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Thema:

The Ivy-Portfolio: An Empirical Analysis

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1 Introduction

Endowments have attracted an increasing amount of publicity in recent years for their explosive growth and spectacular performance.[2] Elite universities are characterized to manage enormous endowments, realizing astonishing high excess returns in the last decades.[3] Their investment performance has been subject of examination in the literature of finance. They nearly represent an ideal laboratory for studying the asset allocation process for several reasons, including the varied nature of the objective functions and investment restrictions that define their investment problem, the virtually infinite time horizon they face, and their ability to both form and periodically adjust a truly diversified portfolio across several asset classes.[4] Evidence about the benefits of these strategies applied by them are relevant and of obvious interest for entities and individuals with funds to be allocated.

Purpose of this paper is to obtain an useful insight to the endowment world, more specifically to the 'Ivy League world' by describing and analyzing the investing strategies components taken by these Top Endowments, which happen to have excellent and consistent results, reducing the drawdowns in one of the greatest Bull Markets in United States (U.S.). Surprisingly, these universities endowments produced outperforming double digit annual returns and less volatility than the Standard & Poor's 500 Index.[5]

The first part of this paper will provide a brief overview of the these institutions universe, especially addressing the composition of the Ivy League Portfolio Determinants and Allocations, accompanied by a short remembrance of their development over the years. Followed with a short description for each of the university representing this League, in a detailed effort to perceive similarities and the portfolios' compositions. Additionally, other relevant determinants will be appealed, such as the risk-management and the diversification effects, but more importantly the active management decision skills, which are fundamental for the outstanding success of these institutions.

Subsequently, the Benchmark Portfolios and the related underlying asset class index time-series are introduced, statistical tests and necessary processing steps are undertaken as well as sum-

[2]Lerner, Schoar and Wang (2008), P.209
[3]Faber (2009), P.ix
[4]Brown, Garlappi and Tiu (2007), P.37
[5]Faber (2009), P.ix

mary statistics presented, using a comprehensive data set spanning from 2005 to 2013. Afterwards, a model to determine the asset class factor mix for the Ivy League and Average Endowment returns, based upon Sharpe (1992) will be taken into account, seeking to examine the exposures to the selected key asset classes and exemplifying the magnitude of the alternative asset classes in the outperformance of these funds. Moreover, the final goal of this paper will be centred in the different portfolio determinant contribution to the return variation through the employance of cross-sectional and time-series analysis, despite the wide heterogeneity in the asset allocation weights deployed. The objective is to demonstrate which of the factors is the most influential driver for the outperformance of the Ivy League Schools compared to the Average Endowments, based on Brown, Garlappi and Tiu (2007) and Xiong, Ibbotson, Idzorek and Chen (2010) Models, reinforcing the notion that the asset allocation, as justified along these years, do not completely explain the whole return attribution and that the security selection is the responsible for such overwhelming results among peers.

Particularly, Ivy League Funds emphasize and benefit more from the implementation of Active Management through the exploitation of market inefficiencies, stronger negotiating position, and superior access to capital markets, in comparison to the Average Endowments. Finally, a Moving Average Process will be performed to prove the increasingly role of Active Management skills for the accomplishment of superior returns.[6]

[6]Faber (2009), P.ix

9 Conclusion

Ivy League Schools probed to possess superior asset selection ability beyond their strategies for allocating funds to certain asset classes. Qualitative evidence suggests that these endowments benefit from superior investment committees, more highly-skilled investment managers, and the broader knowledge bases and social networks of the schools themselves.[164] This assignment has explained the relevance of these institution portfolio strategies, beginning with the increasingly magnitude in the tendency towards alternative asset classes described in chapter six, as well as their diversification factor which are fundamental for the obtainance of excess returns. Most of all, the aim of this paper was align in the understanding of the different return contributors, distinguishing between the passive and the active ones. The first considers only the asset allocation, while the latter concentrates on the market timing and the security selection. Furthermore, during the last three decades, several authors like Brown, Garlappi and Tiu (2007) have stated the overwhelming importance of asset allocation in the bestowal of outperformance. On the other side Xiong, Ibbotson, Idzorek and Chen (2010) have contradicted it, revealing the equal importance of security selection and asset allocation among endowments over time, arguing that the determining effect of asset allocation relies in the market movement.

In an attempt of analyzing their importance, cross-sectional and time-series anaylisis were performed. Thus, the findings presented in chapter seven, demonstrated that Ivy League Portfolios Returns are similar, but more attributable to the selection than to the asset allocation component, consequently being the active management skills the greastest responsible for the variation in return contribution among peers over time. On the other side, Average Endowments follow an equilibrated, more passive than active effort of adquiring abnormal returns.

Nevertheless, these institution funds vary substantially in their asset allocation weights, all subject to a similar constraint in their asset allocation policy decision. Moreover, the ability of an endowment manager to reallocate capital between several asset classes is not completely unrestricted but rather subject to volatility constraints, i.e. a self imposed risk-budget of these institutions. The fact that they hold different asset allocation weights is set up to the readiness with which endowments can find skilled active managers within each asset class (i.e. the ”alpha-

[164]Lerner, Schoar and Wang (2008), P.208-209

generating" capability of the asset class).[165] Consistently, Ivy League Endowment Funds place more emphasis on active security selection skills, performing better on a risk-adjusted basis, than funds that rely mostly on their initial passive policy allocation decision.[166] The results of this research support the idea that the outperformance in the latter years are related to the exhaustive analisis of inefficient riskier markets, in specific the Emerging and Alternative Assets. Top-tier managers benefit from extraordinary deal flow, a stronger negotiating position, and superior access to capital markets, and thus are well positioned to outperform their peers. The relative importance of both asset allocation policy return in excess of market return and active portfolio management is an empirical result that is highly dependent on the fund, the peer group, and the period being analyzed.[167]

The findings do not imply that ordinary investors could achieve similar results by mimicking the strategies of the Ivy League. Indeed, the same strategies that have worked so well for the endowments in the past two decades may not do so in the future.[168] The gap between average and top endowments have decrease in the recent years, also alternative investment markets which are particularly vulnerable to influxes of capital, are becoming more capitalized as the strategies of the elite endowments are being scrutinized and imitated as never before.[169] The first mover lags advantage will become much shorter.

The demand for talent to lead the growing number of investment funds pursuing sophisticated strategies world-wide, are likely to increase the temptation for mangers to pursue their activities in the private sector, whether the attraction of working for the good of an academic institution will be sufficient to retain top performers remains to be seen.[170]

Despite its exploratory nature, this thesis offers some insight into the Endowment Active Management strategies proposed by Faber and Richardson, probing several important conclusions. The Ivy Portfolio with 1MMA improve the investments horizons of individuals and institutions by offering the chance to invest more dinamically, as it is possible to decrease portfolios volatility and ameliorate the returns.

[165] Brown, Garlappi and Tiu (2007), P.23
[166] Brown, Garlappi and Tiu (2007), P.37
[167] Xiong, Ibbotson, Idzorek and Chen (2010), P.7
[168] Lerner, Schoar and Wang (2008), P.209
[169] Lerner, Schoar and Wang (2008), P.221
[170] Lerner, Schoar and Wang (2008), P.220