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6
Apêndice

In Table 12 we found that mean yearly return was increasing with size, across the five size groups we formed. This is at odds with the empirical evidence first reported by Banz (1981), the so called "size effect". In Section 4.3 we argued that two reasons for this apparent contradiction we previous empirical literature were, first, that we classify size using market capitalization contemporaneous to returns, and, second, that recent empirical literature was unable to replicate the size effect.

Table 15 - Analysis of "size effect" on returns – differences in size classification

The table presents yearly returns for the sample period from January 1965 to December 2007. Only observations (stock-years) with data for all trading days in the year are considered. Mean returns are calculated by observation (stock-year) and then using all observations that fit in the size group and time period. Standard deviations are presented in parenthesis. The lines in the table correspond to different procedures to determine market capitalization, the variable used to classify stocks by size group.

Size Group	1 (small)	2	3	4	5 (big)
by mean in current year	0.001 (0.488)	0.060 (0.416)	0.083 (0.379)	0.097 (0.336)	0.107 (0.296)
by mean in previous year	0.061 (0.458)	0.070 (0.407)	0.069 (0.386)	0.076 (0.347)	0.076 (0.307)
by end of previous year	0.055 (0.483)	0.057 (0.426)	0.064 (0.393)	0.069 (0.360)	0.073 (0.313)

In Table 15 we provide support to our first argument. When we classify stocks by size based on market capitalization of previous year (either mean or year end), the difference in returns between any two size groups is reduced at least by 50%. Taking the extremes (groups 1 and 5), the difference in mean returns is reduced by more than 80%.

In Table 16 we provide empirical support to our second argument. Classifying stocks by size based on year end market capitalization of previous year, as is usual in finance literature, we show that the decrease of return with size was present only in the period before Banz (1981) report.

Table 16 - Analysis of "size effect" on returns – differences in period of analysis

The table presents yearly returns for three sample periods. Only observations (stock-years) with data for all trading days in the year are considered. Mean returns are calculated by observation (stock-year) and then using all observations that fit in the size group and time period. Standard deviations are presented in parenthesis.

Size Group	1 (small)	2	3	4	5 (big)
1965 – 1979	0.082 (0.470)	0.059 (0.447)	0.052 (0.405)	0.048 (0.367)	0.029 (0.294)
1980 – 1993	0.038 (0.544)	0.072 (0.414)	0.090 (0.372)	0.105 (0.308)	0.116 (0.260)
1994 – 2007	0.046 (0.452)	0.045 (0.424)	0.052 (0.403)	0.055 (0.387)	0.071 (0.351)