VARIATION IN THE STRUCTURE AND ADMINISTRATION OF STUDENT-MANAGED INVESTMENT FUNDS

Charles M. Boughton, School of Business, Truman State University, 100 E. Normal Street, Kirksville, MO 65301, 660-785-4521, boughton@truman.edu
Katherine L. Jackson, School of Business, Truman State University, 100 E. Normal Street, Kirksville, MO 65301, 660-785-6019 kjackson@truman.edu

ABSTRACT

Several years have passed without much formal investigation of Student-Managed Investment Fund (SMIF) practices. Research began again in 2016. The findings of this study conclude that not only is the prior research still valid, but the issues raised in the earlier research are still present. Both topics are addressed further in this paper. The question of "where do we go from here" may require additional research.

KEYWORDS

Student-Managed Investment Funds, SMIF, Finance Education

INTRODUCTION

Since Lawrence's last article [17], several years have passed without much formal investigation of Student-Managed Investment Fund (SMIF) practices. The research described in this paper began about the time Kubik's [14] disseminated his research. The research path of this paper and Kubik's are highly complementary and taken together provide a fair assessment of "what's happening" in the world of SMIF's circa 2017.

This research intends to examine three questions related to SMIF's. First, has the world of SMIF's changed since the last studies were conducted or are the gleanings from prior research still valid? Second, what are "best practices" in the SMIF community and how can we best share this information? Third, where do we go from here? We confirmed the issue of validation of prior findings via a largely descriptive survey and the issue of "best practice dissemination" was addressed both through the survey and also by primary research via telephone and panel discussion with many of the leaders in the field.

In short, this paper's findings are that not only is the prior research still valid, but the issues raised in the earlier research are still present. The authors address both topics in the Research Results section. The question of "where do we go from here" may be more speculative and require additional research. In the following sections, the authors provide a condensed literature review, methodology, research results, limitations, and a summary with conclusions.

LITERATURE REVIEW

Student-Managed investment funds (SMIF's) began as an experiment in the 70s and 80s and have since become widely accepted as a viable learning and recruitment tool for many business schools. The literature splits roughly into three distinct thematic areas. First, those who detailed how they set up their school's SMIF (Belt [2]; Hirt [10]; Bear [1]; Markese [20]; Tatar [24]; Block & French [4]; Kahl [12]; Cox & Goff [7]; Mallett & Lerro [19]; Pactwa, Wong & Moore [22]; Dewally & Drause [9]; Krueger

[13]; and Cooley & Hubbard [6]). Standard approaches along with many innovative approaches such as Bhattacharya & McClung [3] who set up their initial fund with money they borrowed from a bank and Dewally & Drause [9] who created their portfolio using exchange-traded funds (ETF's) illustrate the variety of ways SMIF's initially become established. Second, those who collected SMIF data (Lawrence [15]; Lawrence [16]; Neely & Cooley [21]; Lawrence [17]; Peng, Dukes & Bremer [23]; and Kubik [14]). Third, those who used SMIFs in unique ways or who were able to measure outcomes. For example, Daugherty [8] was able to measure learning outcomes using stock picks from the beginning of a student's tenure in the SMIF and compare them to the stock picks those same students made at the end of their tenure with the fund. Daugherty did this using 14 years' worth of data and found a significant difference between the two implying there is definite value in experience. Jennings & Jennings [11] were able to measure a significant home bias across SMIFs with only a minor difference in home bias between smaller funds (<$1 million) and larger ones (>$1 million). Caldwell and Dolvin [5] debated the existence and subsequent impact of herding behavior in student-managed funds. Their article provides guidance on how to minimize this behavior through education.

METHODOLOGY

The primary data collection for this project was an email-linked survey directed to SMIF faculty advisors (endnote 1). The initial survey included the 41 U.S. universities that are members of the Student-Managed Investment Fund Consortium (SMIFC). The SMIFC membership response was 16/41 (39%). Subsequently, the scope was expanded to test if SMIFC member institutions were statistically different from non-member institutions. A second sample was selected on a random basis (excluding the SMIFC membership) from the 441 schools identified by Kubik [14]. The authors sent the same survey solicitation to SMIF faculty advisors at 42 non-SMIFC member schools, and ten responded (24%). Finally, Chi-square was used to determine if the SMIFC membership responses were significantly different from the non-member responses. As there was no notable statistical difference between the two samples, the samples were combined to generate a database of responses that represent a sampling of about 6% of the SMIF's at U.S. universities (endnote 2).

Also, primary data collection extended to telephone interviews and panel discussions with leaders in the SMIF community. Seven (7) faculty members at various institutions participated in this aspect of the research (endnote 3). Of the seven participants, six were from U.S. universities and one from a Canadian university.

RESEARCH RESULTS

There seems to be no right or wrong way to structure a Student-Managed Investment Fund (SMIF) as long as the fund operates under the auspice of an Investment Policy Statement (IPS) or a similar oversight mechanism. The overwhelming consensus in the literature is that the educational benefits of operating a SMIF far outweigh the administrative challenges of creating a student fund tailored to individual donor expectations/constraints. In response to the question "what do you think the long-term value of running a SMIF is for your institution," survey respondents indicated that the funds create institutional value in some areas. First, we noted practical education resulting in internship opportunities and job placement. Second, we identified university/program visibility, the development of alumni/professional relationships, and program recruitment/retention. Third, an emphasis on financial performance was seldom mentioned (7%). These findings are consistent with the existing literature.

While not much supported by the literature (see Block and French [4]), the debate remains about fund structure as part of a class or some other type of structure (co-curricular is the term used herein to describe the "other" ways to structure and administer a SMIF). The rationale for a classroom structure includes replacement of a simulation with hands-on investment, student fee generation to support the SMIF, and donor preference. Arguments against class-based programs are primarily related to continuity issues. If the orientation of the institutional/professional bias is toward long-term investing versus speculation, is a semester "long-term" or not? In response to this criticism, many universities allow students to enroll in either one class multiple times or in a sequence of courses that encourages multiple semesters/years of participation in the SMIF. For most class-based SMIF's, admission to the program is upper-division or graduate. Our research tends to validate that classroom structures have shorter tenure while co-curricular structures have longer tenures (Fisher's exact: p=.097).

The three most popular models seem to be as a class or component of a class that in many cases may be repeated for additional credit and continuity, a co-curricular organization or club, or an organization independent of the university that uses a board of investment professionals for oversight. In probably the first meta-study of SMIF's and still a seminal article related to SMIF's, Lawrence [17] identifies that the structure of approximately 71% of the programs in the US is as part of a formal class. The survey findings validate this point as 69% of survey respondents reported their SMIF operating as part of a formal class.

The survey initially drew from two samples, SMIFC members, and non-SMIFC members. While most of the results from the individual samples were the same, one of the key areas of distinction between the two samples was concerned with the roles that faculty members played. The non-SMIFC sample respondents were 100 percent classroom-based, and as such reported the faculty roles in fund administration was largely serving as classroom faculty and planning. Contrastingly, only half of the SMIFC funds reported that they were classroom-based and faculty roles were much more varied with faculty being much more involved in planning, fund-raising, and other activities. By and large, the faculty associated with co-curricular funds are not compensated by either course release or by the mentorship of the fund being part of their regular teaching load. Alternatively, all of the faculty respondents of classroom-based SMIF's received compensation for their involvement with the fund.

The biggest challenge for most SMIF's is the acquisition of the initial investment to start the fund. SMIF administrative and academic leaders have been keen to adapt their fund's operations around the guidelines established by the original donor (or, as the case may be, the administration of the university's endowment or corporate sponsor). The data in the literature to date seems to suggest that once a university launches a SMIF, the forward probability of continuous operation increases substantially. Anecdotally, the evidence suggests that once a school establishes a SMIF, they are successful. In all of the eighty (80) plus funds queried by this study, none of them suggested that they had ceased fund operations. Most of the SMIFs surveyed indicated that they had been in existence for five years or longer (92%) with many reporting tenures of more than ten years.

Universities have realized that SMIF operations have overhead and "hidden costs" that are above and beyond normal transaction fees and taxation issues (Mallett & Lerro, [19]). These costs include investments in infrastructure such as computer classrooms and investment in specialized software. These costs also include supportive investment in instructional costs such as additional faculty, elective course offerings, staff-time devoted to securing guest lectures, travel to and participation in professional development events. These supportive costs are ongoing and add "hidden cost."

Kubik [14] notes the literature surrounding Student-Managed Investment Funds (SMIF's) indicates that on college campuses across the US and Canada, SMIF's have proven their value because they provide the link between financial theory and the actual practice of finance and investment management. Mallet, Belcher & Boyd [18] provide (primarily anecdotal) evidence to support this assessment. Lawrence [17] remains the most comprehensive study of SMIFs to date reporting that 81% of the faculty surveyed felt that students who actively participated in SMIFs were "better trained" and had an advantage upon entering the workforce post-graduation. Pactwa [22] explores the topic of the benefits of "experiential learning." Beyond the benefits of operating a fund, the primary outcomes expressed by faculty members stem from student professional development and the linkage of theory with practice. Our survey validates those findings as the responses to the question "how have your expectations been met/not met," all respondents (100%) indicated that their expectations were met (yes/no question). The authors report the following results as examples of expectations met from open-ended questions: professional development (52%), linking theory to practice (65%), recruitment/retention (42%), and program visibility (23%).

Kruger [13] notes the importance of a formal Investment Policy Statement (IPS). An Investment Policy Statement (IPS) is a generalized agreement between the "client" and the "manager" (in this case a SMIF) about how funds will be managed and invested. There is wide variation in the actual terms of the agreement. Most IPS's are very prescriptive and limit investments by the manager to specific asset classes and explicitly prohibit investments in other asset classes. It is an accepted "best practice" that fund managers operate under an IPS. Kruger [13] advocated the development and compliance monitoring of IPS's for SMIF's. Our research indicates that 100% of the SMIF's surveyed were operating under formal IPS's. There was some variation in that the Tennessee Valley Authority (TVA) funded SMIF's are operating under the guidelines of the TVA, but we coded those responses as a donor-specific IPS. The most common model is a joint effort that includes the donor, faculty, and a board of trustees (usually the university's Foundation board). SMIF's obtain input from multiple constituencies with either the donor or the university foundation board as the final oversight. Compliance concerning the administration of the IPS is usually one of the key responsibilities of the classroom faculty or faculty advisor/mentor (67%). Compliance otherwise is a function of an oversight board or the board of trustees.

In this study, faculty from class-based SMIF's reported that they received compensation for their services as faculty advisors (due in part to the revenue-generating nature of the course) and faculty advisors for co-curricular SMIFC's reported that they did not receive either cash compensation or course-release time. Mallett and Larro [19] recognized this issue and also discussed the potential conflicts that faculty involvement with SMIF's such as reduced time for research and writing as active faculty engagement with SMIF's (under any structure) is a time-intensive endeavor. As a "non-satisfier" this sentiment was expressed by more than one faculty advisor in open-ended responses to the current survey.

LIMITATIONS AND FURTHER STEPS

As with most of the studies, the sample sizes of this study have been relatively small. Small samples wreak havoc with standard statistical measures such as Chi-Square. It is very difficult to get p-values less than .10 much less the preferred .05 or less. Nevertheless, p-values below .10 do indicate a somewhat significant result.

The notable exceptions to small sample size are Lawrence [17], and Kubik [14] with sample sizes more than 100. Extrapolating from a small n to a big N is largely the marketer's realm, but with this study's two-sample methodology, the inferences regarding the population may be more statistically relevant.

Out of the roughly 1700 business school programs in the US and Canada, approximately 440 have active SMIF programs (Lawrence, [17] and Kubik, [14]).

Further steps include expanding the U.S. sample to the known population, reworking the survey a bit to make it more interesting based on the issues raised in this and other current research, and extending the study to SMIF's operated internationally. The successes of international universities at competitions such as the CFA Institute Student Research Challenge indicate that there may be much we can learn from international SMIF models.

CONCLUSIONS AND SUMMARY

SMIF's are a proven way to increase student, alumni, and other important constituent engagement. All indicators are that they enhance not only the student experience, but the experience and perceptions of prospective students, prospective employers, and alumni as well. Whether classroom-based or co-curricular the benefits that accrue from operating programs of this nature exceed the costs and as such should receive the full support of faculty and administrators. At the universities where programs currently exist, all sides should actively promote the continued growth of their SMIF program. Universities that don't have programs of this nature should consider the development of a SMIF program that allows "real students to invest real money."

REFERENCES

[1] Bear, F. T. & Boyd, G. M. An applied course in investment analysis and portfolio management. *Journal of Financial Education*, 1984, *13* (Fall), 68-71.

[2] Belt, B. A securities portfolio managed by graduate students. *Journal of Financial Education*, 1975, *4* (Fall), 77-81.

[3] Bhattacharya, T. K. & McClung J. J. Cameron University's unique student-managed investment portfolio. *Financial Practice and Education*, 1994, *4* (1), 55-60.

[4] Block, S. B., & French, D. W. The student-managed investment fund: A special opportunity in learning. *Financial Practice and Education*, 1991, *1* (1), 35-40.

[5] Caldwell, C. B. & Dolvin, S. D. (2012) Herding behavior in student-managed investment funds: Identification, impact and reduction. *Journal of Economics and Economic Education Research*, 2012, *13* (2), 97-110.

[6] Cooley, P. L. & Hubbard, C. M. FAQ's about student-managed funds. *Advances in Financial Education*, 2012, *10* (1), 72-83.

[7] Cox, D. R., & Goff, D. C. Starting and operating a student investment club. *Financial Practice and Education*, 1996, *6* (2), 78-85.

[8] Daugherty, M. S. Using performance data to evaluate student learning in a Student-Managed Investment Fund. *Journal of Higher Education Theory and Practice*, 2015, *15*(2), 85.

[9] Dewally, M. & Drause, D. S. The establishment of a student-managed investment club utilizing exchange traded funds. *Journal of the Academy of Business Education*, 2009, (*Spring)*, 132-145

[10] Hirt, G. A. Real dollar portfolios managed by students – an evaluation. *Journal of Financial Education*, 1977, *6* (Fall), 57-61.

[11] Jennings, W. P. & Jennings, P. Domestic investment bias among student-managed investment portfolios. *Investment Management and Financial Innovations*, 2006, *3* (3), 155-159.

[12] Kahl, D. R. The challenges and opportunities of Student-Managed investment funds at metropolitan universities. *Financial Services Review*, 1997, *6* (3), 197-200.

[13] Krueger, T. M. Finance experts versus students: Policies, comparative return and risk of investments in student-directed investment portfolio. *Journal of Accounting and Finance*, 2001, *11* (4), 119-137.
[14] Kubik, C. Student-Managed investment funds: A survey of student demographics, fund policies, and transparency. 2017,Working paper.
[15] Lawrence, E. C. Learning portfolio management by experience: University student investment funds. *The Financial Review*, 1990, *25* (1), 165-173.
[16] ____________ Financial innovation: The case of student investment funds at United States universities. *Financial Practice & Education*, 1994, *4* (1), 47-53.
[17] ____________ Student-managed investment funds: An international perspective. *Journal of Applied Finance*, 2008, *18* (2), 67-83.
[18] Mallett, J. E., Belcher, L. J., & Boyd, G. M. Experiment no more: The long-term effectiveness of a student-managed investments program. *Journal of Financial Education*, 2010, *36* (3/4), 1-15.
[19] _______ & Lerro, A. J. Establishing and running a student-managed investment program. DOI http://www.slideshare.net/khanyasmin/establishing-and-running-a-Student-Managed-investment-program. 2002
[20] Markese, J.D. Applied security analysis, and portfolio management. *Journal of Financial Education*, 1984, *13* (Fall), 65-67.
[21] Neely, W. P., & Cooley, P. L. A survey of student-managed funds. *Advances in Financial Education*, 2004, *1*, 1-9.
[22] Pactwa, T. E., Wong, K. M., & Moore, K. M. An application in experiential learning: Developing an intercollegiate investment research competition. *Journal of Financial Education*, 2007, *33* (Summer), 1-21.
[23] Peng, Z., Dukes, W. P., & Bremer, R. Evidence on Student-Managed funds: A survey of U.S. universities. *Business Education & Accreditation*, 2009, *1* (1), 55-64.
[24] Tatar, D. D. Teaching securities analysis with real funds, *Journal of Financial Education*, 1987, *16* (Fall), 40-45.

Endnotes:

1. Many thanks to the volunteer Research Assistants from the Bulldog Student Investment Fund at Truman State University (Ramy Hawtmeh, Michael Nimmer, and Benjamin Wingo). These students spent many hours researching contact information and other issues related to the survey document.

2. The efforts of The Center for Applied Statistical Evaluation (CASE) at Truman State University were invaluable in the preparation of this paper. CASE ran two separate analyses: "Sample 1 versus Sample 2" (Dr. Scott Alberts, supervising investigator and An Nguyen, student investigator) and "Classroom versus Co-curricular Analysis" (Dr. Scott Thatcher, supervising investigator and Rudolph Nartker, student investigator).

3. The insights provided by colleagues and co-panelists were most helpful in understanding the variation in and challenges of operating SMIF's. Special thanks to professors: K.C. Chen (California State University/Fresno), Robert Heinkel (University of British Columbia), K.C. Ma (Stetson University), Edward Lawrence (University of Missouri St. Louis), Tarek Zaher (Indiana State University), Thomas Mallett (Stetson University), and Chris Kubik (Mount Ida University). Their generous contributions of time and advice provided both history and context to this paper.