22.53%
1952	18.35%	1.16%	1.65%	0.89%	9.33	2.61	1.32	1.49	17.19%	16.70%
1953	-0.98%	3.63%	1.83%	0.64%	9.24	2.71	1.35	1.50	-4.61%	-2.81%
1954	52.62%	7.18%	0.86%	-0.50%	14.10	2.90	1.36	1.49	45.44%	51.76%
1955	31.54%	-1.28%	1.57%	0.36%	18.55	2.87	1.38	1.50	32.82%	29.97%
1956	6.56%	-5.58%	2.47%	2.86%	19.77	2.71	1.41	1.54	12.14%	4.09%
1957	-10.79%	7.47%	3.15%	3.02%	17.63	2.91	1.46	1.59	-18.26%	-13.94%
1958	43.37%	-6.11%	1.53%	1.77%	25.28	2.73	1.48	1.62	49.48%	41.84%
1959	11.98%	-2.28%	2.97%	1.51%	28.31	2.67	1.53	1.64	14.26%	9.01%
1960	0.46%	13.79%	2.67%	1.48%	28.44	3.04	1.57	1.66	-13.33%	-2.21%
1961	26.89%	0.96%	2.12%	0.67%	36.09	3.07	1.60	1.68	25.93%	24.77%
1962	-8.73%	6.88%	2.72%	1.21%	32.94	3.28	1.64	1.70	-15.61%	-11.45%
1963	22.78%	1.21%	3.11%	1.66%	40.44	3.32	1.69	1.72	21.57%	19.67%
1964	16.51%	3.51%	3.53%	1.21%	47.12	3.43	1.75	1.74	13.00%	12.98%
1965	12.45%	0.70%	3.92%	1.93%	52.98	3.46	1.82	1.78	11.75%	8.53%
1966	-10.05%	3.64%	4.75%	3.35%	47.66	3.58	1.91	1.84	-13.69%	-14.80%
1967	23.99%	-9.19%	4.20%	3.04%	59.09	3.25	1.99	1.89	33.18%	19.79%
1968	11.08%	-0.26%	5.22%	4.72%	65.64	3.25	2.09	1.98	11.34%	5.86%
1969	-8.49%	-5.07%	6.57%	6.10%	60.07	3.08	2.23	2.10	-3.42%	-15.06%
1970	4.03%	12.10%	6.52%	5.48%	62.49	3.45	2.38	2.22	-8.07%	-2.49%
1971	14.32%	13.24%	4.39%	3.36%	71.44	3.91	2.48	2.29	1.08%	9.93%
1972	18.98%	5.67%	3.84%	3.42%	85.00	4.13	2.58	2.37	13.31%	15.14%
1973	-14.67%	-1.10%	6.93%	8.78%	72.53	4.09	2.75	2.58	-13.57%	-21.60%
1974	-26.46%	4.35%	8.01%	12.20%	53.34	4.26	2.97	2.90	-30.81%	-34.47%
1975	37.21%	9.19%	5.80%	7.01%	73.18	4.66	3.15	3.10	28.02%	31.41%
1976	23.85%	16.76%	5.08%	4.82%	90.64	5.44	3.31	3.25	7.09%	18.77%

Year	Retorno do S&P 500	Retorno do 20-Year Treasury Bond	Retorno do 1-Month Treasury Bill	Inflação	Acumulação de Riqueza das Ações	Acumulação de Riqueza dos Bonds	Acumulação de Riqueza das Bills	Acumulação de Riqueza da Inflação	Equity Premium sobre Bonds	Equity Premium sobre Bills
1977	-7.18%	-0.65%	5.13%	6.77%	1.00	1.00	1.00	1.00	-6.53%	-12.31%
1978	6.57%	-1.18%	7.20%	9.03%	84.13	5.40	3.48	3.47	7.75%	-0.63%
1979	18.42%	-1.21%	10.38%	13.32%	106.17	5.27	4.11	4.28	19.63%	8.04%
1980	32.41%	-3.96%	11.26%	12.41%	140.58	5.06	4.58	4.82	36.37%	21.15%
1981	-4.91%	1.86%	14.72%	8.94%	133.68	5.16	5.25	5.25	-6.77%	-19.63%
1982	21.41%	40.37%	10.53%	3.87%	162.30	7.24	5.80	5.45	-18.96%	10.88%
1983	22.51%	0.69%	8.80%	3.80%	198.83	7.29	6.31	5.66	21.82%	13.71%
1984	6.27%	15.54%	9.78%	4.02%	211.30	8.42	6.93	5.88	-9.27%	-3.51%
1985	32.17%	30.96%	7.73%	3.77%	279.28	11.03	7.47	6.11	1.21%	24.44%
1986	18.47%	24.45%	6.15%	1.14%	330.86	13.73	7.93	6.18	-5.98%	12.32%
1987	5.23%	-2.70%	5.46%	4.41%	348.16	13.36	8.36	6.45	7.93%	-0.23%
1988	16.81%	9.68%	6.36%	4.42%	406.69	14.65	8.89	6.73	7.13%	10.45%
1989	31.49%	18.10%	8.38%	4.64%	534.75	17.31	9.64	7.05	13.39%	23.11%
1990	-3.17%	6.20%	7.82%	6.10%	517.80	18.38	10.39	7.48	-9.37%	-10.99%
1991	30.55%	19.26%	5.60%	3.07%	675.99	21.92	10.97	7.71	11.29%	24.95%
1992	7.67%	9.41%	3.51%	3.03%	727.84	23.98	11.36	7.94	-1.74%	4.16%
1993	9.99%	18.24%	2.90%	2.75%	800.55	28.35	11.69	8.16	-8.25%	7.09%
1994	1.31%	-7.78%	3.91%	2.67%	811.04	26.15	12.14	8.37	9.09%	-2.60%
1995	37.43%	31.67%	5.60%	2.67%	1,114.61	34.43	12.82	8.60	5.76%	31.83%
1996	23.07%	-0.92%	5.20%	3.33%	1,371.75	34.11	13.49	8.88	23.99%	17.87%
1997	33.37%	15.87%	5.25%	1.70%	1,829.50	39.53	14.20	9.04	17.50%	28.12%
<b>1926 - 1997</b>										
Average	13.0%	5.6%	3.8%	3.2%	10.8%	5.1%	3.7%	3.1%	7.3%	9.2%
SD	20.3%	9.2%	3.2%	4.5%					20.6%	20.7%
SD of mean	2.4%	1.1%	0.4%	0.5%					2.4%	2.4%
<b>1946 - 1997</b>										
Average	13.7%	5.9%	4.9%	4.4%	12.7%	5.4%	4.8%	4.0%	7.8%	8.9%
SD	16.5%	10.5%	3.1%	3.8%					17.4%	17.1%
SD of mean	2.3%	1.5%	0.4%	0.5%					2.4%	2.4%

SD = standard deviation; S&P = Standard & Poor's