THE VALUE OF INVESTMENT RESEARCH: HOW DO COMPANY VISITS AFFECT

THE PERFORMANCE OF PROFESSIONAL INVESTORS?

Mariane Keushgerian

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By: Mariane Keushgerian

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Signed by the final examining committees:

Dr. Kai Lamertz   Chair

Dr. Sandra Betton   Examiner

Dr. Nilanjan Basu   Examiner

Dr. Lorne Switzer   Supervisor

Approved by   Dr. Harjeet Bhabra
                  Chair of Department or Graduate Program Director

              Dr. Harjeet Bhabra
                  Dean of Faculty

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ABSTRACT

The Value of Investment Research: How Do company visits affect the Performance of Professional Investors?

Mariane Keushgerian

We test a sample of 205 Canadian and 938 US equity funds during the period 2008 through 2011. Specifically, we look at whether manager characteristics and actions have any bearing on the performance, management fees and systematic risk of the funds with a special focus on the impact of company visits. We find that company visits consistently positively and significantly affect performance, portfolio turnover and fees leading us to conclude that in the case of the US sample, company visits have a value added effect while we are inconclusive on its effects on the Canadian sample. Other findings using the three stage least square methodology show that for the Canadian sample, investment experience and employee equity ownership positively affect the fund's beta and team size has a positive impact on fees while company visits have a positive impact only in the system with the Sharpe ratio as the performance measure. The US results show that investment experience has a positive and significant impact on the fund's beta while a negative impact on both portfolio turnover and fees. Finally, employee equity ownership also has a positive impact on systematic risk while team size has a positive impact on fees.

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1. Introduction

The Investment Company Institute Factbook (ICI, 2011), shows that US Investment management firms had US $13.1 trillion in total net assets under management at the end of 2010, an increase of US $943 billion and US $2.8 trillion compared to 2009 and 2008 respectively, demonstrating the sheer size of the industry as a whole. AS per the ICI, 74% of these assets are managed by fund management companies making them the key players in the financial markets. The ICI report shows that over the years 2008 through 2010 there has been a 5% decrease in the number of investment firms. This consolidation is partly attributed to the turbulent macroeconomic environment. On the other hand, the Investment Funds Institute of Canada (IFIC, 2011) report[1] shows that the fund management industry in Canada had a total of CAD $636 billion in assets under management as at the end of 2010, an increase of CAD $41 billion and CAD $129 billion over 2009 and 2008 respectively. The report further shows that similar to the US, between 2008 through 2010; there was a 6% decrease in the number of Canadian management firms. The growth of the Canadian fund industry was highlighted by Klapper et al (2005) who document in their study of the worldwide growth of Mutual funds in the 90's, the average annual growth rate of Canadian funds was 26.2% from 1992 to 1998 and that equity funds represented 48% of the mutual fund industry in Canada during that period. The driving force behind this multi-trillion dollar industry are 1) the people investing their moneys into investment funds, the individual or institutional investors and 2) as described by Barker (1998), the people who "are responsible for buying, holding and selling shares, and thereby determining share prices", the fund managers. The focus of this paper is on the latter since fund managers hold considerable influence over share prices;

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[1] http://statistics.ific.ca/English/Reports/MonthlyStatistics.asp

this makes them an interesting subject to study. The primary services offered by fund managers, as articulated by Gurley and Shaw (1960), are "professionally managed, diversified portfolios, […] technical expertise involved in the portfolio's selection, […] and continuous supervision of the portfolio." With such attributes as management style, timing, stock picking ability, amongst other qualities, they are the ones holding considerable influence in this thriving industry. Investment managers make use of a variety of information in security selection for their portfolios. As identified by Lee and Tweedie (1981), Moizer and Arnold (1984), Barker (1998), their wealth of information emanate from formal meetings, annual reports, sell side and buy side analysts, results announcements, other direct contact with the companies, market news, investors' meetings, newspapers, industry contacts, and industry information services. Of particular interest is the personal contact such as formal meetings and direct contact that fund managers have with company executives. Such contacts and meetings allow fund managers access to certain strategic or tactical information that is not found in financial statements which gives them clues as to the future of the company. Hence, this research aims to test empirically whether the frequency of company visits is a contributing factor in fund performance and if so, does it have a positive effect on performance?

We examine a sample of 205 Canadian and 938 US equity funds during the period 2008 through 2011. We find that company visits consistently positively and significantly affect performance, portfolio turnover and fees leading us to conclude that in the case of the US sample, company visits have a value added effect while we are inconclusive on its effects on the Canadian sample. Among some of the human capital characteristics, the three stage least square methodology results for the Canadian sample shows that investment experience

and employee equity ownership positively affect the fund's beta while team size has a positive impact on fees. We further find that frequency of company visits have a positive impact on trading activity only in the system with the Sharpe ratio as the performance measure. The US results show that investment experience has a positive and significant impact on the fund's beta while a negative impact on both portfolio turnover and fees. Finally, employee equity ownership also has a positive impact on systematic risk while team size has a positive impact on fees.

The contribution of this paper is threefold. First, it is the first study we know of that looks specifically at company visits and shows the differing behaviors of Canadian and US fund managers. Second, it highlights and reinforces to professional investors that although company visits is a sacrifice in terms of their time and the additional costs however, we show that these visits are of added value permitting them to make better company valuation, thus being more selective in the stocks they choose and garnering better performance. Third, it serves as a view of market efficiency since as Barker (1998) describes it "analysts regard company contact as an opportunity to introduce value-relevant news to the market and that they 'sell' as quickly and as widely as possible their interpretation of news".

This paper will be divided in the following sequence; first, we will be discussing the rationale for using company visits as the focus of our study. Next, we will be reviewing related literature on performance. Section 4 will be stating the hypothesis for our research, then the data and methodology will be explained in section 5, followed by the results of the Canadian sample and the US sample in sections 6 and 7 respectively, and finally the last section will conclude the study.

2. Literature On Company visits

Company visits is one of many methods employed by fund managers in assessing the companies comprising their funds. As defined by Lee and Tweedie (1981) "it is the receipt of information obtained from visits to companies" and further elaborated by Glaum and Friedrich (2006), it involves personal contact and face-to-face interactions with company personnel. Through Arnold and Moizer (1984) detailed survey, we find that these meetings give fund managers the opportunity to discuss such information as the "company's past trading performance, details of management long term objectives and plans and the reasons for changes in the balance sheet, data on costs and margins, the outlook of demand for the company's products, the current labor situation, plans for future capital investment, and information on competitors". While company visits offer fund managers crucial qualitative information on the values, culture and work ethic of the company, it also gives them access to quantitative information as it gives them a chance to discuss the figures found in the financial statements. Many fund managers are in disagreement on its benefits, as one portfolio manager put it "it is a function of what is necessary and what is relevant. What does it require in order for us to have the confidence that we are making good decisions. The interesting exercise in our industry is to profess the number of company visits or the number of analysts. We have yet to find a direct correlation between those metrics and the ability to outperform over time."[2] It is precisely this, the aim of our study, to show that there is a direct a correlation between visits and performance and that it indirectly affects turnover and fees since they are all interrelated.

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[2] http://www.morningstar.com/cover/videocenter.aspx?id=311080

Although there is a vast literature on funds and fund management which will be discussed shortly, especially in examining fund manager behavior and the effect it has on performance, one aspect that has not received a great deal of attention is the frequency of company visits, fund managers undertake to ensure that their information, research and analyses of the securities comprising the fund(s) under their management is in line with their firsthand account of the company. It is essentially a way for the fund manager to verify the quality of information found in financial statements, that the company is in good standing, and to ensure themselves of their choices in building portfolio.

Lee and Tweedie (1981) were one of the earliest to publish a comprehensive research on fund managers (Insurance companies, pension funds, investment and unit trusts, merchant banks and stockbroking firms) and their "use of financial information". Using a sample of 231 interviews, they look individually at such factors as fund managers' level of understanding of financial information, of their use of such information, and of their use of annual reports. Furthermore they investigate additional sources of information which consider the importance of company visits and the value of the information that can be extracted from it. Amongst their results, Lee and Tweedie (1981) find that "44% of those employed by stock broking firms declare that their firms visited all companies frequently". They further find that "46% of stock broking firms declared that their organization visited on a frequent basis, all companies in which it was interested". Moreover, when they question the purpose of these visits and what the fund managers anticipate to learn from them, they find that fund managers were interested in getting hold of a direct sense of the management of the investee company. Specifically, they document that 56% of those surveyed show a need for crucial information regarding the company's growth, managements' capabilities, upcoming

projects, whether they have achieved what they set out to do, in addition to financial reports to evaluate likelihood of future success. Although the financial managers being surveyed rate company visits least important when compared with two other sources of information, nevertheless 38% of them still regard company visits as paramount, and finally they find that 62% of fund managers working in stock broking firms rated company visits as holding material weight in portfolio decision making in contrast to their counterparts in financial institutions. Chugh and Meador (1984) highlight the importance company visits bear on the valuation process of analysts since through such visits; they are able to ascertain the attributes of management, which represent a core element of the company value. They show that analysts place great value on human capital attributes to make sense out of the quantitative data at their disposal. For instance, they find that "when determining stock value analysts appear to look most closely at long term predictors of qualitative growth earnings, particularly to the quality and depth of management" among other factors.

Through interviews with 27 UK financial institutions, Holland and Doran (1998) draw conclusions on the role of company visits and its implications in the valuation process. They show that through repeated company visits fund managers are able to cultivate good relations with investee companies and through these relationships, they develop a 'relationship information collection' process which enhance the funds they manage thereby aiding them in 'stock selection and asset allocation'. The fund managers interviewed hold that it is through the development and maintenance of these relationships that they secure a better understanding of the investee company, its current situation, its goals, and long term strategy. They explain that through these visits, they learn such beneficial information as the "quality and personality of management" and this instills a "trust and confidence" in them.

They have the chance to evaluate management by keeping a close eye on their mode of interaction with one another, their oral exchanges, whether they are in agreement with one another and inferring their personalities. Indeed, one fund manager says that "these impressions are as important to us as a slide full of financial figures" (Holland & Doran, 1998). This in turn, enriches them with a "reservoir of knowledge" regarding the investee company. Moreover, this accumulation of company specific information is particularly advantageous as it helps them in making better trading decisions. All of these along with a discussion of the financial reports help fund managers in interweaving valuable information to create a "knowledge advantage" and provides new ground on how to make better sense of arising information and how it affects the value of the company. Along the same line of examination, Holland (1998) explores company visits in light of "private meetings" as a means to gain insight on the top management of the company invested in. Amongst some of the highlights of the study, he concludes that the favorable properties of management are major contributors to the financial well-being of the company and that this can only be discerned by recurring visits.

Roberts et al (2006) study in detail how company visits function as a source of governance process between managers and shareholders. Thus, in bringing together fund managers and the companies they have invested in, the company takes a good look at itself and the message it is trying to convey about its strategy, performance and goals and "reminds" them that they are being watched; while the fund manager pays close attention to the work ethics and demeanor of the management team. They explain that the setting of the meeting whereby, management presents itself to fund managers offers them the opportunity to inquire about figures found in the financial reports and a clarification of any ambiguity on

the fund manager's part. On the other hand, besides gaining a clarity and better comprehension of the company's position, fund managers focus on the general ambiance of the meeting such as the "tone, mood, gesture and interaction" of the investee company's management.

In his in-depth examination of the governance role of fund managers in their investee companies and consequently his proposition of a five-stage dynamic model of fund manager corporate governance influence, Holland (2002) explains that the composition of current financial reports have become characterized as "too complex, too large and too cumbersome" for both professional money managers and individual investors. He holds that the lack of information at fund managers' disposal used in valuating companies is due to the unavailability of crucial qualitative information such as intellectual capital (quality of management, coherence and credibility, strategy…) and intangible factors which he explains are built in the share price. Accordingly, he shows that the fund managers in his case study use a combination of qualitative and quantitative data in the valuation process. They reveal that the prevalence of financial data and variables in the financial report only gave them access to quantitative knowledge but did not give fund managers the opportunity to examine the qualitative aspects which they find is an integral part of a company as a determinant factor of its long-term success. Furthermore, since financial reports are available to the public, it neither gave them a knowledge advantage over their competitors in stock-picking in order to enhance their performance, nor did it provide them with information concerning management and personnel. Therefore, Holland (2002) concludes that financial reports are not "an effective mechanism for disclosing information on intangibles such as corporate

knowledge assets and innovatory skills" and that "sole reliance on public sources of information limited fund manager's understanding of portfolio companies".

Continuing with his inquiry into fund manager's corporate governance process, Holland (2002) explains that the difficulty faced by fund managers due to their dependence only on financial reports for sources of information motivated them to request more meetings and face-to-face contact with senior management teams in order to give them the opportunity to ask critical questions concerning both quantitative and qualitative aspects of the company, which would give them the relevant information to gauge the company value and tie it to its performance. Specifically, he elaborates that "the fund managers used the private meetings to identify the major qualitative factors affecting value creation and corporate valuation. These provided the conceptual base to explore how these factors interacted with each other over time and hence how the value-creation process functioned in investee companies" (Holland, 2002). And it is presumed that precisely the combination of the qualitative information extracted from these meetings along with the information present in the financial reports that the portfolio manager has an enhanced understanding of the portfolios he is managing and is better equipped in decision making concerning asset allocation and stock picking. This endeavor on the fund manager's part leads him to re-examine company valuations using the new qualitative information and its implications on performance.

Although Holland's extensive study of the methods employed by fund managers in their decision making process, was studied in light of corporate governance mechanism, it has major implications on the paper at hand because the very fact that it emphasizes private

meetings and direct contact with investee companies causing them to review the valuation of the company illustrates how instrumental company visits are in the management of funds.

Company visits are vital as Wright (2007) probes practitioners in the industry, one energy equity analyst says, it allowed him to "gain a better feel for how the industry worked and how all the assets fit together". Some of the key highlights of company visits include an assessment of the quality of management, and its strategies in pursuit of its long term goals. Moreover, he notes that with enough visits to a company, one can notice flaws in the management or recognize some of their strong qualities which would be instrumental in achieving future company goals. Another small cap value mutual fund manager says that company visits instills a sense of assurance when investing in companies. Furthermore, company visits allow analysts "to test the credibility of the company's assertions about itself". Therefore, although company visits are not guarantees that the company you are investing in will show favorable performance in the future but it will at least give you a better understanding of the company, its culture, and its vision. Similarly, Opiela (2004) looks into selection decisions of some mutual fund managers and finds that in addition to the research on fund rating, analysis of performance, and strategies they use in completing their tasks, one fund manager stresses the importance of company visits. He says that those visits provide him with a "real sense of the corporate culture", the work ethic and environment and an indication of where the company is heading.

Through a series of questions asked of fund managers to rate, Barker (1998) finds that the most important source of information for fund managers are obtained through 'formal meetings with senior company management' with annual reports being second most

important. They explain that through meetings with senior management, they have the opportunity to get a well rounded view of the company, its management and its strategy and how they implement it. This accumulation of knowledge about the company helps them to better identify what factors affect share price. Contrary to the above, Barker finds that some fund managers consider site visits, of minimal importance stating that they were a drain to their time and offered a myopic view of the company. However, he does find in the same study that fund managers place high value on 'personal contact'. Glaum and Friedrich (2006) find that in the telecommunications industry, analysts rate contact with company representatives, financial statements, analysts conferences, and company visits in this order as the most helpful sources of information to valuate companies. Pike et al (1993) find that the most pertinent sources of information for British investment analysts are; discussions with company personnel and analysts' meetings in-company, with annual reports as the 3rd most important source of information. The reason that investment analysts value individual contact more than financial reports is because it allows for them to discuss results of the financial reports. In exploring the methods used by UK investment analysts in their choice of buying and selling shares, Moizer and Arnold (1984) find that along with annual report items such as the income statement, balance sheet, the other major source of information they most rely on are contact with the investee company's personnel. Similarly, Day (1986) explores how meaningful UK investment analysts find certain items in the financial statements and how frequently they make use of them in their analysis of a company. The results show that the main items investment analysts look at first glance were Long term debt/loans/ borrowing, Balance sheet, and profits, however, they explain that the financial report is

considered a 'point of reference' and that contact with the company's management is regarded as crucial in their analysis process.

Holland (2006), in his survey of fund managers, finds that fund managers are critical of financial reports for a number of reasons, three of which are 1) that the information supplied by the interim reports is not valuable since they are already aware of the information it contains and therefore the information is already built in the share price and 2) that the financial report is "too complex, too large and too cumbersome" and 3) that there is a prevalence of financial performance indicators and drawbacks in qualitative measures such as 'quality of management'. After naming a number of other limitations, Holland explains that public knowledge along with private knowledge derived from meetings with management of investee companies are essential for fund management performance.

In the same line of thought, Lev and Zarowin (1999) find that the value of financial report information has shown a decline in the past 20 years and that this coincides with change in the US business enterprise mainly driven by 'innovative activities'. They hold that it is due to the deficiency in reporting for intangibles that the accounting methods fall short in displaying 'performance and enterprise value'.

Thus far, most studies covering the importance of company visits have used interview based studies in order to demonstrate the crucial role it plays in fund managers' decision making process. Whereas interview based studies reveal fund manager's views and outlook, the present study attempts to use statistical tests to show fund manager's actions. To the best of our knowledge, there have not been empirical studies in highlighting the importance of

company visits to fund managers in their decision making process and thereby its effect on performance.

3. Literature Review

There has been a vast literature covering various aspects of fund performance in the US. Since the work of Jensen (1968), funds have been analyzed in terms of management style (passive versus active management), management incentive (employment risk versus compensation risk), stock selection ability, it is also been studied in terms of governance structure. A more recent approach in studying the determining factors in fund performance has been in light of intellectual capital, that is, how fund manager specific characteristics play a role in influencing their performance. The following sections highlight some important studies in the different categories of fund performance research.

3.1 Performance and human capital

According to human capital theory, individual characteristics such as education and experience function together in creating output, and in turn determine the compensation of workers. It follows that their individual experience, their education, their age even their gender are factors that affect their decision making, risk-taking behavior, and their overall performance. For instance, level of experience would most likely affect their know-how, educational background would affect their analytical skills, some studies have even found that gender affects amount of risk taken. For instance, Golec (1996) examines such characteristics as manager age, tenure, education, and whether or not he/she had an MBA to

see whether they have any bearing on key functions of a fund, that is, expenses charged, the risk, and performance. Amongst his findings, the manager's tenure, the MBA variable as well as fees have a positive and significant impact on the fund's performance while age and other expenses have a negative impact on the performance of the fund. Adding on to Golec (1996), Chevalier and Ellison (1999a) perform a similar study with the addition of a 'college quality' variable as well as other tests controlling for survivorship bias and investment style. Their most consistent finding is that those managers who attended higher quality colleges display better performance than their counterparts. Similarly, Gottesman and Morey (2006) look at the difference in performance of managers holding an MBA, distinguishing them according to the MBA quality and find that indeed, higher quality MBAs are conducive to better performance. They also look at whether other educational accomplishments such as CFA among other variables affect mutual fund performance. They find that managers with other qualifications do not significantly impact fund performance. Along with education variables, Switzer and Huang (2007) explore how gender[3], tenure, and experience affect small and midcap equity fund performance. Through their simultaneous equation methodology they find that the education variable MBA is negatively related to measures of performance while neither tenure and experience nor gender show a significant relation to the performance of small and midcap funds. Costa et al (2006) investigate the effects of manager experience by studying their performance during different business cycles. They conclude that it is mainly due to prolonged upward (downward) movements in the market that fund managers show negative (positive) performance and that it is not attributed to their experience.

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[3] Atkinson, Baird, and Frye (2003), Estes and Hosseini (1988), Barber and Odeon (2001), Powell and Ansic (1997) among others explore the role of gender and performance.

As human capital gains more attention, it is evident that quantitative as well as non-quantitative factors play a determining role in fund management decisions thus performance. Holland (2003) states that, money managers during the 1990s and later, started focusing on the managerial attributes of target investees, having discovered how these qualities and changes thereof affect the stock price of a specific company.

3.2 Performance and management style

As stated by Holland (2010) "active fund managers share fundamental beliefs about imperfections in the market and believed that their superior skills were the means to succeed in investment decisions." Gruber (1996) probes into the question as to why actively managed funds are so appealing. He conducts a comprehensive study, testing mutual funds by type and then in terms of persistence, expenses, cash flows and ROI and he concludes that funds that are actively managed are indeed beneficial but that they display negative performance due to high fees. Cremers and Petajisto (2009) come up with a new variable to calculate degree of active management called Active share and they document that active management of portfolios presents an advantage to investors since they exhibit outperformance relative to their benchmarks. Related to style is the issue of persistence of fund performance, that is, the likelihood of funds which displayed positive performance in the past year to continue doing so in the following years; and not management ability that is responsible for positive risk-adjusted performance. For instance, Elton et al (1996) and Gruber (1996) show results similar to Hendricks, Patel and Zeckhauser (1993) while accounting for survivorship bias, namely, funds that perform well in the previous year will continue doing so the following

year, additionally they find that these results persist when using a three year horizon. Similarly, Grinblatt and Titman (1992), report persistence of funds over a long period of time. Carhart (1997), also finds in a sample of 1,892 diversified equity funds from 1962 to 1993, that funds displaying positive performance in one year will continue doing so the following year but not afterward, while funds displaying negative performance in one year will continue doing so for multiple years.[4]

3.3 Performance and stock selection ability

Among the managerial abilities that have been studied in portfolio management is stock picking ability, as many investors believe that it is in a manager's ability to choose stocks according to the their valuation and research that certain funds outperform their benchmarks. Wermers (2000) delves deeply into this outlook by dissecting performance of actively managed funds into several parts, that is, stock selection ability, timing ability, and style objective of the fund as well as trade costs, expenses, and benchmark adjusted excess returns. Some of his findings over the period 1975 to 1994 include, high turnover funds perform better than low turnover funds; moreover he finds small capitalization funds perform better than their large capitalization counterparts, he attributes these results to managerial talent. Daniel et al (1997) begin their inquiry into the performance of mutual funds by stating that "half of the expenses of mutual funds arise because of their stock selection efforts". They conduct their study by first building benchmarks comparable in terms of size, book to market ratio, and prior year returns. Evaluating the fund manager's stock picking and timing ability, along with the style objective, they conclude that fund managers do have superior skill in

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[4] read also Brown, S. J. & Goetzmann, W. N. (1995).

terms of picking ability but that it is not strong enough to achieve returns surpassing its benchmark after expenses are deducted. Kosowski et al (2006) document that fund managers have superior skills. They analyze fund performance over a 27 year period using the bootstrap method, and they find that those funds whose performance they ascribe to managerial skill show superior performance pre and post deducted expenses.

3.4 Performance and incentives

Another strand of the performance literature is devoted to explaining that incentives are the driving force behind fund manager's performance. Fund managers are principally motivated by 2 things, job security and compensation. Brown et al (1996), test a group of 334 funds and find evidence that fund managers who are lagging behind midyear in contrast to other fund managers, engage in more risk taking behavior than their counterparts in order to improve their fund's performance till year end. Similarly, Kemph, Ruenzi, and Thiele (2009) use upward and downward trends in the market to determine which incentive prevails in the different states and determine that employment (compensation) incentives are one of key drivers of change in risk-taking in fund manager's behavior during downward (upward) shifts in the market. In exploring job security matters of fund managers, Chevalier and Ellison's (1999b) assess the performance of 453 fund managers during 1992-1994, by grouping them into two categories, namely, those that belong to "terminations" are the managers who stopped running their fund and do not re-appear as the manager of another fund, alternatively they re-emerge managing fewer assets, while those that belong to "promotions", are those who stopped running a specific fund and re-emerge managing more total assets. Among their findings, they conclude that "younger managers take on less unsystematic risk, and are less

likely to deviate from the herd than older managers." Massa and Patgiri (2009), explain that through compensation incentives, fund managers are able to generate 'superior performance', and that it is not only attributed to additional risk borne by managers but also to their abilities in 'trading strategies' and 'portfolio rebalancing'. Indeed their results show that high incentive portfolios generate a return gap[5] of 6 bps while low incentive portfolios generate a return gap of negative 4 bps during their sample period from 1996 to 2003.

The various strands of the fund performance literature has shown us that many factors come into play in determining performance and has given us ground to explore yet another variable which we believe has a direct relation and that is the effect of company visits on performance and whether it contributes positively to fund performance by giving fund manager an edge over their competitors. The next section outlines our hypotheses and our reasoning.

4 Hypothesis

Beginning our enquiry, we find that Glaum and Friedrich (2006), Moizer and Arnold's (1984), Chugh and Meador (1984), Holland and Doran (1998), Barker (1998), Pike et al (1993), Day (1986) have considered the importance of the visits paid by fund managers during their information collection process in building portfolios or just as a mechanism of checking up on the companies making up their portfolios. As Lee and Tweedie (1981) explain that "this source of information is quite distinct from the other sources. Any information obtained during a visit to a company may well be unique in the sense that it may

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[5] The return gap is a measure introduced by Kacperczyk, Sialm, and Zheng (2008), Massa and Patgiri define it as "the difference between the investor return and the buy-and-hold return from their disclosed portfolio".

not be shared by other investors (both existing and potential), whereas published sources provide knowledge for all users. Consequently, company visits would seem at first sight to be an extremely useful means of obtaining information in advance of other investors." Accordingly, we reason that since company visits are rated as vital in the decision making process then this implies that these visits give fund managers knowledge and is a source of information that is highly advantageous and provides them with a wealth of information not available otherwise. Thus,

Hypothesis 1:

The frequency of company visits conducted by fund managers has a positive effect on the performance of the funds they manage.

In his inquiry into the existence of economies of scale in the management of mutual funds, Latzko (1999) clarifies that funds like other investment products have operating expenses; and that they typically consist of three major kinds of expenses which are paid from the fund's assets. The first type is the management fee paid to the fund's manager, as compensation for the expenses of portfolio management, namely, researching and setting up of the product. He continues that the magnitude of such management fee is a function of the annual performance of the product, therefore, the greater the return the larger the fee. In contrast, low performing products do not benefit from high fees. Gil-Bazo and Ruiz-Verdu (2009) elaborate further by saying that fund fees are a function of the underlying cost for services provided in the form of managerial capabilities as well as cost of research and analysis. One of the explanations they offer is the 'cost-based explanation' which holds that if larger fund operating expenses are due to higher salaries being paid in order to attract and

retain better qualified fund managers then this results in a positive relation between performance and fees and serves to show existing and potential investors the quality of the fund. Alternatively, they posit that, factors such as economies of scale, learning economies, fund age reflecting its survival and a better management team would render better decision making and an overall better portfolio management which result in lower fund expenses. As hypothesized above, we believe company visits are positively related to fund performance; nevertheless, they still represent costs to the manager in terms of time, money, and effort. The manager must forgo other duties, in order to conduct company visits; and often, the companies they visit require travelling, which presents their company with additional costs. Moreover, the fund manager must use his skills and abilities in order to engage and probe the employees at the investee companies. All of these contribute positively to the management fees charged. Therefore we hold that visits are a necessary component for them to offer those services. Thus,

Hypothesis 2:

The number of company visits conducted by fund managers is positively related to the management fees charged.

One interpretation Golec (1996) gives of portfolio turnover is that a high frequency of portfolio turnover entails high costs which are necessary for "return-producing input by fund managers". Moreover, Trueman (1988) explains in his paper, a fund manager's value is partly determined by the amount the fund(s) under his management trades and that greatly relies on the rate at which new information is made sense of and the accuracy of such information. He goes on to explain if indeed the obtaining of new information and

subsequent trading on it indicates to investors the superior skills of the manager, then the investment manager will be motivated to trade more in order to gain more clients. He cites Kanodia, Bushman and Dickhaut (1986) and Trueman (1986) saying that they "show that agents may take actions that increase investor's perceptions of their ability to collect information". In their results, Chevalier and Ellison (1999a) find that expenses significantly reduce risk-adjusted excess return while turnover carries a positive sign when it is in the same equation, implying that the presence of high expenses with low turnover signifies "managerial slack", alternatively, the presence of high expense and high turnover conveys the opposite that the high expenses are being used for "research" purposes which results in more trading activity.

Thus,

Hypothesis 3:

The number of company visits conducted by fund managers is positively related to the portfolio turnover.

5 Data and Methodology

5.1 Data

The database is provided by Brockhouse Cooper, a research and advisory company specialized in providing structured and financially engineered solutions that meet the needs of the investment community at large. They offer standard advisory services, composed of investment consulting, asset management, transition management, securities trading, and global macro research. The Brockhouse Cooper Team systematically and periodically evaluate and re-evaluate, managerial attributes, fund performance, and risk characteristics of

investment management firms globally comparing their performance and usually benchmarking such performances. Their database is international comprised of data on Canadian, US, EAFE, and global equity funds. It holds figures on around 5,000 products from 1,300 different firms[6]. From this database, we extract data on all Canadian Equity, small capitalization and mid capitalization funds. We also obtain data on all U.S. large, small, mid, and mix of small and mid (smid) capitalization funds listed in the data base. Quarterly data were collected from the period March 2008 to March 2011, giving us an initial sample of 247 Canadian funds of which, 49 were classified as small caps with the 198 remaining as equity funds with 741 observations . The US sample gave us an initial sample of 1843, of which 491 were small caps, 949 were large caps, and the remaining 247 were mid cap and 156 were smid cap with 5529 observations. Our sample is of particular interest since its inception which is the first quarter of 2008 is at the onset of the liquidity crunch; therefore as Gottesman and Morey (2006) explain, and driven by the incentives literature, the fund manager's skill would be explained better than if it was during an expansionary period. In conducting our research, we make use of multiple indicators of performance, human capital characteristics, and fund characteristics, therefore, for all funds in our sample, we obtained the 4 year Jensen's alpha, the excess return, the 4 year Sharpe ratio, the 4 year beta, team size, manager experience, manager turnover, employee equity ownership, and company visits. We further got the fund's total institutional assets under management, portfolio turnover, the average number of securities held in the portfolio, the dividend yield, the market to book ratio, and the annual returns. Next, we calculate the fund age by subtracting the year the first account was launched from the fund year in our sample, namely the first quarter in which it is

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[6] www.brockhousecooper.com

taken in. We specify that each fund has at least 12 months worth of data therefore all funds that were younger than 1 year were excluded. In determining the management fees for each fund, we had at our disposal 2 fee schedules; one pertained to commingled accounts while the other was for segregated accounts. We referred to the segregated fee schedule because we enquired with a representative at Brockhouse Cooper and were informed that the majority of funds had segregated accounts. We, therefore, use an average of the percentage charged, since they were listed in 3 ranges and we proceed by multiplying the resulting percentage with the fund's total institutional assets under management. Finally, we form a dummy variable for small and mid capitalization funds, with the variable taking on a value of 1 if the funds were small or midcap and zero otherwise, note here that there were funds that had a 'not defined' market capitalization description among the large cap funds, we assumed them to be 'all cap' and therefore they took on the value of zero. After merging the performance variables, the human capital variables, and the fund characteristics variables for the Canadian data, and making the necessary changes such as deleting observations where team size, fund assets under management, average number of securities held, and price to book ratio were zero, we were left with a final Canadian sample of 205 funds with 601 observations. A similar procedure was performed for the US sample which gave us a final sample of 938 funds with 2720 observations.

5.2 Methodology

As Golec (1996), Chevalier and Ellison (1999), and Gottesman and Morey (2006) and Switzer and Huang (2007) did before us, we set up our data so that for all the dependent variables, namely, the performance variables, the fees and the betas are taken in year t, while

all the manager characteristics and action and the fund characteristics as well as the annual returns which proxy for momentum are taken in year t – 1. It is important to note here that we considered our fund years from March to March, therefore, all variables assumed the first quarter of each year as the year end except for the portfolio turnover variable which assumed a calendar year end. We use this approach so as to be able to discern the effects of manager's behavior since it is not immediately apparent. The rationale for the model we use in testing the relationship between the various characteristics of fund managers and their actions, and performance, risk and management fees of Canadian and US equity funds, follows Golec (1996), Chevalier and Ellison (1999), and Gottesman and Morey (2006) and Switzer and Huang (2007) and it also incorporates aspects of the dynamic model proposed in Holland's (2002) CIMA report. Although the latter's model was constructed to include all variables that would aid fund managers in governance processes, it is nevertheless, still applicable for our purposes since it takes human capital variables into account. The model consists of 3 parts, the first one is human capital and structural capital which includes management specific variables such as experience, team size, manager turnover, as well as governance variables such as employee equity ownership; the second part consists of the fund managers actions which includes the frequency of contact with companies, the main variable the affects of which we are testing in this thesis, the third part includes fund characteristics, namely size, age, turnover, average number of securities held, and as documented by Fama and French (1993), Jegadeesh and Titman (1993) and Carhart (1997), we add the book to market ratio, the momentum factor and a dummy variable for small and mid capitalization funds. The following section defines the variables used.

1) Human capital and structural capital:

Experience: is defined as the fund manager's investment experience. It might be a good indication of skill and know-how since the longer the fund manager has been in the industry, the higher his experience level and some like Golec (1996) might argue the less risk averse he becomes because job security becomes less of an issue. Golec (1996) uses manager age as an indication of experience and one argument he offers is that the older a manager gets, the higher fees he charges and the lower the portfolio turnover due to "negative impact of age on stamina". Chevalier and Ellison (1999b) also conclude that "younger managers take on less unsystematic risk than older managers". Switzer and Huang (2007) find that experience of the fund manager is positively related to both fund beta and expenses and a negative association between experience of the fund manager and portfolio turnover. In our study, we expect experience to have positive impact on the management fees, portfolio turnover, and on the amount of risk taken.

Team size: is defined as number of people involved in mandate. This variable indicates whether having one fund manager making decisions produces better results as opposed to having more than one fund manager. Both Golec (1996) and Khorana et al (2007) do not find a significant relation between team size and performance. In their paper on restrictions clause in mutual funds, Almazan et al (2004) elaborate on the link between the amount of risk taken by fund managers and their age as well as whether the fund is individually or team managed. They explain that those funds with a single manager in charge are more likely to have 'career concerns' since they are the sole bearers of responsibility of the fund's performance. On the other hand, team-managed funds will have it easier since it is more difficult to point fingers in case of bad performance. Therefore, we expect team size to have a positive relation to both management fees and turnover since naturally, as more people are devoting their skills;

the more management fees are charged and the more managers conducting research and compiling information, the more they will trade.

Manager turnover: is a measure of the frequency of change in fund managers since the inception date of the fund. Although we do not take change of fund manager into account, however, through the inclusion of manager turnover rate in percentage, we can have a history of manager turnover in fund management companies and see its affects on performance, fees and risk. Khorana (1996), in his study of manager turnover, finds that a fund manager who is about to be removed from his fund displays higher portfolio turnover and consequently higher expense and lower performance. Moreover, he argues that those managers engage in more risk taking behavior. Where Khorana (1996) relates managerial turnover to preceding fund performance, Chevalier and Ellison (1999b) test the effects in the following period in order to show whether more money is being directed towards a fund that just changed its manager; they find that manager turnover does not have a huge impact on inflow of funds. We expect manager turnover to be positively related to the three performance measures since previous managers may have been dismissed due to bad performance. Moreover, we expect it to reduce both systematic risk and portfolio turnover since the opposite behavior prior to removal was documented by Khorana (1996).

Employee equity ownership: is defined, as stated by Khorana et al (2007), "how much of their personal wealth is invested in the funds they manage". They find that managerial ownership has a positive impact on performance and conclude that having personal stake tied to the fund(s) under his or her management is a positive motivator for fund managers. Moreover, an interesting point they make is that "managers simply have superior information with respect to the expected performance of the funds they manage and purchase shares in

the funds they expect to outperform." Therefore, we expect employee equity ownership to have a positive effect on performance, beta and turnover.

2) Fund managers' actions:

Company visits: is defined as the frequency of fund managers' contact with companies and it is recorded as of the inception date of the fund. In line with previous literature discussed on the topic, we expect visits to be positively related to performance, management fees and turnover since the more visits conducted by fund managers, the more information they can extract about the company, leading them to trade more. In turn, a higher management fee is charged for the extra costs and efforts.

3) Fund characteristics:

Fund age: is an indication of the fund's endurance, reputation, and fidelity of its investors (Golec (1996)). It is computed as the year the first account was launched from the fund year in our sample, namely the first quarter in which it is taken in. Golec (1996) finds that fund age is positively associated with beta, and negatively related to management fees. Similarly Malhotra and Mcleod (1997) also find that older funds reduce expense due to 'greater operating efficiency'. Following along those lines, we expect fund age to be negatively related to fees, positively related both systematic risk and performance since more risk entails higher returns and thus more of a chance for survival.

Fund size which is measured as the natural logarithm of a fund's total institutional assets under management, is an indication of its "market acceptance, past growth, and economies of scale" Golec (1996). Though he does not find significant results between both performance

and turnover and fund, he does, however, find that fund size has a negative impact on management fees, supporting the reasoning that as fund size grows, the prorated impact of expenses when allocated among a large asset base thus reduces as a percentage the amount of management fees and other expenses charged. Switzer and Huang (2007) show a negative association between each of their performance, expense, and turnover equations and fund size and a positive association between fund size and beta. Fama and French (1993) examine various factors that have a determining role in average returns of stocks and among their findings they document that size has a negative impact on returns. Therefore, we expect that fund size will be negatively related to performance, and portfolio turnover, and positively related to beta.

Number of securities held: is the average number of stocks held in a portfolio. In our data there was a minimum number and maximum number of securities that can be held in each fund, we therefore took an average of the 2 numbers. Sapp and Yan (2008) report in their study of focused funds that the number of securities held in a fund has a positive impact on performance, and that "funds with a large number of holdings significantly outperform funds with a small number of holdings both before and after expenses." Cremers and Petajisto (2009) also include number of securities held in their tests of the value of active management and they find that they have a positive effect on fund performance. We expect number of securities held to be associated with more exposure to systematic risk, higher management fees, and higher turnover.

Fund Beta: also known as non-diversifiable risk, is defined in the Brockhouse Cooper database as, "the sensitivity or the responsiveness of the fund's excess return to that of the

market portfolio." Since a fund manager has no control over market movements, then the level of systematic risk he/she is exposed to and the subsequent performance of the fund(s) indicate the manager's ability of how well he/she can predict this risk and choose stocks that are more or less risky according to their risk objectives. As explained by Elton, Gruber, Brown and Goetzman, in their book, Modern Portfolio Theory and Investment Analysis, "stocks are thought of as being more or less risky than the market, according to whether their beta is larger or smaller than 1" (Elton et al, 2007). We consider beta as a dependent variable in the systematic risk equation, to see how the variables in the specification of the equation are related to systematic risk. We also consider it as an independent variable in the performance equations to see how it affects performance.

Portfolio turnover: is indicative of the amount of trading activity undertaken by the fund manager. Both Switzer and Huang (2007) and Golec (1996), report that there is a positive association between turnover and beta, however, they finds no significant relation between turnover and alpha. Carhart (1997) shows a negative relation between turnover and alpha. We predict that portfolio turnover would have a positive effect on performance, management fees, and beta. Portfolio turnover is also tested as a dependent variable.

The book to market ratio: is commonly known as the ratio of the book value of a firm's common stock to its market value. Fama and French (1993) find that the book to market ratio has significant weight in accounting for the average returns on stocks, therefore, we include book to market ratio as a control variable in the performance equations to capture 'relative earnings performance'.

Dividend yield: is also another variable evidenced in the literature to have weight in explaining average stock returns, therefore, we include it as a control variable in the performance equations.

The capitalization dummy variable was added to control for the small and mid capitalization objective of the funds in the Canadian and US samples. It takes on the value of 1 if it is a small or mid capitalization fund and zero otherwise. Including this variable in the regressions allows us to see explicitly the effects of small and mid capitalization firms on beta, management fees, and turnover. Small caps have been a source of interest among academicians due to their ability to produce higher performance than their large cap counterparts. Switzer and Huang (2007) show a negative association between both beta and expenses and mid capitalization funds. We predict a negative relation between small and mid capitalization funds and the systematic risk, management fees and portfolio turnover.

The Momentum factor, as evidenced by Jegadeesh and Titman (1993), is considered as the annualized 1 year return of the fund during the period $t - 1$.

The following three performance measures used[7]:

4 year Sharpe ratio: is one of the risk-adjusted performance measures we employ. It is a measure of performance taking into account the relation between the fund's excess return and its standards deviation. As Sharpe (1966) explained, "It is the reward provided the investor for bearing risk". This measure gives us a good indication of performance since it takes the relation between total risk and excess return into account. We use it as an independent

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[7] Note that all performance measures were already calculated in the database used.

variable in the management fee equation to see whether performance raises or lowers the amount of fees charged.

4 year Jensen's alpha: is another risk-adjusted performance measure we utilize, it is defined in the Brockhouse Cooper database as, "the average difference between the return of the manager and the return of a passive strategy of equal market absolute risk." Namely, Jensen's alpha as introduced by Jensen (1968) shows the returns achieved by a fund manager taking into account systematic risk and expected return on the market portfolio. A positive alpha shows that a fund manager has outperformed the market while a negative one shows the opposite. Similar to the Sharpe ratio, Jensen's alpha is also used as an independent variable in the management fee equation for the same reason.

Excess return: is the fund's excess return over an appropriate benchmark, matched according to market capitalization therefore, the Canadian small cap uses the Nesbitt Burns Small Cap index as its benchmark, while Canadian equity uses the S&P/TSX as its benchmark. The US large capitalization funds use the Russell 1000 Growth, Russell 1000 value; while the mid capitalization funds use the Russell Mid-Cap Growth, Russell Mid-Cap value; finally the small capitalization funds use Russell 2000 Growth, Russell 2000 Value.

In conducting the analysis, our endeavor begins with preliminary tests of manager characteristics and actions versus fund characteristics. We then use 2 main methodologies, namely, a heteroscedasticity consistent ordinary least squares approach and a three stage least square estimation procedure similar to Golec (1996), Switzer and Huang (2007) and Chevalier and Ellison (1999a), explained in the following section.

5.2.1 Heteroscedasticity robust OLS procedure:

Since we are examining cross-sectionally at how the manager actions and characteristics affect performance, risk, and management fees, there may be a problem of heteroscedasticity in the error terms thus affecting the standard error of the co-efficient estimations leading us to less than accurate results. We correct for this potential problem by testing the effect of each independent variable on the dependent variable by setting it to zero. This procedure is first performed in testing fund characteristics against manager characteristics and actions in similar fashion to Chevalier and Ellison (1999a). The following equations are utilized:

$$Fund\ Characteristics = Manager\ Characteristics + Manager\ Action + \quad Capsize + \varepsilon$$

Next, using the same method, we perform the main regressions of our study, which we also use in the 3sls estimations, namely, we employ three performance equations in our study:

$$
\begin{aligned}
Excess\ ret = \ & a_1 + a_2\ (Beta) + a_3\ (manager\ turnover) + a_4\ (company\ visists) \\
& + a_5\ (employee\ equity\ ownership) + a_6\ (portfolio\ turnover) \\
& + a_7\ (log\ of\ total\ assets\ under\ management) + a_8\ (fund\ age) \\
& + a_9\ (management\ fees) + a_{10}\ (dividend\ yield) \\
& + a_{11}\ (market\ to\ book\ ratio) + a_{12}\ (momentum) + \varepsilon
\end{aligned}
$$

$$
\begin{aligned}
Jensen's\ & Alpha \\
& = a_1 + a_2\ (Beta) + a_3\ (manager\ turnover) + a_4\ (company\ visists) \\
& + a_5\ (employee\ equity\ ownership) + a_6\ (portfolio\ turnover) \\
& + a_7\ (log\ of\ total\ assets\ under\ management) + a_8\ (fund\ age) \\
& + a_9\ (management\ fees) + a_{10}\ (dividend\ yield) \\
& + a_{11}\ (market\ to\ book\ ratio) + a_{12}\ (momentum) + \varepsilon
\end{aligned}
$$

$$Sharpe\ Ratio = a_1 + a_2\ (beta) + a_3\ (manager\ turnover) + a_4\ (company\ visists)$$
$$+ a_5\ (employee\ equity\ ownership) + a_6\ (portfolio\ turnover)$$
$$+ a_7\ (log\ of\ total\ assets\ under\ management) + a_8\ (fund\ age)$$
$$+ a_9\ (management\ fees) + a_{10}\ (dividend\ yield)$$
$$+ a_{11}\ (market\ to\ book\ ratio) + a_{12}\ (momentum) + \varepsilon$$

We employ one measure of systematic risk exposure of the fund:

$$Beta = a_1 + a_2\ (average\ years\ of\ investment\ experience\ for\ most\ senior)$$
$$+ a_3\ (manager\ turnover) + a_4\ (employee\ equity\ ownership)$$
$$+ a_5\ (portfolio\ turnover)$$
$$+ a_6\ (log\ of\ total\ assets\ under\ management) + a_7\ (fund\ age)$$
$$+ a_8\ (avg\ number\ of\ securities\ held\ in\ portfolio) + a_9\ (cap\ dummy) + \varepsilon$$

We employ an equation for management fees and one for portfolio turnover:

$$Turnover = a_1 + a_2\ (\#\ of\ people\ involved\ in\ mandate)$$
$$+ a_3\ (average\ years\ of\ investment\ experience\ for\ most\ senior)$$
$$+ a_4\ (manager\ turnover) + a_5\ (company\ visists)$$
$$+ a_6\ (employee\ equity\ ownership)$$
$$+ a_7\ (log\ of\ total\ assets\ under\ management)$$
$$+ a_8\ (avg\ number\ of\ securities\ held\ in\ portfolio) + a_9\ (cap\ dummy) + \varepsilon$$

$$Management\ Fees$$
$$= a_1 + a_2\ (\#\ of\ people\ involved\ in\ mandate)$$
$$+ a_3\ (average\ years\ of\ investment\ experience\ for\ most\ senior)$$
$$+ a_4\ (Excess\ ret/Sharpe/Jensen's\ alpha) + a_5\ (company\ visists)$$
$$+ a_6\ (avg\ number\ of\ securities\ held\ in\ portfolio)$$
$$+ a_7\ (portfolio\ turnover) + a_8\ (cap\ dummy) + a_9\ (fund\ age) + \varepsilon$$

5.2.2 Three stage least square procedure:

We then conduct a three stage least square estimation procedure like Golec (1996), Switzer and Huang (2007) and Chevalier and Ellison (1999a), because the dependent variables we are testing are all interrelated and may affect each other simultaneously. The three stage least

squares procedure begins by using the instrumental variables which we have specified to generate 'predict values' for the endogenous variables (portfolio turnover, 4 yr alpha, Sharpe ratio, excess return, 4 yr beta, and management fees), next regressions are run using the 'predicted values' in order to generate the residuals which are used in the third stage to build a covariance matrix and produce accurate estimates. In line with this procedure, we set up the equations so that they fulfill the order and rank condition, that is we make sure that each equation in the system is either over-identified or exactly-identified by specifying each equation so that the total number of exogenous variables that were excluded were greater than or equal to the number of endogenous variables on the right hand side of the equation. In this paper, we treat all the dependent variables as endogenous, because performance of the fund is affected by the systematic risk exposure of the fund and the fees charged which are in turn affected by portfolio turnover, therefore, we test the previously stated equations, three times using a different performance equation in the system each time.

6 Empirical Estimation of Canadian sample

6.1 Descriptive statistics

Panel A of Table 1, shows the simple statistics of our sample, which have assets under management ranging from CAD $420,000 to CAD $18.5 billion, reflecting our sample of small capitalization funds to large capitalization funds. We can see that the mean beta is 0.9, suggesting that the average equity fund in our sample underperforms the market. Further indicated by the performance measures which show that the average Jensen's alpha was -0.18, the average excess return was -0.27, while the average Sharpe ratio was -0.023, reflective of the recessionary period the study takes place in. The average team size is around

6 people while the average investment experience level of the fund managers is about 17 years. Noteworthy are the minimum and the maximum experience levels, 2 and 48 years respectively indicating that there are both really young and inexperienced fund managers along with really experienced old managers. The different lengths of experience imply different risk levels, fee levels and general behavior. Company visits range from no visits at all to 3000 visits since the inception of the fund which shows the differing sentiments of the importance of company visits among fund managers in the industry. The average number of securities held was around 58 with 10.5 being the minimum and 650 being the maximum. The average fund age in our sample is about 17 years. The portfolio turns over at an average of 61 % per year while turnover of key managers averages to about 27% since the inception date of the fund. Finally, the management fees charged in our sample ranges from 0.03% to 5.2%.

insert Table 1 panel A about here

6.2 correlation matrix

The Pearson correlations are presented in Table 2. We can observe from Panel A of Table 2, that there is a 28% positive correlation between visits and team size, indicating that the larger the team size, the more company visits are conducted; since number of visits can be allocated among more managers, this should have a positive impact on performance. This is in line with our proposition that the higher the number of visits, the higher the probability that they will catch on information not available to others. Next we find, that employee equity ownership has a positive 22% and a negative 17% correlation with investment experience and visits respectively signifying that ownership of part of the fund by its

manager(s) does not cause a manager(s) to rate visits as important. Moreover, we find that portfolio turnover has a positive correlation of 18% and 37% with Jensen's alpha and beta respectively, demonstrating that the higher portfolio turnover is the higher its performance and the higher the level of systematic risk taken. On the other hand, portfolio turnover has a negative correlation of 29% with fund age implying that older funds are less active than younger funds. Next we find a positive correlation of 45% between management fees and team size and a 25% negative correlation between management fees and turnover; while a 44% positive correlation between management fees and fund age implying that older funds may also have older fund managers who require higher fees due to years of experience and superior skills. Finally, we find that the log of fund assets has a 31% positive correlation between both team size and fund age suggesting that growth of the fund comes with age and the number of people involved in decision making. We also find a negative correlation of 26% between the log of fund assets and portfolio turnover, implying that as the fund grows, it trades less. Additionally, there is a 64% positive correlation between management fees and the log of fund assets, due to the magnitude of the correlation; we omitted this variable from the fee equation to avoid problems of multicolinearity.

insert Table 2 Panel A about here

6.3 Heteroscedasiticity Consistent OLS results of fund characteristics versus manager characteristics and actions

Much like chevalier and Ellison (1999a) and Gottesman and Morrey (2006), Panel A of table 3 presents an initial analysis of fund characteristics versus manager characteristics and actions for the Canadian Sample. The table shows model 1 and model 2 for each equation with model 1, presenting the inclusion of the capitalization dummy and model 2 presenting the equation without the capitalization dummy to discern the effects of small and mid cap funds. The interpretations of this table focuses on the results including the capitalization dummy, that is model 1, unless there is a significant difference, we limit our comments to the former. In terms of management fees charged by the fund, we find that team size is positive and significant at the 1% level; therefore a 1 % increase in team size is associated with 0.51 % increase in management fees. Contrary to expectations, there is a negative relation between visits and management fees at the 5% level of significance. We also find that small caps have a negative and significant impact on management fees at the 1% level meaning that managers at small caps have a lower compensation than their large cap counterparts.

The portfolio turnover equation is negatively associated with both team size and investment experience at the 1% and 5% level of significance respectively. This shows that team size does not translate into more trading activity by fund managers. Moreover, our findings of the negative association between experience and portfolio turnover are consistent with Switzer and Huang (2007) and as explained by Golec (1996), it may indicate that older fund managers may be less motivated to prove themselves since they have less time left till retirement.

The fifth column demonstrates a positive relation between team size and log of fund assets equation indicating that as more people become in charge of managing a fund, they

contribute positively to the growth of fund assets. Moreover, the positive and significant relation between visits and fund size at the 10% level implies that the more visits conducted to the companies of the securities comprising the fund; the more valuable information is collected for decision making and growth of the fund. Next, we find a negative relation between investment experience and log of fund assets which is analogous to Chevalier and Ellison's (1999a) finding that older managers are associated with smaller funds. We find further, that there is a negative and significant association between manager turnover and fund size at the 5% level, meaning that frequency of change in management has adverse effects on fund size. As Chevalier and Ellison (1999b) elaborate, the resulting effects of managerial turnover serve to show the response of institutional investors. Clearly, we can see that they reacted negatively by limiting magnitude of investments to the fund thus reducing it in size.

Finally, consistent with Switzer and Huang (2007) and Chevalier and Ellison (1999a) the systematic risk equation shows a positive relation between investment experience and betas, suggesting that more experienced investors take on more risk, however this is only in the case when we exclude the capsize dummy. On the other hand, the results also show a negative association between employee ownership and beta, implying that more ownership reduces the systematic risk exposure of the fund managers. This is an indication that as employee equity ownership increases, fund managers become more risk averse since their personal stake is now tied to the fund.

insert Table 3 Panel A about here

The preliminary results show that human capital characteristics and actions do have an effect on various fund characteristics. In summary, we find contrary to our expectations that company visits is negatively related to management fees while positively related to fund size. Team size is positively related to management fees and fund size while negatively related to trading activity. The fund manager's investment experience is negatively related to both portfolio turnover and fund size. Finally ownership is negatively related to beta while managerial turnover is negatively related to fund size.

6.4 Heteroscedasiticity consistent OLS results of performance, risk, and fees equations

For the main tests of this paper, we conduct all the regressions using 2 methodologies, namely, a heteroscedasticity consistent OLS regressions and 3SLS regressions in order to account for simultaneity of the dependent variables. Focusing our attention on the performance equations in Panel A of table 4, we find that beta is positively and significantly related to excess returns therefore, the more risk borne by the investor, the higher the returns. Our next finding shows that manager turnover is also positively and significantly related to excess returns at the 5% level. The result is consistent with our reasoning that when a low performing fund manager is replaced by a more skillful manager than this would positively affect performance. In terms of the value added by human capital and actions, we cannot ascertain much from the OLS results of the performance equations except that manager turnover positively affects excess returns.

The OLS results of the systematic risk equation shows that portfolio turnover, number of securities held in the portfolio and fund age have a positive impact on beta at the 1%, 5%, and 10% levels respectively. These findings suggest that the trading activity of the manager increases the fund's systematic risk; that the number of securities held in a portfolio increases the systematic risk of that portfolio, although very marginally; and consistent with Golec (1996) older funds are more experienced and are not afraid to take on more risk. Finally, as expected manager turnover has a significant and negative impact on beta at the 5% level, following Khorana's (1996) reasoning that fund managers appear to increase systematic risk prior to being replaced therefore, the new manager would most likely hold less risk. Finally, similar to Switzer and Huang (2007), the small and mid capitalization dummy was negatively related to beta suggesting that small and mid cap funds have lower betas.

The portfolio turnover equation shows that investment experience, team size and fund size are negatively and significantly related to the trading activity of the fund. While, as expected, number of securities held has a positive impact on portfolio turnover though it is not significant. Contrary to our expectations but in line with Switzer and Huang (2007), every additional year of investment experience reduces turnover by 1.26%. Similarly, we find that fund size is also negatively related to turnover at the 1% level of significance.

The management fee equation, is done 3 separate times using a different performance measure each time. Contrary to our expectations, the results of all three management fee equations show that portfolio turnover and company visits are negatively and significantly related to management fees at the 1% and 10% levels respectively. This implies that management fees are reduced by trading activity, this result is counterintuitive since we hold

that more trading activity by a fund entails higher expenses and in the same token higher management fees, however, perhaps due to an effort on fund managers' part to decrease expenses they may reduce fees. On the other hand, team size and fund age have a positive impact on management fees both at the 1% level, therefore, as more people manage a fund the more salaries are paid out, hence the higher the management fees. Also, as explained earlier, older funds may have older fund managers who require higher compensation for their services. The capitalization dummy also has a negative impact on the fee equations in line with our preliminary findings that small and mid capitalization managers have lower compensation compared to large cap funds since fees are paid out of fund assets therefore the smaller capitalization fund would pay less.

insert Table 4 Panel A about here

As a wrap up to table 4a, we can conclude that as funds age, they have a positive and significant impact on beta and management fees at the 10% and 1% levels of significance respectively. Moreover, as their team size grow in number, they charge higher management fees and slow down trading activity. We also find that trading activity of the funds in our sample have a positive effect on beta and the opposite effect on fees. Finally, we find company visits conducted by the fund managers reduces management fees.

6.5 Three stage least squares results of performance, risk , and fee equations

The 3sls equations are performed 3 separate times using a different performance measure. Focusing on Panel A of table 5, where the system uses excess return as the performance measure, we find that in line with Trueman's (1988) reasoning and Golec's

(1996) findings, the systematic risk equation shows that portfolio turnover is positively and significantly related to risk at the 1% level, similarly, investment experience has positive and significant impact on beta as well as ownership, number of securities held, and fund age. As expected, the more a portfolio turns over, the more the fund manager is trading which implies greater systematic risk. In the same vein the greater the number of securities held, suggests more positions taken by each security in the fund, which in turn implies greater risk. Moreover, employee equity ownership also shows a positive and significant association with beta at the 5% level which supports the incentive alignment argument that the greater a fund manager's or the equity team's personal interests are tied to the fund under their management, the more he will want to achieve superior performance thus causing him to take on more systematic risk. Fund age also appears to have a positive and significant effect on beta at the 1% level, supporting Golec's (1996) reasoning that taking on more systematic risk increases a fund's chances of superior performance, thereby increasing the fund's longevity. Finally, similar to Switzer and Huang (2007) and in contrast to Golec (1996), fund size displays a positive relation to beta.

Moving on to the turnover equation, we find that experience has adverse effects on portfolio turnover suggesting that as fund managers become more experienced, they reduce trading activity in an effort to reduce expenses, however, it is not significant. Next, consistent with expectations, we find that the number of securities held is positively and significantly related to turnover at the 5% level. Finally, we find that fund assets have a negative impact on turnover, which suggests lower activity by the fund as it grows. Finally, the 3SLS results for the management fee equation show that turnover has a negative and significant impact on

fees charged, while team size and fund age have a positive impact at the 1% and 5% levels respectively.

Panel B of table 5 presents the system using Jensen's alpha as the performance measure. The results for the systematic risk equation, are qualitatively similar to the previous system using excess returns. We find that the turnover equation is also similar qualitatively to the previous system, however, with different magnitudes. Finally in the management fees equation, portfolio turnover becomes insignificant while team size and fund age continue to have a positive and significant impact on fees as in the previous system.

The results for the system using the Sharpe ratio as the performance measure are presented in Panel C of table 5. We find that the price to book ratio has a negative effect on performance at the 1% level. Additionally, in this system we find that dividend yield and momentum are positively and significantly related at the 5% and 1% levels respectively. For the systematic risk equation, the results are qualitatively the same as the previous 2 systems. The turnover equation also displays similar results as the previous two; with frequency of company visits becoming significant at the 10% level. The management fees equation shows similar results to the first system, namely that turnover has a negative and significant effect while team size and fund age have a positive effect on management fees suggesting that older funds charge higher to reflect their prestige, and perhaps they are managed by older managers who also charge higher fees for their services.

insert Table 5 Panel A, B, C about here

A summary of the 3 stage least squares results indicates that for all three systems employing different variables for performance, the following human capital characteristics and fund characteristics, that is, investment experience, employee equity ownership, average number of securities held, fund age, and log of fund assets, positively and significantly impact the fund's beta. Moreover, fund age and team size positively affect management fees in all three systems while portfolio turnover has a negative effect, in the systems using the excess returns and the Sharpe ratios as the performance measures. The main variable we are interested in becomes significant and positively affects trading activity in the system using the Sharpe ratio. Finally, the results show that the average number of securities held has a positive impact on portfolio turnover, while log of fund assets have the opposite effect in all three systems.

7   Empirical Estimation of US sample

7.1 Descriptive statistics

In this section, we will be conducting an analysis of the US results. Therefore, panel B of table 1 shows the simple statistics of the US sample. Since our US sample consists of 4 categories of funds namely, large capitalization, small, capitalization, mid capitalization, and a mix of small and mid capitalization, we can see that assets under management range from CAD$40,000 to about CAD $90 billion. We can observe that the average beta is 0.938, like in the Canadian sample; the US sample is less risky than the market. Looking at the 3 performance measures, we can see that excess return has an average of -0.266% while, Jensen's alpha has an average of -0.143% and the Sharpe ratio has an average of -0.41%, leading us to conclude that they underperformed the market during the 2009 to 2011 period.

Next we can see that team size ranges from a single manager to a managing team of 39. Moreover, similar to the Canadian sample, the experience levels of US fund managers in our sample range from 4 years to 49 years. The minimum number of visits is zero while the maximum is 10,000 giving us an average of 521 visits since the inception of the fund. Employee equity ownership also has an average of 54% ownership, while number of securities held in a portfolio averages 95 securities. The average fund age of our US sample is about 13 years old with the oldest fund being about 85 years old and the youngest 1.25 years old, giving us a sample of well established funds to novice funds. Portfolio turnover averaged about 81.5% per year; moreover, manager turnover averaged 33% with the maximum being 3300% since the inception date of the funds, indicating that some of the investment advisory firms of the fund managers had a huge change in management. Furthermore, dividend yield averaged 1.64% with the maximum being 63.27% and the minimum being 0% while the management fees being charged averaged to 0.67% with the minimum being 0.004% and the maximum being 8.3%.

insert Table 1 Panel B about here

7.2 correlation matrix

Table 2, panel B presents the correlation matrix of all the variables in our sample, some noteworthy observations include the positive 18.8% correlation between employee equity ownership and investment experience indicating that a more experienced fund

manager is more likely to have a stake in the funds he is managing or that is managed in his investment advisory firm. We find a positive 29% correlation between the management fees charged and the fund age indicating that older funds are more prestigious and charge more for their services. We also find a negative 17% correlation between portfolio turnover and fund age indicating that as funds age, they tend to trade less. Moreover, the results show a 35% correlation between fund size fund age meaning that age contributes to the size of the fund and a 20% positive correlation between fund size and team size meaning that as funds grow so does the managing team. Finally we find that in our sample there is a 27% correlation between the capitalization dummy and the Sharpe ratio which is the highest amongst the other performance measure which are correlated at about 11% and 17% for excess return and Jensen's alpha respectively. There is also a negative 24% correlation between the capitalization dummy and the dividend yield indicating that small and mid capitalization funds reduce dividend payout.

insert Table 2 Panel B about here

7.3 Heteroscedasiticity Consistent OLS results of fund characteristics versus manager characteristics and actions

Next, we do initial tests using only human capital characteristics and actions to discern its effects on various fund characteristics. In terms of management fees charged, panel B of table 3 shows that team size, investment experience, and frequency of visits, all have a positive impact at the 1% level; while manager turnover, employee equity ownership

and the small capitalization dummy have a negative impact at the 1% level. These results are consistent with expectations since the more people managing a fund, the more salaries are being paid, moreover, the higher a fund manager's experience level, the more compensation he will demand for his services, and we argue that company visits are essential however present both the fund manager and his management firm with additional costs in terms of money, time, and effort. Manager turnover has a negative impact on fees charged, it may be due to a number of reasons, one of which is that the new manager taking the place of the previous one may reduce his systematic risk in order to make up for the bad performance of the previous manager, therefore, he will reduce expenses for the fund to survive, thus reducing fees. We also find employee equity ownership has a negative impact on fees charged. Finally, as determined in the correlation matrix, the small capitalization funds have a negative impact on fees.

Focusing our attention on portfolio turnover, we find that similar to the Canadian sample, team size and experience have a negative effect on trading activity. Given our sample period, it is expected that the more experienced managers would want to trade less during market downturns. Manager turnover and ownership also has a negative and significant impact on portfolio turnover implying that as team size is reduced due to departure or firing of a manager, less trading is going on in comparison to before. Moreover, as stated for the fee equation, the negative association of ownership and turnover may be due to the time period of our study. On the other hand, frequency of company visits positively and significantly affects portfolio turnover at the 5% level in line with our reasoning, that the more visits fund managers conduct, the more wealth of information they have at their disposal, leading them to trade more.

Next, we find that team size and visits are significantly and positively related to fund size at the 1% level, signifying that the more people managing a fund results in a positive contribution to the growth of the fund, moreover, frequency of visits seems to have the same effect in our US sample. In contrast, ownership continues to display a negative impact on fund characteristics.

Finally as a wrap up to this section, we find that team size has a positive impact on beta at the 1% level, suggesting that the more fund managers in a team, the more trading activity, leading to more risk borne by the fund managers.

insert Table 3 Panel B about here

According to the preliminary results, we find that some aspects of human capital do indeed impact various factors of the fund. We find that these initial results indicate that, team size has a positive and significant effect on fees, size, beta, and a negative effect on portfolio turnover. Investment experience has positive effect on management fees while the opposite effect on portfolio turnover. Company visits has a consistent positive effect wherever it is included, that is in the fees, turnover, and fund size equations. Finally manager turnover and employee equity ownership both have a negative and significant impact on fees, turnover, while employee equity ownership also has a negative effect on fund size.

7.4 Heteroscedasiticity consistent OLS results of performance, risk, and fees equations

We now examine the main regressions we are testing presented in panel B of table 4. The performance regression with Jensen's alpha as the dependent variable shows that turnover has a negative and significant impact on performance at the 5% level, while

management fees are found to be positively and significantly related to performance at the 1% level supporting Golec's (1996) findings that the higher fees charged are due to more effort and research by fund managers as shown by the positive coefficient of visits although it is found to be insignificant. Moreover, similar to Switzer and Huang (2007), fund size is negatively and significantly related to performance. Management fees also have a positive and significant impact on the Sharpe ratio along with the frequency of company visits supporting our hypothesis that visits are positively related to performance. We also find that the beta is positively related to performance since higher risk is associated with higher performance. Similar to the previous performance equation, fund size has a negative impact on the Sharpe ratio while momentum, as documented in the literature has a positive effect on the performance of the fund.

In the portfolio turnover equation, as expected we find that visits has a positive effect at the 1% level which supports the idea that through visits, fund managers have access to information not available otherwise, and the information extracted through these meetings triggers more trading activity as explained by Trueman (1988). The average number of securities held in a portfolio and the small and mid capitalization dummy also have a positive impact on turnover since, the more holdings a fund has, the more positions the securities take which results in higher turnover. We find that experience, team size and ownership all have a negative and significant relation to portfolio turnover, suggesting that experienced managers traded less during our sample period, number of managers in charge of a fund had adverse effects on turnover, and ownership did not demonstrate to be a method of incentive alignment in our sample. Manager turnover also displayed a negative and significant relation at the 5% level along with fund size at the 1% level.

Moving on to the systematic risk equation, we find that portfolio turnover had a positive impact on beta. In addition, we find that employee ownership also had a positive and significant effect on trading activity supporting the idea that the more stake fund managers have in the fund(s) they are managing, the more like they are to take risk to achieve higher performance. Small and mid capitalization had a negative impact on risk.

Similar to the Canadian sample, we ran the fee equations three times using a different performance measure in the equation each time. They all had qualitatively similar results but with different magnitudes. We report that all three performance measures had a positive effect on fees which is consistent with expectations since higher performance charges higher management fees. Moreover, like the Canadian sample results, we find that turnover had a negative impact on fees. As expected, visits had a positive impact on fees along with team size, portfolio holdings and fund age leading us to conclude that as a fund ages and gains more prestige due to its survival and performance and as the number of securities held and team size grows, so do the management fees being charged.

insert Table 4 Panel B about here

The heteroscedasticity consistent OLS results of the US sample shows us several major findings, first, it supports all three of our hypotheses that the frequency of company visits is positively related to performance as indicated by its positive effect on the Sharpe ratio, that it is also positively related to portfolio turnover at the 1% level of significance, and that it contributed positively to management fees since it represents additional costs. Next this table shows that human capital characteristics have a bearing on performance, risk and fees as demonstrated by the negative and significant impact of investment experience on

trading activity, the negative impact of team size on portfolio turnover and its positive impact on fees, and the negative impacts of both managerial turnover and employee equity ownership on the trading activity of the fund.

7.5 Three stage least squares results of performance, risk , and fee equations

Finally, we run the regressions using the 3SLS methodology since we believe results would be better reflected when we take into account the endogeneity of the dependent variables. Looking at panel D of table 5, the system with excess return as the performance measure shows that beta negatively and significantly affects excess returns at the 1% level; portfolio turnover also has a similar negative effect at the 10% level of significance. Visits, on the other hand, have a positive and significant impact on performance at the 1% level of significance; while dividend yield have a negative and significant effect on the excess returns of the fund at the 10% level. Second, we find that portfolio turnover, investment experience, employee equity ownership, and fund size have a positive impact on beta at the 1% level of significance; implying that all human capital characteristics positively affect fund manager's risk taking along with average portfolio holdings which is significant at the 10% level, while the capitalization dummy has a negative and significant impact on beta. Next looking at the turnover equation, we find that visits, the average number of securities held and the capitalization have a positive impact on trading activity at the 1% level. These results suggest that frequency of company visits are a source of value added information since it causes fund managers to trade more, while an addition of a security in a portfolio leads to a 0.05% increase in trading. Moreover the significant capitalization dummy indicates that small and mid caps are 13.8% more active than their large cap counterparts. In contrast, investment

experience, employee equity ownership and fund assets have a negative and significant impact on portfolio turnover at the 1% level of significance.

Shifting our attention to the fees equation we find that Performance and company visits are positively related to management fees at the 1% and 5% levels respectively. On the other hand, portfolio turnover, investment experience, and the capitalization dummy all have a negative impact on management fees.

Similar to the excess return equation, the system with Jensen's alpha as the performance measure, panel E of table 5, shows that beta and dividend yield also have a negative effect on fund performance although dividend yield is not significant, however, management turnover becomes significant at the 10% level implying that a management firm with a long history of managerial turnover has a negative impact on performance. Moreover, as predicted, we find that frequency of visits is positively related to performance. Beta and portfolio turnover in this system, display similar results as the previous system, while in the management fee equation, fund age and team size become significant having a positive effect at 1% level, highlighting the idea that as funds age and as the managing team grows in size so do the management fees.

Finally, in panel F of table 5, presenting the third system with the Sharpe ratio as the performance measure; we find that similar to the two previous systems, beta and dividend yield are negatively related to performance while visits has a positive and significant impact at the 1% level of significance. Moreover, we find that fund age has a negative impact on performance while momentum has a positive and significant impact at the 1% level. Beta and turnover have qualitatively similar results to the previous two systems and finally the results

for the management fee equation shows that, as in the previous system, performance does not affect fees charged, and the capitalization dummy is positive and significant in this system, therefore, small and mid capitalization funds charge 2.16% higher management fees than their large cap peers.

<center>***insert Table 5 Panel D, E, F about here***</center>

The three stage simultaneous equation method of estimation further emphasized the relevance of manager actions and characteristics by producing results that support our three hypotheses, namely that the frequency of company visits has positive and significant impact on all three performance measures and on the fees and systematic risk. Moreover, we find that investment experience consistently shows a positive relation to the beta of the fund while a negative and significant relation to both turnover and management fees, supporting Chevallier and Ellison (1999b) and Golec (1996) that older managers take on more risk, however, due to the negative effects of age, their funds display lower trading activity and thus lower fees. Managerial ownership also maintains a positive and significant association with beta while a negative association with trading activity, while average number of holdings is positively related to beta and portfolio turnover in all three systems.

8   Summary and Conclusions

Using a sample of 205 Canadian and 938 US equity funds during the period 2008 through the first quarter of 2011, we examine how human capital characteristics and actions affect the performance, management fees and systematic risk of the funds. Specifically, we place a special emphasis on the frequency of company visits conducted by fund managers in

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determining whether it contributes positively to the fund performance attributes. We seek to answer the question of whether company visits offer a source of value added information that fund managers can use in their company valuations and subsequent stock-picking since we hold that company visits provide fund managers with the a clearer picture of the companies comprising their funds and the long term goals. We employ 2 methodologies, the first which is the heteroscedasticity consistent ordinary least squares method since this is a cross-sectional study, and the second methodology we utilize is the three stage least squares method since we hold that the performance, risk, and fees are all interrelated and affect one another.

Our tests on the Canadian sample show in the initial results that human capital characteristics do have an impact on various fund attributes. The variable of interest, company visits is negatively and significantly related to management fees, while it shows a positive and significant effect on fund size. Moreover, it has a negative effect on Jensen's alpha and the Sharpe ratio, and a positive effect on the excess returns although they are not significant. It becomes positive and affects trading activity in the 3sls systems employing the Sharpe ratio and excess returns as the performance measures although it is only significant in the former at the 10% level. The analysis and tests on the Canadian sample do not give us ground to make firm conclusions regarding the effects of company visits on performance and management fees including portfolio turnover, since results were not consistent.

The US sample showed in its initial results similar to that of Canadian funds, that human capital impacts various fund characteristics. Contrary to Canadian funds, we find that company visits, has a positive and significant impact on management fees, portfolio turnover

and fund size, showing support to our reasoning that visits increase management fees, since fund managers are contributing their time, effort and other costs in conducting these visits. Moreover, its positive effect on trading activity shows that they are being constantly updated by new information received through visits leading them to trade more; and its positive impact on fund size indicates its contribution to growth of the fund. Company visits are also significant in the OLS results having a positive impact on the Sharpe ratio, the portfolio turnover and the management fees. Finally, company visits have positive and significant effect on all the performance variables, management fees and portfolio turnover in the 3sls estimations. All this lends support to our hypotheses that company visits have a positive contributing factor to fund performance and fees, leading us to conclude that visits present a beneficial value to fund managers in managing portfolio.

Concluding this study, we have a picture of the differing behaviors of Canadian and US fund managers during the period of the first quarter of 2008 through the first quarter of 2011. We conclude that US fund managers derive value enhancing information from company visits while in regards to Canadian fund managers, results are inconclusive, perhaps due to the small sample size, alternatively, it may be due to cultural differences between the US and Canada, demonstrating the weight US fund managers place on company visits relative to Canadian fund managers. Another possible explanation is that the industry composition of the investments differs between the US and Canada. Canadian portfolio managers would have greater exposure to the mining and oil and gas industries. Accordingly, company visits in these industries may be less relevant than other tangible factors, such as geological assays, proven reserves, etc. These issues remain as topics for future research.

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This table presents the summary statistics of all the variables used in the study. The final sample includes 205 Canadian equity funds with 601 observations and 938 US equity funds with 2720 observations. The fund performance measures include the excess returns, the 4 year Jensen's alpha, and the 4 yr Sharpe ratio all taken in year t, while all the human capital characteristics, namely, team size, investment experience in years, employee equity ownership (%), manager turnover (%), and frequency of visits are taken in year t – 1. The 4 year Beta captures the systematic risk of the funds. The rest of the variables are fund characteristics variables, that is, the fund's total institutional assets under management (in $ millions), we also take the natural logarithm of the fund assets and use it as a proxy for fund size in our regressions. The average number of securities held, is measured by taking the average of the minimum number and the maximum number that can be held in a portfolio. Fund age is measured by subtracting the year the first account was launched from the first quarter of the fund year. Portfolio turnover (%) shows the number of times a fund turns over per year, the dividend yield shows the % of dividends paid, and the price to book ratio shows the relation between the stock's market price and its book value. The momentum measures the effects of the returns of the past on performance and is the annualized 1 year return prior to performance therefore it's taken in year t – 1. The management fees indicate the % of fees charged, it is expressed as a decimal and finally, capitalization is a dummy variable that takes on the value of 1 if the fund is a small, mid, or smid capitalization fund and zero otherwise. Panel A, represents the summary statistics of the Canadian Sample while panel B shows the summary statistics of the US Sample.

Panel A: Canadian Sample

Variable	Mean	Median	Std Dev	Minimum	Maximum	Skewness	Kurtosis
Performance measures							
Excess Ret	-0.27	-0.29	3.17	-13.27	16.24	0.34	4.10
Jensen's alpha	-0.19	-0.32	3.30	-16.10	18.04	0.33	3.96
Sharpe Ratio	-0.02	0.00	0.21	-0.99	0.73	-0.44	1.37
Systematic risk							
Beta	0.91	0.93	0.18	-0.02	1.62	-0.29	2.48
Human capital & Actions							
Team size	5.98	5	4.71	1	38	2.61	11.70
Experience	16.94	15	7.70	2	48	1.15	1.53
Employee Equity ownership	47.14	40	41.74	0	100	0.15	-1.64
Manager Turnover	27.04	11	49.73	0	500	4.67	32.60
Visits	185.73	100	292.73	0	3000	5.58	46.77

Panel A (continued)

Fund characteristics							
Fund assets under management (in millions)	1011.81	386	1931.00	0.42	18516	5.10	35.81
Log fund assets	5.56	5.96	2.03	-0.87	9.83	-0.68	0.03
Avg securities held	57.45	45	56.79	10.5	650	6.76	61.32
Fund age	16.64	13.25	11.84	1.25	70.25	1.32	1.94
Portfolio Turnover	61.02	38.45	57.03	0	346	1.88	4.19
Dividend Yield	2.83	2.58	1.31	0	10.571	1.72	6.22
Price to Book ratio	2.01	1.97	0.64	0.6	7.2	1.70	9.57
Momenturm	5.95	0.37	35.25	-55.08	136.29	0.51	-0.48
% of fees charged expressed in decimals	0.004	0.003	0.005	0.0004	0.052	7.69	65.63
Capitalization	0.20	0	0.40	0	1	1.48	0.19

Table 1 (continued)

Panel B: US Sample

Variable	Mean	Median	Std Dev	Minimum	Maximum	Skewness	Kurtosis
Performance measures							
Excess Ret	-0.27	-0.04	9.60	-16.94	441.41	37.90	1745.54
Jensen's alpha	-0.14	-0.39	4.72	-14.37	163.95	17.40	598.30
Sharpe Ratio	-0.41	-0.43	0.27	-1.34	0.68	0.23	0.03
Systematic risk							
Beta	0.94	0.93	0.20	-1.02	3.41	0.40	16.71
Human capital & Actions							
Team size	7.34	6.00	5.70	1	39	2.42	7.71
Experience	17.30	17.00	5.68	4	49	0.81	1.31
Employee Equity ownership	54.44	64.00	43.61	0	100	-0.17	-1.74
Manager Turnover	32.65	4.00	191.76	0	3300	14.47	220.46
Visits	545.87	60.00	1753.50	0	10000	4.86	23.08
Fund characteristics							
Fund assets under management (in millions)	1212.10	347.79	3321.10	0.04	90375.70	13.02	272.75
Log fund assets	5.58	5.85	2.11	-3.22	11.41	-0.87	1.35
Avg securities held	94.74	62.50	113.30	10	1854	6.63	74.94
Fund age	13.24	11.25	9.65	1.25	85.25	2.22	9.54
Portfolio Turnover	80.92	64.00	65.49	0	896.40	2.88	18.74
Dividend Yield	1.64	1.45	1.78	0	63.27	20.46	646.91
Price to Book ratio	2.53	2.24	2.29	0.05	99.90	31.77	1338.06
Momenturm	-3.81	-14.17	23.92	-60.67	100.91	0.85	-0.20
% of fees charged expressed in decimals	0.01	0.01	0.005	0.00004	0.08	11.10	160.49
Capitalization	0.47	0.00	0.50	0	1	0.12	-1.99

Table 2: Correlation Matrix

This table shows the correlation matrix of all the variables used in the study. It gives us preliminary view of the association between all the variables. Panel A, presents the correlation matrix for the Canadian Sample while panel B shows the correlation matrix for the US Sample.

Panel A: Canadian Sample

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Excess Ret (1)	1.00																	
Jensen's alpha (2)	0.11	1.00																
Beta (3)	0.17	0.08	1.00															
Sharpe Ratio (4)	0.27	0.68	0.01	1.00														
Team size (5)	0.04	0.01	-0.01	0.05	1.00													
Experience (6)	0.06	-0.18	0.02	-0.10	-0.18	1.00												
Visits (7)	0.01	0.01	0.03	0.03	0.28	-0.06	1.00											
Employee Equity own (8)	0.03	0.00	-0.18	0.00	0.01	0.22	-0.17	1.00										
Avg securities held (9)	0.01	0.00	0.14	0.01	0.01	-0.11	0.00	-0.19	1.00									
Fund age (10)	0.01	-0.06	0.00	0.01	0.12	0.17	0.06	-0.20	-0.10	1.00								
Portfolio Turnover (11)	0.07	0.18	0.37	0.05	-0.08	-0.12	-0.09	0.02	0.00	-0.29	1.00							
Manager Turnover (12)	0.03	0.01	0.04	0.04	-0.16	-0.12	-0.09	-0.22	0.02	0.15	0.03	1.00						
Dividend Yield (13)	0.03	-0.07	-0.40	0.05	-0.03	-0.04	-0.08	0.08	-0.05	-0.03	-0.14	0.02	1.00					
Price to Book ratio (14)	-0.08	-0.05	0.15	-0.27	0.03	0.02	0.03	-0.01	-0.08	0.02	0.10	-0.03	-0.38	1.00				
Management Fees (15)	0.05	-0.10	0.00	0.07	0.45	0.01	-0.01	0.04	-0.10	0.44	-0.25	-0.08	-0.05	-0.02	1.00			
Momentum (16)	-0.09	0.16	0.07	0.39	0.01	0.02	0.01	0.02	0.00	0.01	-0.03	-0.02	-0.35	0.29	0.03	1.00		
Log fund assets (17)	-0.01	-0.13	0.01	-0.03	0.31	-0.12	0.16	-0.05	0.03	0.31	-0.26	-0.08	-0.03	0.03	0.64	0.04	1.00	
Capitalization (18)	-0.14	0.26	-0.10	-0.05	-0.11	-0.07	-0.05	0.10	-0.03	-0.10	0.03	-0.03	-0.13	-0.16	-0.20	0.06	-0.25	1.00

Panel B: US Sample

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Excess Ret (1)	1.00																	
Jensen's alpha (2)	0.73	1.00																
Beta (3)	0.26	0.27	1.00															
Sharpe Ratio (4)	0.18	0.52	0.03	1.00														
Team size (5)	0.00	0.02	0.07	0.01	1.00													
Experience (6)	0.01	0.00	-0.02	0.06	-0.25	1.00												
Visits (7)	0.01	0.06	0.11	0.06	-0.04	-0.05	1.00											
Employee Equity own (8)	-0.01	0.00	0.00	0.03	-0.04	0.19	0.13	1.00										
Avg securities held (9)	-0.02	-0.09	0.04	-0.12	-0.03	-0.03	-0.03	-0.14	1.00									
Fund age (10)	0.00	0.01	-0.02	0.02	0.09	0.12	0.04	-0.05	-0.07	1.00								
Portfolio Turnover (11)	0.01	-0.01	0.11	-0.05	-0.05	-0.17	0.04	-0.10	0.10	-0.17	1.00							
Manager Turnover (12)	0.00	-0.01	0.01	-0.02	-0.09	0.03	0.06	-0.04	-0.01	0.00	-0.01	1.00						
Dividend Yield (13)	-0.04	-0.08	-0.08	-0.11	0.01	0.02	-0.04	-0.08	0.06	0.01	-0.12	-0.01	1.00					
Price to Book ratio (14)	0.02	0.05	-0.03	0.03	0.01	-0.05	-0.03	0.04	-0.07	0.01	0.04	0.00	-0.11	1.00				
Management Fees (15)	0.00	0.04	0.03	0.09	0.14	0.01	0.13	-0.04	0.00	0.29	-0.10	-0.02	0.03	0.00	1.00			
Momenturm (16)	0.03	0.04	0.05	0.54	-0.01	0.09	0.01	0.00	-0.03	0.07	-0.08	0.00	-0.16	0.08	0.07	1.00		
Log fund assets (17)	-0.01	-0.02	0.04	-0.09	0.21	-0.09	0.16	-0.12	0.12	0.35	-0.10	-0.01	0.02	0.02	0.49	0.01	1.00	
Capitalization (18)	0.11	0.17	-0.02	0.27	0.01	-0.09	-0.03	0.08	0.03	-0.11	0.11	-0.03	-0.24	-0.10	-0.10	0.02	-0.12	1.00

Table 3: Fund vs. manager Characteristics

The table shows the preliminary regressions of various fund characteristics against the fund manager's characteristics and actions. Each regression is tested with without the capitalization dummy; therefore, model 1 of each regression includes the capitalization dummy, while model 2 excludes it. This is done in order to see the effect of small and mid capitalization funds on the various characteristics of the fund. The interpretations of these results generally focus on Model 1 of each regression. n represents the number of observations, followed by the F value and r square of the regressions. All standard errors are reported in parentheses. *, **, *** indicate significance level at the 10%, 5%, and 1% respectively. Panel A, reports the results for the Canadian Sample while panel B reports the results for the US Sample.

Panel A: Canadian Sample

	Dependent Variables							
	Management Fee		Portfolio Turnover		Log Fund assets		Beta	
Independent Variables	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Intercept	-0.2441	-0.8292	83.7808	81.3767	5.9118	5.6727	0.9277	0.9128
	-0.15	-0.53	(7.41)***	(7.28)***	(18.37)***	(17.26)***	(36.66)***	(38.78)***
Team size	0.5067	0.5297	-1.2457	-1.1357	0.0970	0.1098	0.0001	0.0006
	(3.71)***	(3.95)***	(-2.72)***	(-2.62)***	(4.93)***	(5.58)***	0.04	0.38
Experience	0.1102	0.1140	-0.8332	-0.8214	-0.0361	-0.0393	0.0018	0.0020
	1.51	1.54	(-2.09)**	(-2.07)**	(-2.37)**	(-2.53)**	1.53	(1.74)*
Visits	-0.0019	-0.0018	-0.0016	-0.0015	0.0004	0.0005		
	(-2.06)**	(-1.96)*	-0.33	-0.31	(1.82)*	(1.94)*		
Manager Turnover	-0.0049	-0.0033	-0.0414	-0.0332	-0.0055	-0.0039	0.0000	0.0001
	-0.81	-0.55	-0.44	-0.34	(-2.3)**	(-1.65)*	0.1	0.35
Employee Equity own	0.0047	0.0036	0.0434	0.0393	-0.0013	-0.0024	-0.0009	-0.0009
	0.54	0.4	0.48	0.44	-0.51	-0.94	(-4.04)***	(-4.2)***
Capitalization	-1.5446		-6.4202		-0.9615		-0.0439	
	(-2.9)***		-0.89		(-4.07)***		(-2.16)**	
n	248	248	358	358	337	337	472	472
F value	(13.05)***	(14.86)***	1.2	1.29	(13.24)***	(12.13)***	(5.19)***	(5.38)***
r-square	0.2453	0.2349	0.0201	0.018	0.194	0.1548	0.0528	0.044

Table 3 (continued)

Panel B: US Sample

Independent Variables	Management Fee		Portfolio Turnover		Log Fund assets		Beta	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Intercept	1.80797	0.63388	126.3794	134.6515	5.58611	5.36657	0.92625	0.92205
	1.55	0.49	(19.81)***	(21.54)***	(29.15)***	(28.82)***	(55.09)***	(55.88)***
Team size	0.49456	0.49583	-0.95364	-0.96285	0.09326	0.09382	0.00244	0.00245
	(6.5)***	(6.48)***	(-3.47)***	(-3.55)***	(10.42)***	(10.41)***	(3.35)***	(3.35)***
Experience	0.19371	0.21276	-2.30965	-2.4211	-0.01126	-0.00778	-0.00033	-0.00026
	(3.11)***	(3.26)***	(-8.15)***	(-8.47)***	-1.23	-0.84	-0.36	-0.28
Visits	0.00124	0.00127	0.0015	0.00131	0.00022	0.000225		
	(6.79)***	(7.06)***	(2.56)**	(2.29)**	(10.14)***	(10.62)***		
Manager Turnover	-0.0014	-0.0013	-0.00543	-0.00624	-4.4E-05	-2.3E-05	1.33E-05	1.37E-05
	(-3.86)***	(-3.81)***	(-1.87)*	(-2.31)**	-0.35	-0.19	1.5	1.55
Employee Equity own	-0.02866	-0.031	-0.11867	-0.10059	-0.00757	-0.00801	3.54E-05	2.76E-05
	(-3.67)***	(-3.99)***	(-3.88)***	(-3.3)***	(-7.48)***	(-7.89)***	0.34	0.28
Capitalization	-1.97566		15.37708		-0.36537		-0.00699	
	(-3.21)***		(5.53)***		(-4.23)***		-0.83	
n	2025	2025	1986	1986	2071	2071	2415	2415
F value	(20.98)***	(23.22)***	(23.68)***	(21.84)***	(45.72)***	(51.01)***	(2.7)**	(3.21)**
r square	0.0587	0.0544	0.067	0.0523	0.1173	0.1099	0.0056	0.0053

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Table 4: Heteroscedasticity consistent OLS results of performance, risk and fees

This table shows the first methodology employed which is the ordinary least squares methodology with heteroscedasticity robust standard errors reported in parentheses. Three different performance measures are employed, namely, the excess returns, the 4 yr Jensen's Alpha, and the 4 yr Sharpe ratio. The 4 yr beta regression represents the systematic risk of the fund while the portfolio turnover regression shows the trading activity of the funds, and finally the management fees equations are tested three times using a different performance measure in the equation each time. Model 1 is the management fee equation using excess return as the measure of performance, Model 2 uses Jensen's alpha as the performance measure and Model 3 uses the Sharpe ratio as the performance measure. n represents the number of observations, followed by the F value and r square of the regressions. All standard errors are reported in parentheses. *, **, *** indicate significance level at the 10%, 5%, and 1% respectively. Panel A, reports the results for the Canadian Sample while panel B reports the results for the US Sample.

Panel A: Canadian Sample

Independent Variables	Dependent Variables							
	Performance			Risk	Turnover	Management Fees		
	Excess Ret	Jensen's alpha	Sharpe Ratio	Beta	Portfolio Turnover	Model 1	Model 2	Model 3
Intercept	-4.60469	2.67942	0.21577	0.7617	135.9309	0.3194	0.52606	0.48259
	(-1.91)*	1.09	(1.92)*	(13.18)***	(6.29)***	0.18	0.3	0.28
Beta	4.31196	-1.0254	-0.01174					
	(2.32)**	-0.56	-0.12					
excess ret						0.02754		
						0.38		
Jensen's alpha							-0.07485	
							-0.85	
Sharpe Ratio								1.46572
								1.11
Portfolio Turnover	0.0008767	0.00645	0.000292	0.00112		-0.01016	-0.01099	-0.01182
	0.22	1.37	1.09	(5.03)***		(-2.71)***	(-2.96)***	(-3.21)***

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Panel A (continued)

Management fees	-0.00723	0.01397	0.00157					
	-0.2	0.33	0.76					
Visits	0.00001014	-0.00032	-5.7E-06		-0.0012	-0.00203	-0.00202	-0.00199
	0.04	-0.7	-0.19		-0.24	(-1.84)*	(-1.88)*	(-1.79)*
Experience				0.00187	-1.26858	-0.0062	-0.01122	-0.00802
				1.18	(-2.68)***	-0.09	-0.17	-0.12
Team size					-0.80738	0.40556	0.41604	0.41289
					(-1.93)*	(3.37)***	(3.45)***	(3.42)***
Employee Equity Own	-0.00672	-0.01012	-0.00023	-0.00076	-0.05697			
	-1.01	-1.46	-0.66	(-3.19)***	-0.65			
Manager Turnover	0.01291	0.00557	0.000261	-0.00077	-0.11769			
	(1.99)**	0.57	0.5	(-2.28)**	-1.11			
Securities held				0.00106	0.25398	-0.00546	-0.0082	-0.00721
				(2.33)**	1.62	-0.29	-0.42	-0.37
Fund age	0.00698	0.00545	0.00117	0.00166		0.17725	0.17376	0.17497
	0.32	0.26	0.94	(1.74)*		(4.59)***	(4.31)***	(4.36)***
Dividend Yield	0.17813	-0.09848	0.01982					
	0.81	-0.4	1.18					
Price to Book	-0.28878	0.29412	-0.12576					
	-0.63	0.55	(-4.77)***					
Log fund assets	0.0963	-0.29907	-0.01035	0.00635	-8.64517			
	0.7	-1.46	-1.11	1.18	(-4.22)***			
Momentum	0.00521	0.00604	0.00322					
	0.79	0.79	(8.15)***					
Capitalization				-0.05479	-16.427	-1.23681	-1.09717	-1.14447
				(-2.5)**	(-2.1)**	(-2.29)**	(-1.86)*	(-2.04)**
n	197	197	197	301	300	254	243	243
F value	(1.65)*	1.52	(8.69)***	(11.22)***	(4.95)***	(16.72)***	(16.01)***	(16.07)***
r square	0.0893	0.083	0.3407	0.2351	0.1198	0.3532	0.3537	0.3546

Table 4 (continued)

Panel B: US Sample

| | Dependent Variables | | | | | | | |
| | Performance | | | Risk | Turnover | Management Fees | | |
Independent Variables	Excess Ret	Jensen's alpha	Sharpe Ratio	Beta	Portfolio Turnover	Model 1	Model 2	Model 3
Intercept	-18.44215	-7.81821	-0.33381	0.89742	141.06036	-0.7434	-0.54326	2.89017
	-1.25	-1.46	(-7.23)***	(40.34)***	(16.12)***	-0.58	-0.4	(1.8)*
Beta	19.99022	9.50882	0.0694					
	1.25	1.65	(1.99)**					
Excess ret						0.01957		
						(1.81)*		
Jensen's alpha							0.12362	
							(1.9)*	
Sharpe ratio								6.67224
								(5.4)***
Portfolio turnover	-0.00504	-0.00563	-8.8E-05	0.000294		-0.01271	-0.01314	-0.01074
	-0.85	(-2.23)**	-0.9	(3.51)***		(-3.58)***	(-3.55)***	(-3)***
Management fees	0.01352	0.03102	0.00342					
	1.16	(3.24)***	(4.84)***					
Visits	-0.0001938	3.456E-05	5.76E-06		0.0023	0.00108	0.00107	0.00102
	-1.03	0.47	(2.46)**		(3.75)***	(6.29)***	(6.19)***	(6)***
Experience				0.000338	-2.32647	0.02409	0.02305	0.000788
				0.4	(-8.21)***	0.4	0.37	0.01
Team Size					-0.53813	0.40417	0.40249	0.39606
					(-1.86)*	(6.03)***	(5.92)***	(5.84)***

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Panel B (continued)

Employee Equity Own	-0.00844	-0.00336	0.000131	0.000206	-0.13929			
	-0.82	-0.83	1.05	(1.92)*	(-4.27)***			
Manager Turnover	-5.696E-05	-0.00025	-2.1E-05	3.38E-06	-0.00623			
	-0.16	-1.22	-0.91	0.38	(-2.36)**			
Securities held				4.07E-05	0.04572	0.0042	0.0053	0.00636
				1.49	(3.03)***	(2.03)**	(2.17)**	(2.53)**
Fund age	0.01395	0.01452	0.000414	-1.7E-05		0.37392	0.36844	0.36363
	0.96	(1.66)*	0.66	-0.04		(8.93)***	(8.45)***	(8.37)***
Dividend Yield	-0.04724	-0.21734	-0.00786					
	-0.22	-1.33	-0.99					
Price to Book	0.07771	0.06492	-0.00239					
	0.77	1.15	-0.68					
Log fund assets	-0.01204	-0.15481	-0.02363	0.00226	-3.62372			
	-0.1	(-2.48)**	(-6.4)***	1.01	(-4.65)***			
Momentum	0.00663	0.00135	0.00584					
	0.85	0.28	(24.23)***					
Capitalization				-0.01932	13.93989	-1.51576	-1.79312	-2.70483
				(-2.13)***	(4.83)***	(-2.46)**	(-2.83)***	(-3.87)***
n	1697	1697	1697	2080	1873	1877	1816	1816
F value	(19.7)***	(25.3)***	(78.75)***	(3.07)***	(23.09)***	(30.31)***	(28.58)***	(31.53)***
r square	0.1139	0.1417	0.3395	0.0117	0.0902	0.1149	0.1123	0.1225

Table 5: 3sls results of risk, performance, and fees

This table shows the results of the second methodology employed, the three stage least squares estimation, taking into account the simultaneity of the performance, risk, and fee equations including portfolio turnover. We utilize three systems in this procedure in order to test the three performance measures of the fund, therefore, the first system uses the fund's excess returns as the fund performance measure, the second system uses the 4 yr Jensen's alpha as the fund performance measure, while the third system uses the 4 yr Sharpe ratio as the fund performance measure. For each system, n represents the number of observations, followed by the F value and r square of the regressions. All standard errors are reported in parentheses. *, **, *** indicate significance level at the 10%, 5%, and 1% respectively. Panels A, B and C of table 5 represent the 3sls results of the Canadian Sample with Excess return, Jensen's alpha, and the Sharpe ratio as the performance measures respectively; while panel D, E, and F represent the 3sls results of the US Sample with Excess return, Jensen's alpha, and the Sharpe ratio as the performance measures respectively.

Panel A: Canadian Sample Using the Excess Return as the performance measure

Independent Variables	Dependent Variables			
	Excess ret	Beta	Management Fees	Portfolio Turnover
Intercept	-8.44541	-0.33666	6.068704	133.3206
	-1.06	(-2.24)**	(1.87)*	(6.47)***
excess ret			0.103908	
			0.11	
Beta	16.84279			
	1.29			
Portfolio turnover	-0.05607	0.008224	-0.12369	
	-0.63	(9.85)***	(-5.33)***	
Management fee	0.039357			
	0.28			
Company Visits	0.000279		-0.00035	0.011346
	0.19		-0.3	1.63
Experience		0.00568	0.037549	-0.48929
		(1.96)*	0.43	-0.73
Team size			0.330296	-0.07305
			(4.5)***	-0.17
Employee Equity Own	-0.01042	0.001189		-0.11803
	-0.52	(2.56)**		-1.31

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Panel A (continued)

Manager turnover	0.015536	-5.54E-06		0.042916
	1.35	-0.01		0.34
securities held		0.001648	0.028614	0.448304
		(2.32)**	1.11	(2.52)**
Fund age	-0.05084	0.010223	0.141874	
	-0.33	(5.97)***	(2.38)**	
Log fund assets	-0.50494	0.055616		-13.3113
	-1.28	(5.53)***		(-7.62)***
Dividend Yield	0.629418			
	1.25			
Price to book	-0.70792			
	-0.97			
Momentum	0.011463			
	1.17			
Capitalization		-0.01781	-0.56173	-9.79256
		-0.45	-0.38	-1.06
n	196	196	196	196
F value	0.57	(4.49)***	(12.21)***	(4.16)***
r square	0.033	0.16123	0.15102	0.34309

Panel B: Canadian Sample using the Jensen's Alpha as the performance measure

Independent Variables	Dependent Variables			
	Jensen's alpha	Beta	Management Fees	Portfolio Turnover
Intercept	14.50203	-0.32901	1.501446	133.0749
	0.92	(-2.2)**	0.31	(6.28)***
Jensen's alpha			-1.90227	
			-1.47	
Beta	-28.984			
	-1.12			
Portfolio turnover	0.135316	0.008084	-0.05834	
	0.76	(9.74)***	-1.21	
Management fee	0.095184			
	0.6			
Company Visits	-0.00131		-0.00132	0.011372
	-0.49		-0.84	1.62
Experience		0.006466	-0.00135	-0.72209
		(2.25)**	-0.01	-1.08
Team size			0.392734	-0.19565
			(3.65)***	-0.45
Employee Equity Own	-0.00541	0.001226		-0.12056
	-0.14	(2.52)**		-1.18
Manager turnover	0.025285	0.000597		-0.14127
	1.13	0.95		-1
securities held		0.002441	0.02351	0.309159
		(6.6)***	0.7	(2.07)**
Fund age	0.088896	0.010346	0.206295	
	0.29	(6.05)***	(2.24)**	
Log fund assets	0.388911	0.044823		-10.778
	0.58	(4.18)***		(-5.08)***
Dividend Yield	-1.15573			
	-1.17			
Price to book	1.400694			
	1.12			
Momentum	-0.01446			
	-0.99			
Capitalization		-0.02995	2.692229	-7.4109
		-0.75	0.98	-0.79
n	196	196	196	196
F value	0.34	(4.49)***	(8.53)***	(4.16)***
r- square	0.02011	0.16123	0.26728	0.15102

Panel C: Canadian Sample using the Sharpe Ratio as the performance measure

Independent Variables	Dependent Variables			
	Sharpe Ratio	Beta	Management Fees	Portfolio Turnover
Intercept	-0.68427	-0.34496	5.696457	136.9065
	-1.57	(-2.26)**	(1.74)*	(6.37)***
Sharpe Ratio			2.4218	
			0.74	
Beta	0.938206			
	1.32			
Portfolio turnover	0.00028	0.008297	-0.11791	
	0.06	(9.95)***	(-4.93)***	
Management fee	0.005733			
	0.61			
Company Visits	-0.00004		-0.00013	0.011572
	-0.48		-0.11	(1.66)*
Experience		0.005655	0.041394	-0.51859
		(1.94)*	0.45	-0.77
Team size			0.332745	-0.05967
			(4.46)***	-0.14
Employee Equity Own	0.000113	0.00122		-0.12738
	0.1	(2.7)***		-1.52
Manager turnover	0.00015	5.49E-06		0.037081
	0.23	0.01		0.36
securities held		0.001535	0.021586	0.409674
		(1.74)*	0.79	(2.04)**
Fund age	-0.00205	0.010223	0.15453	
	-0.24	(5.97)***	(2.89)***	
Log fund assets	-0.00662	0.056855		-13.4288
	-0.28	(5.69)***		(-7.68)***
Dividend Yield	0.061239			
	(2.21)**			
Price to book	-0.1638			
	(-3.9)***			
Momentum	0.003737			
	(6.46)***			
Capitalization		-0.01654	-0.50291	-9.75274
		-0.42	-0.41	-1.06
n	196	196	196	196
F value	(5.32)***	(4.49)***	(11.58)***	(4.16)***
r-square	0.24122	0.16123	0.33123	0.15102

Panel D: US Sample using the Excess return as the performance measure

Independent Variables	Dependent Variables			
	Excess ret	Beta	Management Fees	Portfolio Turnover
Intercept	140.8497 (3.02)***	0.575369 (9.89)***	46.26114 (2.87)***	130.114 (18.18)***
Excess ret			6.693938 (2.82)***	
Beta	-140.305 (-3.47)***			
Portfolio Turnover	-0.1309 (-1.77)*	0.002628 (6.41)***	-0.28004 (-2.62)***	
Management Fees	-0.5018 -1.32			
Company Visits	0.001666 (2.84)***		0.001635 (2.53)**	0.002686 (3.91)***
Experience		0.0053 (4.41)***	-0.84862 (-2.34)**	-1.97797 (-7.41)***
Team size			0.3934 1.64	-0.22187 -0.89
Employee Equity Own	-0.00249 -0.16	0.000618 (5.1)***		-0.12193 (-3.78)***
Manager turnover	-0.00277 -1.58	0.000011 0.56		-0.0054 -0.94
Securities held		0.000056 (1.9)*	-0.00352 -0.46	0.05742 (4.93)***
Fund age	-0.13437 -1.07	0.000319 0.51	0.096111 0.55	
Dividend Yield	-2.27588 (-1.88)*			
Price to book	-0.1729 -1.12			
Log fund assets	1.829638 1.55	0.007961 (3.1)***		-3.66438 (-5.23)***
Momentum	-0.02308 -1			
Capitalization		-0.05195 (-4.52)***	-10.9043 (-2.01)**	13.88212 (5.06)***
n	1689	1689	1689	1689
F value	0.44	(3.05)***	(2.54)***	(19.87)***
r-square	0.00291	0.01431	0.01194	0.08643

Panel E: US Sample using the Jensen's alpha as the performance measure

Independent Variables	Dependent Variables			
	Jensen's alpha	Beta	Management Fees	Portfolio Turnover
Intercept	83.09009 (2.88)***	0.594045 (10.04)***	17.18657 (3.49)***	145.135 (20.57)***
Jensen's alpha			-1.13724 -1.16	
Beta	-82.8559 (-3.31)***			
Portfolio Turnover	-0.03413 -0.76	0.002592 (6.29)***	-0.17491 (-5.92)***	
Management Fees	-0.04699 -0.22			
Company Visits	0.000887 (2.55)**		0.001465 (6.25)***	0.003093 (4.53)***
Experience		0.004904 (4.07)***	-0.31405 (-3.23)***	-2.10601 (-7.9)***
Team size			0.308779 (4.17)***	0.034386 0.14
Employee Equity Own	0.01252 1.23	0.000651 (5.13)***		-0.07648 (-2.49)**
Manager turnover	-0.00057 (-0.39)*	0.000015 0.72		-0.00243 -0.45
Securities held		0.000084 (3.3)***	0.004136 1.37	0.06507 (5.55)***
Fund age	-0.0517 -0.67	0.000911 1.45	0.312625 (5.91)***	
Dividend Yield	-1.2241 -1.65			
Price to book	0.066528 0.63			
Log fund assets	-0.12813 -0.19	0.004181 1.54		-6.72884 (-10.1)***
Momentum	-0.01523 -1.08			
Capitalization		-0.05238 (-4.55)***	2.835341 (1.69)*	12.20525 (4.45)***
n	1689	1689	1689	1689
F value	0.84	(3.05)***	(29.6)***	(19.87)***
r square	0.00551	0.01431	0.12355	0.08643

Panel F: US Sample using the Sharpe ratio as the performance measure

Independent Variables	Dependent Variables			
	Sharpe Ratio	Beta	Management Fees	Portfolio Turnover
Intercept	8.206976	0.55325	25.48379	152.1646
	(3.81)***	(9.34)***	(7.39)***	(22.02)***
Sharpe Ratio			-2.34542	
			-0.99	
Beta	-8.44696			
	(-4.53)***			
Portfolio Turnover	-0.00501	0.002635	-0.238	
	-1.49	(6.38)***	(-8.37)***	
Management Fees	-0.00326			
	-0.22			
Company Visits	0.00009		0.00145	0.00313
	(3.56)***		(7.91)***	(4.59)***
Experience		0.00551	-0.44338	-2.20254
		(4.57)***	(-5.17)***	(-8.28)***
Team size			0.278174	0.116371
			(4.15)***	0.47
Employee Equity Own	0.000412	0.000539		-0.03596
	0.54	(4.28)***		-1.26
Manager turnover	-0.00011	8.82E-06		-0.00011
	-1.06	0.42		-0.02
Securities held		0.000085	0.002862	0.06969
		(3.68)***	0.97	(5.95)***
Fund age	-0.01197	0.00056	0.230788	
	(-2.08)**	0.89	(5.94)***	
Dividend Yield	-0.13521			
	(-2.43)**			
Price to book	-0.00447			
	-0.61			
Log fund assets	0.019841	0.010636		-8.17967
	0.42	(3.95)***		(-13.28)***
Momentum	0.004333			
	(4.2)***			
Capitalization		-0.05001	2.167356	11.21842
		(-4.34)***	(2.25)**	(4.1)***
n	1689	1689	1689	1689
F value	(4.38)***	(3.05)***	(30.32)***	(19.87)***
r square	0.02792	0.01431	0.12617	0.08643