Contracts with Benefits: The Implementation of Impact Investing‡

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ABSTRACT

The Private Equity/Venture Capital industry has developed contracting practices that align incentives for value creation while addressing agency problems. Impact investing adds social benefits to the value a fund aims to create, raising the question of how impact funds should adapt contracting practices optimized for monetary goals. Contracts struck by impact funds, both forward to portfolio companies and back to investors, use new terms directly operationalizing impact, and also adjust the use of existing terms on governance, investor protection, and other concerns to facilitate it. Funds contract both directly and indirectly on impact goals, and their direct contracting on impact with investors passes through to their contracting with portfolio companies. The use of direct and indirect impact terms is significantly related, which indicates complementarity between the rights they assign and therefore that the terms are best understood through their role in this interrelated network, rather than on their own.

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I. Introduction

The flow of cash from investment to entrepreneurship is complicated by moral hazards, and this is true even when everyone is simply in it for the money. There are agency problems at every layer of intermediation, as is apparent in the contracting practices that have evolved to address them. The recent growth in impact investing—investing with both financial and social-benefit goals—adds a new dimension to this already challenging contracting problem. This is because an impact fund is, by its own description, not in it just for the money and neither, potentially, are the others involved. As a result, there is an added objective for the network of contracts to serve, and this raises the question of how contracting practices adapt.

We analyze contracts struck by impact funds – both forward to portfolio companies and back to impact investors – to determine how contract terms change with the addition of the impact objective and how these differences affect the agency problems that the terms aim to address. Our sample is a unique set of 202 legal documents pertaining to impact funds, representing 54 separate funds and 92 of their portfolio companies.

Impact investing, a term that dates only to 2007 and with ongoing definitional debate,[1] has rapidly become a major force in both the public and private financial markets. In 2006, signatories of the UN Principles for Responsible Investment numbered around 100 and managed $7 trillion, but by 2017 more than 1,750 signatories managed $70 trillion,[2] most of this

[1] "The State and Future of Impact Investing," *Forbes*, February 23, 2012. One definition of impact investment requires an outcome that would not occur but for the investment or, in other words, that the investment creates additionality. (Brest et al., 2017).

[2] "PRI Signatory Delisting Model to Come Into Effect Before Year-End, *Intelligence on European Pensions and Institutional Investment*, October 20, 2017. Signatories commit, among other things, to "…incorporate ESG (i.e.

presumably in the public markets. The private markets have seen the quick spread of state laws enabling Benefit Corporations, which bind themselves to social-benefit purposes (Geczy et al. (2015)). They have also seen rapid growth: the 225 respondents to a 2018 survey by the Global Impact Investor Network (GIIN) report $35.5 billion of investment in 11,136 deals.[3] In just a decade or so, impact investing has grown both on the money-management side and on the entrepreneurial side from a niche to the sector it is now.

The essence of impact investing is the service of two goals at once. Investors and entrepreneurs could invest for profits and apply these profits to social causes, so that their economic interaction is all about making and sharing profits, and their social service plays out off-screen. Instead, impact investors and social entrepreneurs bundle these activities in their economic relationship, and therefore address the tensions expected from the dual mandate through the contracts that reduce this relationship to writing and through any fiduciary duties they owe. The contracts consequently present the opportunity to learn how the industry views the addition of social impact to the objective of a profit-seeking firm.

How should the addition of social impact affect contracts? If one views impact as greenwashing, optics without content, then presumably not at all. But even if impact investors mean what they say, the effect on contracts is not a priori clear. The usual insights about efficient contracting are hard to apply when surplus includes the utilities variously derived by fund managers, investors, entrepreneurs, and other stakeholders as broad as society at large, from the delivery of a benefit such as cleaner water or financial empowerment.

Environmental, Social and Governmental) issues into investment analysis and decision-making processes." https://staging-web.unpri.org/about

[3] https://thegiin.org/assets/2018_GIIN_Annual_Impact_Investor_Survey_webfile.pdf.

Rather than test a global hypothesis about the effect of impact on contracts, we take a more granular, bottom-up approach, analyzing contracting terms by means of two contrasts. One contrast is between our sample of market-rate seeking (MRS) impact funds and the samples of non-impact funds analyzed elsewhere in the rich literature on PE and VC contracting. Both sets of funds seek competitive financial returns, so this contrast reveals how funds add the impact goal to the financial goal. The other contrast is between these MRS impact funds and *non*-market-rate seeking (NMRS) impact funds in our sample. As the label implies, NMRS funds have lower expected financial returns than MRS funds. This comparison sheds light on contracting from another direction, using the cross section of tradeoffs between financial and non-financial goals to relate terms to the intended intensity of impact.

Is impact investing just greenwashing? Our results indicate that it is not. To test this greenwashing hypothesis we measure the incidence of *operational impact*, i.e., contracting terms that assign rights and duties on the basis of impact. Operational impact proves to be widespread in the contracts. For example, funds often build impact directly into the diligence process and impact measurement requirements. In the contracts with the funds' portfolio companies, impact is often operationalized through the fund retaining a veto right on deviations from the business model, and identifying, measuring, and reporting on the impact goal. The contracts also generally feature *aspirational impact*, which is to say, terms affirming the intention to deliver impact and also not to produce negative impact. Moreover, funds with a high incidence of operational impact in their contracts with investors also tend to have a high incidence of operational impact in their contracts with portfolio companies (PCs). The contracts thus bear out the prioritization of impact.

What happens to the rest of the contracts? Funds can adapt other governance and control terms to promote the social-benefit goal, either as substitutes or as complements for direct contracting on impact. To address the use of terms throughout the contract, we develop a rubric that captures the strength of salient contract dimensions, such as governance and investment protection. We find that impact funds differ from non-impact funds especially in areas that pertain to involvement in the investment process (what we call "participatory governance"): at the fund level this means more advisory committees and at the PC level, more seats on the board. In both cases, the levels are higher among MRS impact funds. The findings on manager restrictions, investment protection, and exit terms are mixed relative to our hypotheses, but we show how their rationale may lie in considerations specific to the impact environment. And the high co-occurrence of operational impact and ex ante constraints on managers points to these terms acting as complements rather than substitutes. Overall, we find strong support for a complementary view of contracting terms.

The paper is in seven sections. Section II briefly reviews the relevant literature, Section III develops hypotheses for how impact may alter contracting practices directly or indirectly, and Section IV outlines our sample and empirical approach. Sections V and VI formally relate empirics to our hypotheses, with Section V focusing on comparisons to the existing literature and Section VI examining the relationship between different contracting tools within our sample. Section VII concludes.

II. **Literature Review**

Our paper, which analyzes contracts between impact-oriented PE/VC General Partners ("GPs") and their investors ("LPs"), as well as portfolio companies ("PCs"), [4,5] contributes to the vast literature on the general principal-agent problem in incomplete financial contracting (e.g., Grossman and Hart (1986); Hart and Moore (1990)). It contributes specifically to empirical projects on PE/VC funds from the last two decades observing contracting trends and relationships between contract terms. Most notably among them is Kaplan & Strömberg's 2003 paper on VC and portfolio company contracting, which finds a relationship between contract terms on financial and control rights. They also observe the complexity of VC and portfolio company contracting and a preference to use contract rights as complements to, rather than substitute for, other control terms.

Observing VC contracts with LPs, Gompers and Lerner (1996) find that GP covenants counter act the principal-agent problem in VC contracts by mitigating conflicts of interests. Later work by Gompers, Gornall, Kaplan and Strebulaev (GGKS, 2016) deepens our understanding of PE and VC fund contracting preferences and approaches to controlling internal risks through provisions like pro-rata rights, liquidation preference, anti-dilution, valuation, board control, and vesting.

A survey of LP investors, by Da Rin and Phalippou (2017), finds that LP size in terms of absolute dollars invested in private equity (rather than investor identity, i.e., endowment, past

[4] With a slight abuse of language, but consistent with common practice in this space, we refer to fund managers as GPs and investors into funds as LPs regardless of the specific legal structure of the fund.
[5] This builds on the sample in Geczy, Jeffers, Musto and Tucker (GJMT 2017) and a 2015 Wharton Social Impact Initiative (WSII) report on the state of impact investment. Gray, J., Ashburn, N., Douglas, H., Jeffers, J., Great Expectations: mission preservation and financial performance in impact investing (2015).

performance, or vintage) accounts for investor heterogeneity in approaches to investment decisions. They find that large LP asset investment correlates with more time spent on due diligence (up to two-fold) and includes a more robust due diligence process.

Other work focuses on fund characteristics as drivers of GP covenants. Gompers and Lerner (1996) find that fund size, age, investment stage, sector focus, and performance-based pay sensitivity influence control rights (confirmed in part by Metrick and Yasuda (2010); Gompers and Lerner (1999)). Fund's past performance and reputation also shape contract preferences of VC and buyout firms (Kaplan and Schoar (2005); Gompers and Lerner (1999); Gompers (1996)).

A fund's investment strategy shapes contract preferences with observable preferences among leveraged buyout firms for equity ownership incentives, board of directors' control, and PC management support (Kaplan and Strömberg (2009)). Gompers, Kaplan and Mukharlyamov (GKM, 2016) also find PE and VC fund preference for equity incentives for PC management, as well as smaller boards with fund representation. Market forces such as supply and demand within the VC market may also shape contract terms (Gompers and Lerner (1996)).

GKM (2016) also contribute to our understanding of how to value a successful exit and therefore investment, documenting the PE belief that investors prefer absolute, over relative, returns on equity investments. Legal scholarship finds a relationship between a VC fund's exit rights and governance rights in the funds' portfolio companies (Smith (2005)).

Only recently have scholars such as Barber, Morse and Yasuda (2017) begun to explore how the addition of an impact goal is reflected in contracts, which introduces an interesting

complication of the standard principal-agent challenge.[6] They find that some impact investors are willing to earn lower returns in exchange for impact (Barber, Morse and Yasuda (2017)). A 2015 study of community development venture capital funds by Kovner and Lerner documents fewer successful exits as compared to traditional VC funds.

A recent legal essay by Brest, Gilson and Wolfson (2018) offers a taxonomy of investment preferences to match investor goals with manager investment strategies, describing investor preferences as socially-neutral, value aligned, or social-value creation. Their taxonomy is consistent with the three-way comparison we use in this paper.[7] Their theoretical work explores the relationship between social value creation and financial returns and, in the context of MRS funds, focuses on the role of fund managers' private information in delivery on the dual goals. They look to deal terms such as benefit-linked manager compensation as a sign of strong impact commitment by MRS funds.

Our work connects recent impact investment work with traditional PE/VC literature, specifically focused on contracting terms, and contributes our observations about the implementation of impact in contracts and how the addition of impact affects other contract terms.

[6] The paucity of scholarship reflects both an emerging trend and a relative lack of data.

[7] Socially-neutral investors are consistent with our description (and data) of non-impact funds. Social value creation investors, split into non-concessionary investments, what we call market rate return or MRS funds, and concessionary investments, what we refer to as non-market rate seeking or NMRS funds. Brest et al. (2018), propose another category of investors—value aligned investors—who invest in companies with value aligned business practices and products, typically available in the public markets. Like Brest et al. (2018), we do not define value aligned investors as *impact* investors, and accordingly, our project does not include them, nor public market investors generally.

III. **Hypotheses**

How should contracts change to add the goals of impact investors? We argue options can be divided into three categories: (1) direct contracting on impact; (2) no contracting on impact; and (3) indirect contracting to protect the impact goal. In this Section, we discuss each category in the context of economic and legal theory and propose testable hypotheses. These options need not be mutually exclusive, and we further explore conditions under which we may see several of these play out both across and within funds.

A. Direct contracting on impact

An obvious option is for parties to contract directly on impact goals by inserting express obligations that are visible and verifiable. There are several potential benefits of this approach. Direct terms differentiate the fund as an investment product to potential investors. They also encourage impact by creating enforceable contract rights, which can lead to damages, termination, or renegotiation if violated (Hart and Moore (2008)) and can address agency problems arising from differing preferences for impact, provided monitoring costs are low (Holmstrom and Milgrom (1991)). From the fund managers' perspective, direct terms may help protect their reputations by shaping investment expectations. For example, a fund manager may prefer terms clarifying the role impact will play in portfolio management to shield the fund against ex post litigation over fraud, breach of fiduciary duty, or financial returns.

What would contracts look like under this approach? Fund managers could be compensated on the basis of their impact, just as they are paid for financial returns. But considering the difficulty of contracting on the impact outcome, contracts might also focus on the process of generating impact. This can include requiring the fund's formal diligence to

appraise impact or requiring an impact committee. Collectively, we call the visible insertion of impact *operational* impact. (Tables 8 and 9 include a full list of these terms.)

Hypothesis 1: Impact funds operationalize impact through contracting on outcome and on process.

B. No contracting on impact

Alternatively, parties may omit contracting for impact by leaving the non-impact framework essentially intact and relying instead on the parties' character and reputational concerns for progress toward the impact goal. This could mask misaligned preferences between contracting parties. For example, parties may place different weights on the balance of social benefit and profit and use the incompleteness of the contract to pursue their own agenda privately (e.g., greenwashing).

However, not contracting on a task can be optimal when performance on that task is difficult to measure (Holmstrom and Milgrom (1991)). Impact can take many forms, and since the fund and its investors do not know ex ante what deal flow they will see once the fund is operating, direct impact terms could be prohibitively difficult or costly to spell out in the contract. Impact could also be so embedded in a company's business plan (e.g., a wind farm or a company hiring only ex-convicts) that additional contracting on impact is redundant.

Changing default contract terms is time consuming and therefore costly, creating a natural path dependency on existing "standard" terms and templates. Additionally, boilerplate terms may make it easier for specially-situated fund investors (e.g., foundations constrained by charters) to bolt on their additional terms with side letters, and for all parties to predict more accurately how the terms would be used by lawyers and adjudicated in courts. There is also the

more general point, made by Hart and Moore (2008), that less specificity can encourages parties to comply more with the spirit than the letter of the agreement.

Hypothesis 2: Some impact funds have aspirational impact with low to no operational impact terms. This is especially true for funds investing in embedded impact portfolio companies and funds with more regulated investors.

C. Indirect contracting on impact

Finally, parties may indirectly protect impact goals by adapting existing contract terms related to governance and control. For example, information rights exist in non-impact contracts, but could take on new importance in impact contracts where they enable investors to monitor both the financial and impact standing of their investment.

Indirect contracting may substitute for direct contracting, if the costs to the latter are high, or may complement and reinforce direct contracting.[8] Governance and control terms may also be part of the goal themselves. For example, transparency in the GP-PC relationship could be part of a good governance commitment for an impact fund. Below, we explore the ways in which funds may adapt investor controls and manager restrictions in fund-level contracts and governance and investor protection in portfolio company contracts.

Hypothesis 3: Impact funds use existing contract terms related to governance and control to protect the impact goal indirectly, and these indirect terms reinforce and complement direct impact terms.

[8] Kaplan and Stromberg (2003) document that in non-impact VC contracts, some terms tend to be complementary (e.g., voting and board control), while others tend to be substitutes (e.g., pay performance sensitivity and founder control).

1. GP-LP contracts

Governance and control terms shape the relationship between fund managers and investors. A key feature of this relationship is that once the fund is underway, fund investors are locked in and play little role in operations, presenting opportunities for managers to self-deal, shirk, or even change the impact focus. This heightens the role of ex ante contracting to define rights and expectations of both parties.

a. Participatory Governance

Impact investors wish to protect the social benefit goal of the fund and prevent drift in investment strategy or goals. One way to do this is through rights to participate, such as through an advisory committee weighing in on investment allocations and exits. If the deal pipeline is harder to develop or screen in the impact space, this participation could support the manager by broadening and deepening the network of contacts with entrepreneurs. As the portfolio companies' futures unfold, and opportunities to pursue impact unfold with them, participation further allows investors to help the manager find the best balance of profit and impact feasible with those opportunities. To the extent that sourcing and screening are especially hard for MRS funds, and the balance of goals particularly delicate, investor participation may be especially important for MRS relative to NMRS funds.

Hypothesis 4: Impact funds have greater management support/supervision than non-impact funds, and MRS greater than NMRS.

b. Manager Restrictions

Another way investors protect their interests is through preemptive restrictions on the manager. Fund contracts often include restrictions on GP functions and discretion to defend

against self-dealing and shirking. With the addition of an impact goal, investors may want managers to have less discretion to invest in industries they view as harmful (e.g., weapons or casinos) and more discretion to seize opportunities to boost impact.

A standard restriction along these lines is the prohibition on reinvesting profits: when PCs start returning profits, these must be distributed back to the fund's investors, rather than reinvested in the fund's other PCs. This restriction protects investors from managers doubling down on risky bets when fund profits are low.[9] However in the impact context, investors might prefer that the fund manager reinvest profits from PCs that are financially successful to others that are not successful but generate significant social benefits.[10] This would be especially true if, as seems likely, a financially unsuccessful PC is unlikely to attract investment from anywhere else.

Hypothesis 5: Impact funds (MRS and NMRS) vary manager restrictions compared to non-impact funds, in order to indirectly serve impact goals: they impose more limits on assets that could conflict with impact (e.g. prohibitions on harmful industries), but allow managers more flexibility on issues that are typically red flags for pure financial performance (e.g. reinvesting profits).

[9] In particular, a fund manager might anticipate fund profits coming in below the hurdle rate, making the carried interest an out-of-the-money option, and thus see a personal financial benefit from shifting risk through the reinvestment of profits. That is, the manager gambles for a carried-interest payoff with negative-NPV but high-variance reinvestment in PCs that would otherwise not see new investment.

[10] This is actually just one facet of a larger question, which is whether funds and their investors take a portfolio view of impact. The asset-pricing literature generally takes the position that investors minimize risk per unit of expected return, which leads to a portfolio view of an asset's risk, wherein a stock that is riskier than average on its own could be less risky than average in the context of this minimization. This paradigm could be expanded to include impact by maximizing portfolio impact for given expected return and risk. By this portfolio view of impact, the optimal portfolio could include both low-impact, high-NPV and high-impact, low-NPV PCs, with the former subsidizing the latter if necessary.

2. GP-PC contracts

a. Investor Protection

Turning to PC contracts, the literature has documented a number of ways that PE/VC investors protect their stakes. A fund can improve its recovery on investments that do not work out by purchasing convertible preferred equity. It can defend against dilution in down-rounds with anti-dilution protections and pre-emptive rights on new investment. These same risks presumably carry over to the impact space, with one addition: the fund may care about retaining influence over exits and new investments not only for financial reasons, but also because of the implications for the portfolio company's social benefit.

Hypothesis 6: Impact funds require more investor protections in GP-PC contracts compared to non-impact funds.

b. Governance

In the PE/VC space, investment tends to convey significant and explicit governance, in the form of both votes and board seats. The balance of goals in impact investing creates added potential for conflicting strategic visions in the boardroom between founders and financers. If and when financial and social-benefit goals conflict, participating in board decisions, if not deciding them through majority control, could be crucial to impact investment success. More impact representation would mean more weight for social-benefit goals in PC operations, thus contributing to a fund's desired balance of outcomes. A VC fund rarely buys a controlling stake (Kaplan and Stromberg 2003), and the same holds for the impact VC funds in our database. This minority control raises the question whether other governance mechanisms like guaranteed

seats on the board, veto rights, and step in rights gain significance to impact investors as ways to keep a hand on the company tiller.

Hypothesis 7: Impact funds require indirect governance and control mechanisms more than non-impact funds.

IV. **Empirical approach**

A. Sample

Our data come from a survey of impact funds administered by the Wharton Social Impact Initiative ("WSII"). WSII compiled an initial database of impact funds via primary research, by working with organizations such as B Lab, the Emerging Markets Private Equity Association (EMPEA), and Anthos Asset Management, and by referring to lists such as ImpactBase and Impact Assets 50. At the time of our document review 3 years after the first release of the survey, 456 fund managers were contacted and 85 had completed the survey, representing 108 separate funds and 1295 portfolio companies. Of these, 43 funds provided contracts. Another 11 funds provided contracts, without completing the survey at the time of writing. We categorize funds as MRS or NMRS on the basis of their answer to the survey question: "What is the statement that best describes the fund's financial return goals?" with the options being "Targeting competitive, market rate returns," "Targeting below market, but close to market returns," "Targeting below market, close to capital preservation returns," and "Not Applicable (Explain)." The contracts, supplemented by several survey questions, form the basis of our empirical review.

Tables 1 and 2 provide summary statistics of participating funds and our sample of impact contracts.[11] Table 1: Panel A describes the 106 GP-LP contracts provided by the 54 participating funds; Panel B describes the 96 GP-PC contracts on 92 portfolio companies. GP-LP contracts establish the contractual relationship between the fund managers and investors (i.e., private placement memoranda, partnership agreements, and side letter agreements). GP-PC contracts include term sheets, letters of intent, and investment agreements.

[Insert Table 1 about here]

Participating funds' average lifespan is 8 years, with a range of 5-10 years, and subject to an average 2-year extension. The contract dates in our sample range from 1988-2016, with the majority dated 2010 or later. The average vintage year for both GP-LP and GP-PC contracts is 2008, with a mode of 2010 for both. See Table 2: Panel B for the distribution of dates.

[Insert Table 2 about here]

Appendix Table A-1 reports additional descriptive fund statistics. Participating impact funds are small. The assets under management (AUM) for our sample ranges from under $10 million to over $200 million, with 50% of participating impact funds holding assets under $75 million, and 22% under $10 million. Funds are primarily organized as limited partnerships (50%) or limited liability companies (26%) in the United States (51%), with equivalent organizational forms in other jurisdictions. Funds in our sample primarily focus on venture capital activities, including investments in growth stage companies (37%), among other

[11] We use the term contract to describe the legal documents we reviewed in our sample, including private placement memoranda (PPM) and term sheets. PPMs are not negotiated like traditional contracts, but are quasi contracts subject to fraud and disclosure claims after investment. Second, consistent with prior studies we treat preliminary agreements such as term sheets and letters of intent as a contract because performance mitigates enforceability concerns and elevates the contractual nature of the documents (GKM 2016).

undefined company stages. Of the funds with a defined geographic focus, North America, Latin America, and Africa are common targets. Participating funds have diverse target industries—many with more than one—including finance, agribusiness, water, essential individual products, social/poverty alleviating services, and health.

Appendix Table A-1 Panel B reports portfolio company summary statistics, which is less robust because it is gathered primarily from term sheets with abbreviated descriptions, if any, of portfolio company operations. Of the identifiable industries, finance and agriculture focused portfolio companies comprise nearly 40% of the sample and match the identified industry focus of the funds. Other industries with more than two portfolio companies include technology/business services (9%) and manufacturing (5%). Portfolio companies operate in Africa (17%), South Asia (11.5%), and Latin America (6%), among other jurisdictions. We have incomplete data on company stage.

Both the GP-LP and the GP-PC targeted areas of geographic and industry investment, especially the full list reported in Appendix A-1, imply that impact motivations can be embedded in operations. For example, investments in water technology, housing in Africa, microfinance in South Asia, and employment in economically depressed areas of the US are intended to generate a social or environment benefit, embedded in the nature of the business itself.

Finally, in Panel C we compare survey information for our sample funds to the information that we have for funds that participated in the WSII survey, but did not share contracts. The two groups of funds are overall fairly similar. Our sample funds contain slightly fewer MRS funds – though target net IRR is similar – and tend to be smaller than non-sample

funds in terms of committed capital. The two groups appear to represent similar vintages and time horizons, as well as number of companies in which funds are invested. The most salient difference is that our sample funds tend to be part of larger and more experience firms, as measured by the total number of funds managed by the firm and the number previously managed by the most senior member of the general partnership.

B. Comparison approach

Existing PE and VC literature on profit-only investments provides our first set of comparison points. We include both PE and VC literature in our comparisons because the two overlap for our sample in meaningful ways, and at the same time neither PE nor VC is a complete match with our sample.[12]

The deal pipeline and structure differ between PE and VC funds, but overlap with our sample. For example, PE funds tend to focus on mature companies in all industries, whereas VC funds focus on startups, particularly in the technology sector (Metrick and Yasuda (2010)). Impact investment funds, in comparison, target companies in a variety of industries, some of them technology focused, and in a variety of stages. Impact funds utilize both equity and debt in portfolio company investments (like PE funds), but our sample demonstrates a preference for equity positions (like VC funds) (Coyle and Green (2014)). Impact funds mirror VC funds in their preference for minority investments, as opposed to majority control or 100% ownership among PE funds (Bratton (2002)). Finally, impact investment funds' rights to exit PCs reflect

[12] We are not the first to group private company investments into a common comparison point. See Cummings/Walz (2010), "[W]e use the term "PE" as a generic term that encompasses all investments in private firms. Likewise, for ease of exposition, we use the term "PE funds" to include earlier-stage venture capital (VC) funds and both ate-stage and mezzanine funds."

aspects of both PE and VC including registration rights, redemption rights, and an emphasis on finding a private buyer (Smith (2005); GKM (2016)). In practice, impact investment fund exits may look different from both samples, with a greater emphasis on private sales to third party buyers and redemption rights where successful founder/company employees work to buy out the fund and regain control over the company (Geczy et al. (2015)). Finally, on a practical note, the paucity of private company empirical data on contracting norms necessitates us looking to both fields.

[Insert Table 3 about here]

In constructing the data comparison points, we look to seven empirical projects—six in finance journals and one in law. The projects report data collected from 1978 to 2016. Four projects report data on VC funds; two projects report data on PE funds; and one project reports data on both VC and PE funds.

[Insert Table 4 about here]

C. Contract coding

Using existing PE and VC finance and legal literature, we developed a list of contract variables and coding procedures. We hired, trained, and supervised law students to record the presence or absence of terms, record variations within provisions, and quote relevant language from the contracts. Text responses allowed us to verify coding entries, control for accuracy, and extract additional information on observable trends and nuances in contract provisions.

To make comparisons of contract terms easier to interpret and digest, we group like contract terms from our dataset of over 500 coded terms that broadly address similar concerns. For example, funds use different terms to give investors indirect control: information rights,

advisory committees, etc. We group these related terms into scores normalized to 100, described in Table 5. A full list of terms, the constituent components, and structure of scores is in Appendix 2.

[Insert Table 5 about here]

We primarily report statistics on GP-LP contracts at the fund level, aggregated across contracts. For example, if Fund A has three contracts—a PPM, an operating agreement, and a side letter—we report the total of contracting terms across these three documents. In regressions, we control for the number of contracts available for the fund. We observe two contracts for the majority of our funds. For GP-PC contracts, we never observe more than one contract for a given GP-PC pair, although a handful of companies have agreements with more than one fund. We report contract-level data for the GP-PC documents, acknowledging that funds negotiate different deals with different portfolio companies.

Table 6 contains summary statistics of non-impact focused scores for GP-LP contracts in MRS and NMRS funds, reported at the fund level. MRS fund scores are higher across the board, but especially in the areas of participatory governance and limits on manager discretion, both in terms of the average scores and in terms of the percentage of funds with positive terms. Participatory governance provides LPs with tools, such as information rights or advisory committees, to monitor the GPs' choice of investments. Limits on manager discretion provide a complementary safeguard in the form of investment caps and prohibitions on types of investments. Together, these tools suggest heightened control over investment choice on the part of LPs.

[Insert Table 6 about here]

Table 7 contains summary statistics of non-impact focused scores for GP-PC contracts in MRS and NMRS funds, reported at the contract level. The main difference seems to be higher governance and information rights for GPs of MRS impact funds, relative to GPs of NMRS impact funds, both in terms of average scores for these dimensions and in terms of the percentage of funds with positive terms. Exit controls are also higher on average for GPs from MRS impact funds, mostly coming from a longer right tail.

[Insert Table 7 about here]

V. **Contract patterns**

In this Section, we discuss the pattern of contracting that we observe in MRS and NMRS impact funds and how this compares to patterns described in the literature on non-impact funds. First, we look for terms that directly address impact in both fund-level and PC-level contracts. Second, we turn to evidence of indirect contracting in governance and control terms.

A. Direct impact terms

In Table 8, we report summary statistics for aspirational and operational impact scores in GP-LP contracts, as well as the incidence of the component terms. We assume non-impact funds and PCs do not include impact terms in their contracts, so that anything we observe in impact contracts is additional, i.e., reflects the addition of the impact goal.

[Insert Table 8 about here]

Panel A contains the summary statistics for MRS funds. Results indicate that MRS funds contract directly around impact. At the contract level, 88% of documents include some description of the impact goal (positive aspirational impact), and 68% include actionable terms

(operational impact). When we roll these up to the fund level for a more complete view of each fund's contracting relationship, we find that 96% of funds have aspirational impact somewhere in their contracts with LPs, and 90% have operational impact.

We turn to our contracts from NMRS funds in Panel B. Eighty-four percent of NMRS fund contracts include some aspirational impact terms, and 58% include operational impact terms. When we roll these up to the fund level, all funds have aspirational impact somewhere in their contracts with investors, and 85% have operational impact.[13]

Together, Panels A and B provide support for Hypothesis 1: impact funds operationalize impact through direct contracting. At the same time, we observe a range of contracting scores, proving support for Hypothesis 2 as well: some impact funds have aspirational impact with low to no operational impact.

Does the relatively stronger financial goal in MRS funds push them to contract more or less directly on impact than NMRS funds? Comparing the two in Panel C, it does not appear that NMRS funds contract more on impact than MRS funds in our sample – if anything, there are slightly more terms in MRS fund contracts, although the difference is not statistically significant. This is consistent with the idea that MRS impact funds are aware of the heightened tension in their dual goals and contract directly to protect the fund's unique balance between profit and impact.

Lastly, Panel D contains a break-out of terms which enter the aspirational and operational impact scores. The most common forms of operational impact are incorporating

[13] Because there are only 14 NMRS funds, the 10th and 90th percentile are interpolated from the 2nd and 3rd, and 11th and 12th ranked funds for each term.

impact into the fund's due diligence and measuring impact. About a third of the funds commit to using a third party for monitoring impact. In 10% of MRS funds and 14% of NMRS funds, the manager's compensation is tied to impact. Collectively, the numbers from Table 8 indicate fairly widespread use of direct contracting around impact in fund-level documents, for funds in our sample.

In Table 9, we turn to PC-level contracts. In Panel A, we report summary statistics for operational impact score for both MRS and NMRS contracts. Since we observe one contract per PC-fund pair, there is no need to roll up the statistics to the PC level. We find that 79% of MRS funds' PC-level contracts include operational impact terms, and 88% of these funds have at least one PC contract with operational impact terms. In contrast, just 46% of NMRS funds' PC contracts include operational impact terms—a statistically significant difference. At the same time, 84% of NMRS funds have at least one PC contract with operational impact terms. In other words, NMRS funds do include operational impact terms for some of their PCs, but for fewer of their PCs than MRS funds.

This provides further support for Hypothesis 2: to the extent that NMRS funds hold more PCs with embedded impact, their costs of direct contracting on impact for these companies may outweigh the benefits. Indeed, the most common sector focus for PCs held by NMRS impact funds is Agribusiness/Farming, and the most common geographic focus is Africa, compared to Finance/Microfinance and South Asia for PCs held by MRS impact funds. It is also possible that NMRS funds have less of a *need* to protect the impact goal (at least in some of their investments) because there is less tension between profit and impact. The pattern

could also be consistent with a "portfolio approach" to balancing goals, e.g., holding some PCs with a high impact motive and low profit motive, and some PCs with the opposite balance.

Panel B contains a break-out of terms which enter the operational impact score in the GP-PC contracts. The most common term is for the fund to retain a veto right on deviations from the business plan, though this is much more common for MRS PCs (57%) than NMRS PCs (27%). The other main difference is in identifying impact, which happens in 33% of MRS term sheets but only in 12% of NMRS term sheets (note that both address impact generally at similar rates). About 20% of MRS PCs measure impact, and about half of these are required to report on that impact performance regularly; these numbers are higher for NMRS PCs, at 27% and two thirds. Overall, these statistics indicate our funds generally also contract directly on impact at the PC level, but also suggest slightly less emphasis on these direct terms at the PC level than at the fund level.

[Insert Table 9 about here]

B. Governance and control

Next we turn to governance and control terms that can protect profit, social-benefit purpose, or both. In examining the balance of these terms in MRS funds compared to non-impact and NMRS funds, we observe how the balance shifts in response to different pressures. Using our contract dimension framework (Table 5), we first compare GP-LP contracts on dimensions of participatory governance, limits to manager discretion, and manager restrictions. Second, we compare GP-PC contracts on contract dimensions related to investment protection, governance, and exit. Distributions of scores for MRS and NMRS funds, distributions, and constituent parts

are provided in Tables 6 and 7 with the full scoring notes available in Appendix 2. In this Section we highlight discrete variables in our scoring framework with comparison points in the existing literature.

[Insert Table 10 about here]

Participatory governance terms are contracting mechanisms that indirectly allow investors to control, supervise, or mitigate a fund manager's power in operating a fund for the 7-10 years after the GP-LP contract is struck. Advisory committees to fund managers are one such tool for which we have a comparison point in non-impact funds (GKM). Table 10 reports our results and shows these provisions play a meaningful role in our sample of impact funds. A high majority of MRS GP-LP contracts (93%) include advisory committees to support or supervise fund management activity. Comparatively, non-impact funds contract for formal advisory committees 40% of the time and broader advisory functions, including senior advisors and other management supports, 66% of the time. MRS funds also use formal advisory committees more frequently than NMRS funds, i.e., 86% of the time.

Why would MRS fund managers want or agree to more advisory committee support? The high frequency of and roles assigned to advisory committees may reflect the particularly difficult task assigned to MRS managers of balancing profit and purpose ex ante, as well as the need for contractual controls to shape future performance (Hart and Moore (2008)). Advisory committees can provide technical support through approving loans, budgets, valuations, compliance, due diligence, and audits. Advisory committees also influence fund strategy and investment policies. Traditional PE/VC literature does not provide a comparison point to our

sample on advisory board function. Across both categories, with a few exceptions,[14] MRS funds have higher frequency of discretionary and technical assistance functions compared with NMRS funds. Most notably, MRS fund managers receive significantly more support than their NMRS counterparts on investment strategy, due diligence, investment approval, exit approval, and fund compliance. Save compliance, these functions largely invoke management discretion and judgment. They also shape a fund's core investment operations as well as opportunities to pursue profit (e.g., exit) and/or a social-benefit purpose (e.g., due diligence). Inclusion of advisory committee terms in GP-LP contracts provide some assurance at the time of investment that fund operations will remain faithful to a fund's goals and intended balance of profit and benefit. We confirm Hypothesis 4 that impact funds have greater management support and supervision needs compared to non-impact funds, and MRS funds will have more than NMRS funds.

Another solution to prevent management misbehavior (or maintain focus on shared goals) is to limit managers' investment discretion through the use of excluded assets, investment caps, and prohibitions. Other contractual tools restrict managers' potential for self-dealing or opportunistic behavior by governing co-investment, reinvestment, and competing activities. The non-impact literature, most notably the work by Gompers and Lerner (1996) on VC contract terms, focuses on restrictive covenants, and more specifically, the latter category of self-interested management behavior. Table 11 reports our results, with Panel A describing

[14] The few exceptions, such as review of investment impact with 3.45% of MRS funds compared to 7.14% of NMRS funds are mostly attributable to the lower count of NMRS funds and the higher weight given to each reporting fund in the frequency.

limits to manager discretion in MRS and NMRS funds, while Panels B and C report on restrictions and total covenants in non-impact, MRS, and NMRS funds.

[Insert Table 11 about here]

MRS funds more frequently include asset restrictions (90%) compared to NMRS funds (71%). MRS funds also have a higher prohibition on conflict of interest investments (17%), with none in NMRS funds. We observe low occurrences of other types of restrictions such as prohibitions against investing fund assets in other family funds, regional investment caps, industry caps, or sector restrictions. Viewing the restrictive covenants as a whole, they may be used, particularly in the MRS fund sample, to preserve ex ante agreements or preferences between GP-LP on the profit/benefit balance for a particular fund by restricting manager behavior.

Returning to the three-way comparison in Panels B and C, no clear distinction emerges between MRS and non-impact funds. For example, MRS funds contract *more* frequently against manager self-dealing through prohibitions on reinvesting fund profits (41%), compared to non-impact funds (21%). The trend reverses on manager coinvestment and prohibitions on outside fundraising, where MRS funds contract *less* frequently than non-impact funds.

MRS and NMRS funds have comparable restrictions on reinvestment of fund profits and outside fundraising. MRS funds, however, have significantly higher prohibitions on management coinvestment in portfolio companies at 66%, compared to NMRS funds at 21%. Increased covenants against manager self-dealing in MRS funds may reflect and protect the dual goals of profit with benefits. Such covenants may also address concerns that managers could use the difficulty of monitoring dual goals to obfuscate self-dealing practices.

Overall, as reported in Panel C, MRS funds have fewer average restrictive covenants (3.8) compared to non-impact funds (5.6), but more than NMRS funds (2.79). Covenants in MRS funds may be more important than in NMRS funds because of MRS managers' dual and seemingly equal imperative to pursue both profit and purpose. Our results are in contrast, however, with prior theoretical predictions that covenants are more important in younger and less mature fields, which would suggest the MRS funds should have *more* restrictions compared to non-impact funds (Gompers and Lerner (1996)). As VC contracting matured, restrictive covenants may have become more specific, or replaced by the reputation of managers. MRS funds may adopt non-impact funds' evolved approach to covenants, so that despite the impact field's relative youth, it incorporates more mature contracting practices.

Taken as a whole, our findings are inconclusive as to Hypothesis 5. We see variation in manager restrictions, but our comparison points in the existing literature are incomplete to conclude that MRS and NMRS impact funds vary manager restrictions compared to non-impact funds in order to indirectly serve impact goals. Our intuition remains but requires further testing.

Next, we turn to GP-PC contracts, comparing investment return protection, governance, and exit rights. Funds, whether impact or non-impact, protect their portfolio company investments through contractual provisions such as rights of first refusals, cash flow rights in the event of liquidation, and anti-dilution and preemption clauses. These provisions are intended to curb negative events occurring after the execution of the GP-PC contract, that might jeopardize the fund's investment and ability to earn a future return. Given the relationship between contractual protection and future profit, we investigate how MRS funds contract for

investment protections relative to non-impact and NMRS funds, to see if the insertion of a social-benefit goal changes the frequency or degree of investment protections. The answer appears to be yes; inserting a benefit goal changes the investment protections between MRS and non-impact funds. Table 12, Panel A reports our results. MRS funds have lower occurrences of investment protection terms compared to non-impact funds, including important features like anti-dilution, preemption rights and calculations, founder non-compete agreements,[15] and fund liquidation rights.

[Insert Table 12 about here]

Notably, the frequency of anti-dilution and preemption provisions—terms that prevent future financing rounds or sales to new investors from decreasing a fund's voting power or valuation—is 83% in MRS funds, compared to 58% in NMRS funds. Conversely, MRS funds contract less frequently (38%) for liquidation rights, compared to 81% of NMRS funds. Increased profit expectations with MRS funds explain the first difference. Liquidation rights, on the other hand, should be stronger when there is greater uncertainty about the venture quality or founder ability (KS (2003); GL (1999)). The profit/benefit balance in NMRS funds may produce a portfolio with riskier investments (in terms of profit expectations) and necessitate greater reliance on liquidation rights by providing a debt-like claim over the portfolio company assets (GL (1999)). Increasing the benefit goal and decreasing profit goals in NMRS funds, compared to MRS funds, has no effect on preemption valuation (full ratchet vs. weighted

[15] Non-impact funds' emphasis on founder non-competes may also be explained by the special role that founders play in the technology sector.

average) or founder non-competes. Our findings confirm, in part, Hypothesis 6 that NMRS funds require even more protections than MRS funds.

Governance provisions allow funds to participate in the ongoing operation of the PC. Governance rights, such as fund ownership percentages, seats on the PC board, and veto rights, may shape how a fund balances the pursuit of profit alongside benefits. Table 13 Panel B reports our comparisons on fund voting controls and PC boards.

MRS funds have no majority control positions in PCs (defined as greater than 50% ownership), whereas non-impact funds invest as the majority owner in 25% of PC contracts. MRS funds hold an average minimum voting position of 31% compared to non-impact funds' average voting position of 53.6%. The minimum voting percentage reflects a fund's position at the outset of the investment before options, additional financing rounds, executed rights of first refusal, and other scenarios allowing a fund to gain additional shares and increased voting control occur. Also note that the non-impact average voting percentage is 53.6%, but only 25% of non-impact funds hold majority ownership positions, signaling either the use of preferred voting stock or a skewed average bloated by outliers with all, or nearly all, voting shares. Like MRS funds, no NMRS funds contract for a majority control position in PCs; the average NMRS voting percentage is 20%. Non-impact funds contract more frequently than MRS and NMRS funds for the right to participate in, and 25% of the time to decide, unspecified operational decisions in the future.

Earlier work predicted that governance rights are particularly valuable in incomplete contracts where it is not feasible to specify all contingencies ex ante (Grossman and Hart (1986); Hart and Moore (1990); KS (2003)). Our intuition was that inserting a second goal of social-

benefit purpose alongside profit would increase the incompleteness of contracts, therefore increasing the need for governance rights. The low ownership percentages among MRS and NMRS, however, may reflect unique aspects of impact investment, such as smaller AUM or different lifecycle stages of PCs. It may also reflect greater collaboration or partnership between funds and entrepreneurs, especially among funds that pursue impact through job creation, and other outcomes associated with fostering founder/employee ownership rather than taking over ownership (Geczy et al. (2015)).

Turning to PC boards, MRS funds invest in PCs with relatively small boards: on average 4 members, relative to the non-impact average of 5-7 members. NMRS funds, like MRS funds, favor small boards. MRS funds contract for a guaranteed seat on PC boards 93% of the time compared with 41% of the time in non-impact funds. NMRS funds, with 69% contracting for guaranteed seats, are also higher than non-impact funds, but lower than MRS funds. Recall that non-impact funds contract for a majority control position in 25% of contracts, which obviates the need for a guaranteed seat on the board—a right secured by majority voting alone. These provisions are a tool most attractive to minority investors, especially those with relatively small ownership positions. Read in conjunction with ownership percentages, the prevalence of guaranteed board seats among MRS and NMRS funds is unsurprising. Returning to Hypothesis 7 that impact funds require indirect governance and control mechanisms more than non-impact funds, we confirm this, in part, with the important caveat that the increased need also reflects the minority ownership position.

Finally, we turn our review to contract provisions related to exit. We consider these terms important because exit events materially affect profits earned by funds and, for impact

funds, the legacy of purpose beyond divestment. Table 12 Panel C reports two points of comparison between our sample and non-impact funds: put/redemption rights and registration rights.

Initial public offerings (IPOs) are an aspirational exit scenario for non-impact funds. Registration rights support a fund's exit through an IPO by contracting for the fund to participate in the underwriting and registration of the PCs stock, which makes a previously-illiquid investment highly liquid (Smith (2005)). Registration rights guarantee funds access to a PC's registration process and often allocate the significant costs of registration to the PC. We look to registration rights to signal a possible IPO exit envisioned for the investment. MRS funds contract for registration rights (50%) less frequently than non-impact funds (90%) and comparable to NMRS funds (54%). This suggests that IPOs are a less important exit scenario for impact funds than for non-impact funds. Exit expectations may also be shaped by what a "successful" investment means for MRS and NMRS funds, especially those with employment and economic improvement-focused missions (Geczy (2015)). A successful investment may be creating a self-sustaining business that provides impact-oriented services, employment, and economic vitality to a region—none of which implicate securities offerings to public markets.

Redemption rights grant funds an option to force a PC to buy-back its equity investment, providing a guaranteed exit path for investors—importantly, one that can occur within the life span of the fund. MRS funds contract for redemption rights in 62% of contracts, compared to 72% of non-impact funds and 50% of NMRS funds. Weaker exit rights in MRS and NMRS contracts may reflect a profit/purpose contracting trade-off when compared with non-impact funds. MRS and NMRS PC differences compared with non-impact PCs, however,

should predict a greater need for redemption rights in MRS and NMRS contracts because of fewer buyers, different definitions of "success," and differences in company stage, industry, and scale. The absence of redemption rights does not preclude repurchase of fund shares by a PC, but it does remove the threat of redemption as a powerful incentive and bargaining chip that fund investors hold. MRS and NMRS funds' weaker reliance on the threat of a forced redemption through contract rights, without necessarily giving up the possibility of an exit by founder or company repurchase, may shed light on a different GP-PC relationship in impact investments. The relationship, as shaped by the contract terms, may be intended at the outset to be more collaborative and one where a PCs growth is shared among founders and investors, even if not forced. MRS and NMRS exit rights, as a form of fund control over PC investments, are weaker than with non-impact funds which is counter to hypothesis 7 that impact funds would seek greater governance control, but may be explainable, in part, by exit constraints and goals unique to the impact space.

VI. **Relationships between contracting terms**

So far, we have talked about contracting terms in isolation. In practice, these terms work together to shape the relationship between LPs, GPs, and entrepreneurs. Indeed, Kaplan & Stromberg (2003) document that in non-impact VC contracts, some terms tend to be complementary (e.g., voting and board control), while others tend to be substitutes (e.g., pay performance sensitivity and founder control). Therefore, understanding the interaction between terms is an important piece for understanding how funds contract around the addition of the impact goal. In particular, we wish to test whether, and when, indirect contracting substitutes

for direct contracting on impact, and whether, and when, indirect contracting appears alongside direct impact terms (Hypothesis 3).

In this Section, we provide a starting point by reporting on basic correlations between different dimensions of contracts. To be clear, these regressions are not identified, and the statements are not causal. Rather, our goal is to provide some sense of whether different groups of terms tend to appear together, in the absence of each other, or seem to be independent, in order to shed light on the contracting patterns we document in Section V.

A. GP-LP contracts

We begin by looking at the correlation between different dimensions in fund-level contracts. We use our scoring framework described in Section IV to group governance and control terms. We run pairwise regressions, controlling for the number of contracts we observe per fund, to understand the relationship between any two dimensions of the contracts. The specification is:

$$fund\ score_i = \alpha + \beta\ other\ fund\ score_i + \gamma\ num.contracts_i + \epsilon$$

Table 13 reports the results of these regressions, pooling all impact fund documents (MRS and NMRS) together. Each cell presents the estimate from a different regression, with the estimate on *num. contracts* suppressed for clarity (it is always positive). We also test the robustness of our results to running regressions at the document level.

[Insert Table 13 about here]

In Panel A, we focus on impact scores as the dependent variables. Aspirational and operational impact both tend to be positively correlated with all groups of contracting terms, although the result is not statistically significant for investor return protection. This lends

support to the hypothesis that indirect contracting mostly complements, rather than substitutes for, direct contracting around impact.

Within the subsample of MRS funds, operational impact is most strongly statistically related to manager restrictions, which include limits on reinvesting profits and on co-investing.[16] For NMRS funds, the terms most strongly correlated with operational impact are limits to manager discretion, which include asset restrictions. These two categories are fairly close conceptually, and together suggest that ex-ante constraints on managers may reinforce direct contracting terms in both MRS and NMRS funds.

In Panel B, we turn to investor rights. Participatory governance captures terms such as information and advisory rights. Again, we see evidence that this kind of governance is complementary both with impact terms, and with terms that specify control over managers. Although not always statistically significant to the same degree, estimate magnitudes tend to be fairly consistent across the MRS and NMRS subsamples. One exception is the correlation with operational impact; this relationship appears to be stronger for NRMS funds than for MRS funds. The other exception is investor return protection, to which we turn next. In contrast to other terms, this category (comprised of terms that directly protect the investment, such as liquidation and cash flow rights) seems relatively independent from the rest of the contracts. In NMRS funds, it weakly correlates with the presence of participatory governance, and in MRS funds with limits to manager discretion. Overall, however, it does not fit the pattern of complementarity of other terms and seems relatively unrelated to impact goals as well.

[16] There is also a strong relationship with aspirational impact.

Finally, Panel C reports on regressions with limits to manager discretion or manager restrictions as the outcome. Both categories tend to have very strong positive correlations with other terms. While the terms included in participatory governance tend to represent a more ongoing form of governance (e.g., participation through advisory committees and monitoring through information rights), limits to manager discretion and manager restrictions tend to represent ex ante controls (e.g., asset restrictions, limits on reinvesting, or co-investing). In the GP-LP relationship, these ex ante controls may take on relatively more importance because the agreement locks LPs in for long periods of time (typically ten or more years), with few opportunities for renegotiation (Smith (2005)).

B. GP-PC contracts

Next, we turn to the relationship between different dimensions within PC-level contracts. Since we have one document for each fund-PC relationship, the specification is simply:

$$PC\ score_i = \alpha + \beta\ other\ PC\ score_i + \epsilon$$

Table 14 reports the results for these pairwise regressions. Panel A shows correlations between operational impact and other terms in GP-PC contracts. In the full sample of funds, all terms appear positively correlated with operational impact, though governance particularly so. In contrast with GP-LP relationships, GP-PC relationships tend to be more flexible and have more points for renegotiation, which may increase the usefulness of governance and information rights (Smith 2005).

Interestingly, these relationships are not the same within MRS and NMRS funds. For MRS funds, information rights emerge as the most consistently (statistically) correlated with

operational impact, while exit control and investment protection seem entirely unrelated to operational impact. In NMRS funds, the coefficient estimate for information rights is actually quite similar to that in MRS funds. However, exit control, governance, and investment protection all appear to be more strongly correlated with operational impact. This again suggests there may be a difference in the nature of PCs for NMRS and MRS funds, especially when it comes to exit expectations. The pattern here could reflect that different exit paths for NMRS PCs may increase the importance of exit control.

[Insert Table 14 about here]

Panels B and C focus on non-impact terms as outcomes. The take-away from these tables is consistent with previous results that impact-serving contracting terms tend to appear alongside each other, rather than as substitutes for one another.

C. Influence of GP-LP contracts on GP-PC contracts

Finally, we wish to see whether operational impact in GP-PC contracts reflects in any way the terms in GP-LP contracts. We run a series of regressions similar to the ones above, with the following specification:

$$PC\ operational\ impact_i = \alpha + \beta\ fund\ score_i + \gamma\ num.contracts_i + \epsilon$$

[Insert Table 15 about here]

Table 15 reports the results.

Looking at the full sample, operational impact in the PC documents is strongly positively correlated with three aspects of the GP-LP contracts: participatory governance, which captures information and advisory committee rights—in other words, greater LP participation in the process; limits to manager discretion, which prohibit GPs from investing (or investing too

much) in certain assets; and finally, operational impact at the fund level. The latter relationship is particularly strong and confirms a through-line of operational impact from the LP to the PC. Interestingly, the relationship between PC-level operational impact and fund-level aspirational impact is negative, suggesting aspirational impact terms at the fund level do not guarantee operationalized impact at the PC level.

Digging into subsamples, we find that MRS funds appear to be driving the overall trends. Remarkably little correlation exists between fund-level terms and PC operational impact in the NMRS funds.

VII. **Conclusion**

Impact investing balances financial and social-benefit goals, and this can make it difficult to delegate. To implement impact investing, funds must decide how the additional social-benefit goal alters the standard, money-focused relationship with investors and entrepreneurs, and how to affect this alteration through their mutual contracts. The resulting impact-investment contracts share a large part of their DNA with nonimpact contracts in PE/VC, but the differences—even where small—are important both in their own right and as guides to the agency problems specific to this balance of goals.

One immediate lesson from our study is that impact investing is not greenwashing. Contracts on both sides of impact funds operationalize social-benefit goals. On the investor side, this includes building social benefit inquiries into the diligence process and requiring impact measurement. On the portfolio company side, this takes the form of measuring and reporting on impact, and of fund control over changes to business plans. Importantly, operational impact in GP-LP contracts is strongly positively correlated with operational impact in GP-PC contracts,

so that impact flows through the agreements. Contracts at both ends operationalize impact at a range of levels, with some funds relying on aspirational impact, i.e., testaments to intended impact, to signal commitment to their social-benefit goals.

How does the addition of these goals affect other contracting practices? Contracting terms related to governance and control sharpen the contrasts between funds. In particular, impact contracts emphasize support and supervision of the agent, both in fund- and PC-level documents. At the fund level, this manifests as more advisory committees with substantive roles, especially in MRS funds. At the PC level, there are more guaranteed board seats, again especially for MRS funds—although (or perhaps because) these funds are never in majority control. From this extra dose of labor-intensive supervision, one can infer that balancing the dual goals of profit and social purpose is hard work.

At the same time, other governance and control terms differ less than our hypotheses predict. At the fund level, restrictions on managers vary somewhat across the three fund groups, but not in a way that brings the underlying economics into focus. Why the MRS funds would restrict managers more than the NMRS funds do is unclear, though it is possible that seeking a market rate makes the agency problems stronger or that the impact of MRS portfolio companies is less embedded and thus more open to discretion. Among investor protections, we find that MRS funds enjoy more anti-dilution protection than do the NMRS funds, but it is the NMRS funds that enjoy stronger liquidation rights. These protections apply to different points in the outcome space, i.e., the moderately bad outcome of a down round vs. the worse outcome of liquidation, and thus could reflect the different salience of these prospects for MRS and NMRS investments.

These contract terms are chosen together, so it stands to reason that they may operate together, i.e., that they are complementary. We explore this possibility by analyzing the correlation between choices at three levels: within GP-LP contracts, within GP-PC contracts, and then between the two levels of contracts. We find a strong connection between choosing governance terms and choosing control terms, both within fund-level contracts and within PC-level contracts. Connecting a fund's contracts with its investors to its contracts with its investments, we find that operational impact on one side correlates with operational impact on the other, so that operational impact flows through the fund from investors to the enterprises they support.

This paper is the first analysis of the effect of impact goals on contracts, so its findings naturally raise more questions for this and similar databases. Among these questions are the role of GP power in shaping impact investment contracts, the potentially dilutive effects of the growing impact-investing deal flow, and the tradeoff or complementary nature of profit and social-purpose benefits. We look forward to addressing these and other questions in future work on impact investing.

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Tables

Table 1: Summary Statistics for Sample of Impact Funds & Documents

Panel A: GP-LP contracts

	All funds		MRS funds		NMRS funds	
	N	%	N	%	N	%
Number of funds	54		29		14	
Number of documents	106		60		31	
Document type						
Fact Sheet	1	0.9%	1	1.7%	0	0.0%
Investment Agreement	4	3.8%	1	1.7%	1	3.2%
Issue Document	2	1.9%	0	0.0%	2	6.5%
Limited Partnership Agreement	25	23.6%	17	28.3%	4	12.9%
Operating Agreement	8	7.5%	4	6.7%	3	9.7%
PPM	43	40.6%	27	45.0%	10	32.3%
Side Letter	20	18.9%	9	15.0%	10	32.3%
Other	3	2.8%	1	1.7%	1	3.2%

Panel B: GP-PC documents

	All funds		MRS funds		NMRS funds	
	N	%	N	%	N	%
Number of funds	16		8		6	
Number of PCs	92		57		25	
Number of documents	96		58		26	
Document type						
Term Sheet	66	68.8%	37	63.8%	20	76.9%
Other	3	3.1%	0	0.0%	2	7.7%
Letter of Intent	7	7.3%	6	10.3%	0	0.0%
Loan Agreement	3	3.1%	0	0.0%	2	7.7%
Investment Agreement	17	17.7%	15	25.9%	2	7.7%

Table 2: Horizons and Years for Sample of Impact Funds & Documents

Panel A: Fund life span and extensions

	N	Mean	Min	10th pctile	25th pctile	50th pctile	75th pctile	90th pctile	Max
Life span (years)									
All	46	8.3	1	5	7	10	10	10	10
MRS	24	8.2	3	5	6.5	10	10	10	10
NMRS	12	8.8	1	7	9.2	10	10	10	10
Extensions (years)									
All	37	2.2	1	1.3	2	2	2	3	5
MRS	19	2.1	1	1.4	2	2	2	3	5
NMRS	10	2.3	2	2	2	2	2	3.1	4

Panel B: Document years

	N	Mean	Min	10th pctile	25th pctile	50th pctile	75th pctile	90th pctile	Max
GP-LP doc. year									
All	100	2008.1	1991	2001	2003	2010	2012	2014	2016
MRS	57	2009.8	2000	2005	2008	2010	2013	2014	2016
NMRS	31	2005.0	1991	1998	2001	2002	2012	2013	2014
GP-PC doc. year									
All	78	2008.7	1988	2003	2005	2010	2012	2014	2016
MRS	48	2008.7	2003	2004	2006	2009	2011	2013	2014
NMRS	19	2005.1	1988	2000	2002	2004	2010.5	2012	2014

Table 3: Characteristics of PE, VC, and Impact Spaces

	PE	VC	Impact
Similarities			
Function	Raise capital to invest in private companies		✓
Compensation	Compensation structures including management fees and waterfall structures at the fund level		✓
Operational Focus	Fund involvement with PC operations to promote growth		to some degree
Differences			
Industry & Stage	All industries, mature companies	Technology startups such as biotech, clean tech, apps, etc.	Both
Control	Majority control or 100% investment in PC	Minority control/investment in PC	Minority control
Investment	Debt and equity investments in PC	Equity in PC	Debt and equity, preference for equity
Fund Exit	Private company sale, spin off, relisting a company, etc.	Private company sale, IPO, later stage financing redemption	Sale or redemption

Table 4: Comparison Points From Literature on VC/PE

Author/Date	Sample size	Input	VC/PE	Data date range	Abbreviation
Gompers & Lerner (1996)	140	Partnership agreements	VC	1978-1992	GL '96
Gompers & Lerner (1999)	419	Fund fee contracts	VC	1978-1992	GL '99
Kaplan & Stromberg (2003)	213	Portfolio company investments	VC	1986-1999	KS
Metrick & Yasuda (2010)	238	Funds (contracts + fund research)	VC/PE	1993-2006	MY
Gompers, Kaplan & Mukharlyamov (2016)	79	Investor surveys	PE	2011-2013	GKM
Gompers, Gornall, Kaplan & Strebulaev, NBER 2016 paper	885	Investor surveys	VC	2016-2016	GGKS
Smith (2005) (*law)	367	Registration statements of venture-backed IPO's	VC	1997-2002	S

Table 5: Contract Dimensions

GP-LP contract dimensions	
1- Aspirational impact	Terms which describe intended impact. *E.g. social or environmental impact addressed, negative impact prohibited.*
2- Operational impact	Terms which incorporate impact goals into contract in actionable way. *E.g. commitment to ESG standards, compensation tied to impact.*
3- Investor return protection	Direct contract rights that protect investors' investment in the fund. *E.g. investor call/put options, tag along/drag along rights, liquidation cash flow rights.*
4- Participatory governance	Rights for investors to participate in the fund's governance, or otherwise monitor/supervise the funds. *E.g. information rights, presence and role of advisory committee.*
5- Limits to manager discretion	The discretion afforded to fund managers under the terms of the agreement. Made up of two sub-categories: asset restrictions, and prohibitions. *E.g. investment cap in PCs, sectors, regions; prohibition on investment in harmful substances, prohibition on hostile transactions.*
6- Manager restrictions	Restrictions imposed on managers. *E.g. fiduciary duty, ability to reinvest funds, restriction on manager's outside activities.*
GP-PC contract dimensions	
1- Operational impact	Terms which incorporate impact goals into contract in actionable way. *E.g. mission lock, impact measurement.*
2- Exit control	Fund's exit paths from the investment in the portfolio company. *E.g. put option in PC securities, tag along/drag along rights, termination rights.*
3- Investment protection	Fund's direct contract rights to protect its investment in the portfolio company. *E.g. ROFR in other PC securities, preemptive/anti-dilution rights, liquidation cash flow rights.*
4- Governance	Fund's ability to participate in the going operation of a portfolio company. *E.g. ownership, board seats, veto rights.*
5- Information rights	Fund information rights. This is a possible subset of governance rights. *E.g. quarterly or annual information rights, form of information shared.*
6- Fund restrictions	Restrictions imposed on fund. *E.g. ROFR on fund securities, non-compete with PC.*

Table 6: Governance/Control Dimensions in GP-LP Contracts

Panel A: MRS impact funds

	N	Mean	Std Dev	Min	10th pctile	25th pctile	50th pctile	75th pctile	90th pctile	Max	% ≠ 0
Investor return protection	29	32.5	20.9	0.0	8.3	8.3	33.3	50.0	66.7	66.7	96.6
Participatory governance	29	78.9	21.8	22.2	53.3	66.7	88.9	100.0	100.0	100.0	100.0
Limits on manager discretion	29	18.4	15.4	0.0	2.7	3.3	13.3	30.0	43.3	43.3	89.7
Manager restrictions	29	21.9	34.2	-17.6	-11.8	-5.9	11.8	52.9	76.5	88.2	93.1
Number of contracts per fund	29	2.1	1.0	1.0	1.0	2.0	2.0	2.0	3.0	6.0	100.0

Panel B: NMRS impact funds

	N	Mean	Std Dev	Min	10th pctile	25th pctile	50th pctile	75th pctile	90th pctile	Max	% ≠ 0
Investor return protection	14	29.2	15.9	0.0	2.5	25.0	33.3	41.7	41.7	50.0	85.7
Participatory governance	14	61.1	30.5	0.0	15.0	51.4	63.9	81.9	95.0	100.0	85.7
Limits on manager discretion	14	14.8	12.9	0.0	0.0	1.7	13.3	22.5	31.3	40.0	71.4
Manager restrictions	14	18.1	30.5	-17.6	-5.9	0.0	2.9	27.9	69.4	76.5	71.4
Number of contracts per fund	14	2.2	1.8	1.0	1.0	1.0	1.0	2.8	5.0	6.0	100.0

Panel C: Differences (MRS-NMRS)

	Difference in mean	t-statistic	Difference in non-zero scores	t-statistic
Investor return protection	3.3	0.521	10.8	1.303
Participatory governance	17.8	2.200**	14.3	2.147**
Limits on manager discretion	3.6	0.762	18.2	1.523
Manager restrictions	3.8	0.357	21.7	0.739
Number of contracts per fund	-0.1	-0.341	n/a	n/a

Table 7: Governance/Control Dimensions in GP-PC Contracts

Panel A: MRS impact funds

	N	Mean	Std Dev	Min	10th pctile	25th pctile	50th pctile	75th pctile	90th pctile	Max	% > 0
Exit control	58	32.7	17.2	0.0	6.3	21.9	37.5	46.1	50.0	62.5	91.4
Investment protection	58	35.4	19.4	0.0	12.1	18.2	30.3	48.5	61.5	84.8	94.8
Governance	58	32.6	10.9	0.0	20.0	26.6	32.9	38.2	45.9	51.8	98.3
Information rights	58	63.2	29.1	0.0	0.0	66.7	66.7	66.7	100.0	100.0	87.9

Panel B: NMRS impact funds

	N	Mean	Std Dev	Min	10th pctile	25th pctile	50th pctile	75th pctile	90th pctile	Max	% > 0
Exit control	26	25.1	14.2	0.0	6.3	19.5	21.9	39.8	43.8	46.9	92.3
Investment protection	26	36.6	22.6	0.0	6.1	18.2	37.9	59.8	60.6	66.7	88.5
Governance	26	25.2	14.1	0.0	1.2	13.5	28.2	36.5	40.6	41.2	88.5
Information rights	26	52.6	34.2	0.0	0.0	16.7	66.7	66.7	83.3	100.0	73.1

Panel C: Differences (MRS-NMRS)

	Difference in mean	t-statistic	Difference in non-zero scores	t-statistic
Exit control	7.6	1.968*	-0.9	-0.141
Investment protection	-1.2	-0.254	6.4	1.042
Governance	7.4	3.032***	9.8	2.508**
Information rights	10.7	1.469	14.9	1.698*

Table 8: Direct Impact Terms in GP-LP Contracts

Panel A: MRS funds

	N	Mean	Std Dev	Min	10th pctile	25th pctile	50th pctile	75th pctile	90th pctile	Max	% > 0
Aspirational impact											
Contract level	60	67.2	32.8	0.0	0.0	66.7	66.7	100.0	100.0	100.0	88.3
Fund level	29	82.8	24.6	0.0	66.7	66.7	100.0	100.0	100.0	100.0	96.6
Operational impact											
Contract level	60	28.2	26.8	0.0	0.0	0.0	27.3	45.5	55.5	100.0	68.3
Fund level	29	43.6	26.1	0.0	7.3	27.3	45.5	54.5	74.5	100.0	89.7
Num. contracts per fund	29	2.1	1.0	1	1	2	2	2	3	6	100

Panel B: NMRS funds

	N	Mean	Std Dev	Min	10th pctile	25th pctile	50th pctile	75th pctile	90th pctile	Max	% > 0
Aspirational impact											
Contract level	31	60.2	35.9	0.0	0.0	33.3	66.7	100.0	100.0	100.0	83.9
Fund level	14	78.6	24.8	33.3	43.3	66.7	83.3	100.0	100.0	100.0	100.0
Operational impact											
Contract level	31	22.6	22.3	0.0	0.0	0.0	18.2	45.5	54.5	63.6	58.1
Fund level	14	39.0	24.0	0.0	5.5	27.3	45.5	52.3	67.3	81.8	85.7
Num. contracts per fund	14	2.2	1.8	1	1	1	1	3	5	6	100

Panel C: Differences (MRS-NMRS)

	Difference in mean	t-statistic	Difference in non-zero scores	t-statistic
Aspirational impact				
Contract level	7.0	0.936	4.5	0.591
Fund level	4.2	0.522	-3.5	-0.690
Operational impact				
Contract level	5.6	1.000	10.3	0.967
Fund level	4.6	0.557	4.0	0.369

Panel D: Break-out of impact terms

	Score weight	Incidence (% funds) MRS	Incidence (% funds) NMRS	*Difference t-statistic*
Aspirational impact terms				
Social impact addressed in agreement	1	93.1%	100.0%	*-0.994*
Agreement generally prohibits negative impact	1	62.1%	50.0%	*0.739*
Fund commitment to social impact	1 if either	89.7%	71.4%	*1.523*
Fund commitment to environmental impact	1 if either	69.0%	50.0%	*1.198*
Operational impact terms				
Fund commitment to international ESG standards	0.5	34.5%	14.3%	*1.382*
Fund GP/Manager compensation tied to benefit/impact performance	1	10.3%	14.3%	*-0.369*
Fund investment due diligence policy addresses impact generally	0.5	86.2%	64.3%	*1.671*
Fund investment due diligence policy addresses portfolio company impact	1	65.5%	64.3%	*0.078*
Fund measures social impact	1	72.4%	64.3%	*0.533*
Fund uses external, third party monitor or reporting system	0.5	34.5%	35.7%	*-0.078*
Fund has an impact committee	1	13.8%	14.3%	*-0.043*

Table 9: Direct Impact Terms in GP-PC Contracts

Panel A: Operational impact

	N	Mean	Std Dev	Min	10th pctile	25th pctile	50th pctile	75th pctile	90th pctile	Max	% > 0	*% funds with >0*
MRS	58	12.6	12.9	0.0	0.0	4.3	8.5	14.4	30.4	53.2	79.3	*88*
NMRS	26	11.0	16.2	0.0	0.0	0.0	0.0	12.2	40.4	42.6	46.2	*84*
Diff. t-statistic		*0.476*									*3.182***	

Panel B: Break-out of impact terms

		Incidence (% funds)		*Difference*
	Score weight	MRS	NMRS	*t-statistic*
PC's mission locked in at the fund's exit	1	5.2%	0.0%	*1.177*
Fund exit right if change in location or business model or benefit	0.5	0.0%	3.8%	*-1.505*
Fund veto right on deviations from the business plan of the PC	1	56.9%	26.9%	*2.615***
PC has an impact committee	0.5	0.0%	0.0%	*n/a*
Fund participates in PC impact committee	0.5	0.0%	0.0%	*n/a*
Fund information rights include impact information	1	10.3%	7.7%	*0.379*
PC environmental or social benefit is measured	1	19.0%	26.9%	*-0.815*
Internal impact measurement	0.5	8.6%	15.4%	*-0.92*
External impact measurement	0.5	3.4%	0%	*0.952*
PC impact performance is reported	1	12.1%	19.2%	*-0.861*
Impact performance reporting done annually	0.25	8.6%	11.5%	*-0.417*
Compensation tied to benefit/impact performance	1	1.7%	3.8%	*-0.584*
Impact addressed generally	0.25	44.8%	38.5%	*0.539*
Impact identified	0.25	32.8%	11.5%	*2.073***
Additional social impact channels (e.g. ESG standards)	1	17.2%	7.7%	*1.152*
Document specifies impact performance reporting	0.25	12.1%	19.2%	*-0.861*

Table 10: Participatory Governance

	Non-Impact		Impact		
	Comparison point	Non-impact funds	MRS funds	N-MRS funds	*Difference t-statistic*
Participatory governance – total score			*78.9*	*61.1*	*2.200***
Advisory committee incidence	GKM	40%	93.10%	85.71%	*0.769*
Advisory capacity incidence (committee, senior advisers, etc.)	GKM	66%			
Advisory committee role:					
Generally advise GP or BOD		n/a	72.41%	64.29%	*0.533*
Technical assistance to GP or BOD		n/a	6.90%	14.29%	*-0.769*
Policy assistance to GP or BOD		n/a	10.34%	14.29%	*-0.369*
Evaluate loans		n/a	0.00%	14.29%	*-2.147***
Investment strategy		n/a	55.17%	28.57%	*1.653*
Due diligence		n/a	51.72%	21.43%	*1.924**
Approve investments		n/a	58.62%	14.29%	*2.949****
Investment financial performance review		n/a	10.34%	0.00%	*1.241*
Investment impact review		n/a	3.45%	7.14%	*-0.528*
Approve conflict of interests		n/a	41.38%	42.86%	*-0.09*
Asset valuations		n/a	37.93%	28.57%	*0.592*
Approve exit scenarios		n/a	27.59%	14.29%	*0.955*
Approve reports and audits		n/a	10.34%	0.00%	*1.241*
Approve budgets, reserves, draw downs and/or fees		n/a	20.69%	14.29%	*0.495*
Fund compliance		n/a	34.48%	7.14%	*1.967**
Fund life: terminate or extend the fund		n/a	13.79%	0.00%	*1.461*
No description		n/a	6.90%	14.29%	*-0.769*

Table 11: Fund Limits to Manager Discretion and Manager Restrictions

	Non-impact			Impact	
	Comparison point	Non-impact funds	MRS funds	NMRS funds	*Difference t-statistic*
Panel A: Limits to Manager Discretion					
Limits to manager discretion – total score			*18.4*	*14.8*	*0.762*
Asset restrictions	n/a		90%	71%	*1.523*
Conflict of interest transactions	n/a		17%	0%	*1.668*
Fund family co-investment prohibition	n/a		0%	7%	*-1.458*
Region investment cap	n/a		0%	0%	*n/a*
No outside region investment	n/a		21%	21%	*-0.055*
No outside sector investments	n/a		10%	7%	*0.331*
Industry restrictions y/n	n/a		17%	14%	*0.24*
Industry cap	n/a		7%	0%	*0.994*
Panel B: Manager Restrictions					
Manager restrictions – total score			*21.9*	*18.1*	*0.357*
Reinvesting fund profits	GL '96	21%	41%	43%	*0.138*
Coinvesting with fund	GL '96	73%	66%	21%	*2.906***
Outside fundraising	GL '96	58%	17%	14%	*0.955*
Panel C: Combined					
Average number of covenant classes	GL '96	5.6	3.59	2.50	

Table 12: GP-PC Contracts

	Non-impact		Impact		
	Comparison point	Non-impact funds	MRS funds	NMRS funds	*Difference t-statistic*
Panel A: Investment protection					
Investment protection – total score			*35.4*	*36.6*	*-0.254*
Anti-dilution of fund investment	KS	95%	83%	58%	*2.515***
Full ratchet preemption	KS	22%	17%	27%	*-1.015*
Weighted average preemption	KS	78%	12%	8%	*0.594*
Founder/entrepreneur non-compete	KS	70%	52%	54%	*-0.178*
Fund liquidation rights	KS	71%	38%	81%	*-3.907****
Panel B: Governance					
Governance – total score			*32.6*	*25.2*	*3.032****
Investor board seats guaranteed	KS	41%	93%	69%	*3.01****
Number of guaranteed seat?	GKM	2.80	1.31	1.67	
PC board size	GKM	5-7 members	4.07	3.88	*0.165*
	KS	6 members			
Investor majority control	KS	25.4%	0%	0%	*n/a*
Investor min. voting %	KS	53.6%	31%	20%	*4.474****
Panel C: Exit					
Exit control – total score			*32.7*	*25.1*	*1.968**
Fund put/redemption right	KS	79%	62%	50%	*1.031*
	S	43%			
Registration rights	S	90%	50%	54%	*-0.322*

Table 13: Correlations Among Dimensions of GP-LP Documents

Column headers indicate dependent variable, with results for all funds, MRS funds, and NMRS funds side-by-side under the header. Each cell represents the result of a *separate regression* of the dependent variable on the row variable and the number of contracts we observe for the fund. The estimate on number of contracts is omitted for brevity.

$$fund\ score_i = \beta\ other\ fund\ score_i + \gamma\ num.contracts_i + \epsilon$$

Panel A: Impact terms

	Aspirational impact			Operational impact		
	All	MRS	NMRS	All	MRS	NMRS
Investor return protection	0.160	0.261	0.111	0.268	0.268	0.342
	(0.18)	(0.23)	(0.50)	(0.17)	(0.24)	(0.41)
Participatory governance	**0.457*** **	**0.517** **	**0.573** **	**0.335** **	0.284	**0.426***
	(0.12)	(0.20)	(0.24)	(0.13)	(0.23)	(0.22)
Limits to manager discretion	**1.052*** **	**0.940*** **	**1.593** **	**0.582** **	0.523	**1.335** **
	(0.23)	(0.28)	(0.70)	(0.25)	(0.34)	(0.59)
Manager restrictions	**0.209** **	**0.364** **	-0.0223	**0.348*** **	**0.418*** **	0.259
	(0.10)	(0.14)	(0.30)	(0.09)	(0.14)	(0.24)
Aspirational impact				**0.348** **	**0.530*** **	0.185
				(0.13)	(0.18)	(0.25)
Operational Impact	**0.371*** **	**0.484*** **	0.264			
	(0.13)	(0.16)	(0.35)			

Panel B: Investor rights

	Participatory governance			Investor return protection		
	All	MRS	NMRS	All	MRS	NMRS
Investor return protection	0.294	0.113	**0.821***			
	(0.18)	(0.20)	(0.45)			
Participatory governance				0.177	0.104	**0.285***
				(0.11)	(0.19)	(0.16)
Limits to manager discretion	**1.264*** **	**1.039*** **	**1.771** **	**0.411** **	**0.518***	0.0557
	(0.202)	(0.22)	(0.68)	(0.20)	(0.27)	(0.51)
Manager restrictions	**0.336*** **	**0.348*** **	0.332	0.127	0.192	0.202
	(0.10)	(0.12)	(0.29)	(0.08)	(0.12)	(0.17)
Aspirational impact	**0.458*** **	**0.403** **	**0.588** **	0.0969	0.188	0.0396
	(0.12)	(0.15)	(0.25)	(0.11)	(0.16)	(0.18)
Operational Impact	**0.358** **	0.202	**0.623***	0.172	0.177	0.174
	(0.14)	(0.16)	(0.31)	(0.11)	(0.16)	(0.21)

Panel C: Control over managers

	Limits to manager discretion			Manager restrictions		
	All	MRS	NMRS	All	MRS	NMRS
Investor return protection	**0.184****	**0.242***	0.0196	0.354	0.438	0.566
	(0.09)	(0.13)	(0.18)	(0.23)	(0.28)	(0.47)
Participatory governance	**0.342*****	**0.449*****	**0.216****	**0.564*****	**0.736*****	0.322
	(0.05)	(0.09)	(0.08)	(0.16)	(0.25)	(0.28)
Limits to manager discretion				**1.411*****	**1.555*****	0.666
				(0.29)	(0.31)	(0.83)
Manager restrictions	**0.227*****	**0.317*****	0.0837			
	(0.05)	(0.06)	(0.10)			
Aspirational impact	**0.285*****	**0.317*****	**0.200****	**0.352****	**0.600****	-0.0223
	(0.06)	(0.10)	(0.09)	(2.01)	(2.70)	(-0.07)
Operational Impact	**0.168****	0.161	**0.239****	**0.624*****	**0.628*****	0.368
	(0.07)	(0.10)	(0.11)	(0.17)	(0.21)	(0.34)

***: p < 1% , **: p < 5%, *: p < 10%; Standard errors in parentheses.

Table 14: Correlation Among Dimensions of GP-PC Documents

Panel A: Impact terms

	Operational impact		
	All	MRS	NMRS
Exit control	**0.180****	0.041	**0.599*****
	(0.0786)	(0.1003)	(0.1981)
Investment protection	**0.113***	-0.013	**0.318****
	(0.0629)	(0.0891)	(0.1309)
Governance	**0.354*****	0.250	**0.547****
	(0.096)	(0.1552)	(0.2055)
Information rights	**0.142*****	**0.160*****	**0.158***
	(0.0378)	(0.0554)	(0.0909)

Panel B: Investment & exit protection

	Exit control			Investment protection		
	All	MRS	NMRS	All	MRS	NMRS
Exit control				**0.659*****	**0.466*****	**0.796*****
				(0.1111)	(0.1372)	(0.2816)
Investment protection	**0.413*****	**0.366*****	**0.314*****			
	(0.0697)	(0.1079)	(0.111)			
Governance	**0.669*****	**0.740*****	0.309	**0.773*****	**0.523****	**0.793****
	(0.1116)	(0.1865)	(0.1952)	(0.1453)	(0.2276)	(0.2838)
Information rights	**0.297*****	**0.343*****	**0.187****	**0.301*****	**0.285*****	0.172
	(0.0417)	(0.0643)	(0.0756)	(0.0575)	(0.0805)	(0.1301)
Operational impact	**0.293****	0.073	**0.461*****	**0.293***	-0.029	**0.621****
	(0.1282)	(0.1774)	(0.1524)	(0.1636)	(0.2004)	(0.2555)

Panel C: Governance & information rights

	Governance			Information rights		
	All	MRS	NMRS	All	MRS	NMRS
Exit control	**0.414*****	**0.297*****	0.306	**1.181*****	**0.982*****	**1.086****
	(0.069)	(0.0747)	(0.1933)	(0.1656)	(0.1841)	(0.4398)
Investment protection	**0.299*****	**0.165****	**0.310****	**0.750*****	**0.642*****	0.394
	(0.0563)	(0.0717)	(0.1108)	(0.1433)	(0.1812)	(0.2985)
Governance				**1.199*****	**0.950*****	0.457
				(0.2304)	(0.3338)	(0.486)
Information rights	**0.187*****	**0.133*****	0.0778			
	(0.0358)	(0.0467)	(0.0827)			
Operational impact	**0.357*****	0.177	**0.417****	**0.918*****	**0.809*****	**0.707***
	(0.0968)	(0.1099)	(0.1566)	(0.2449)	(0.2805)	(0.4072)

***: p < 1% , **: p < 5%, *: p < 10%; Standard errors in parentheses.

Table 15: Correlation of Operational Impact in GP-PC Contracts with GP-LP Terms

	All	MRS	NMRS
Investor (LP) return protection	-0.100	0.005	-0.486
	(0.0758)	(0.084)	(0.4401)
Participatory (LP) governance	**0.257*** **	**0.659*** **	0.001
	(0.0868)	(0.1065)	(0.1465)
Limits to manager (GP) discretion	**0.315** **	**0.781*** **	-0.029
	(0.1468)	(0.1529)	(0.4802)
Manager (GP) restrictions	0.012	**0.216*** **	-0.071
	(0.0591)	(0.0738)	(0.1261)
Aspirational impact (fund)	**-0.166***	0.243	0.114
	(0.0938)	(0.162)	(0.4608)
Operational impact (fund)	**0.214*** **	**0.377*** **	-0.164
	(0.0673)	(0.0738)	(0.1437)
N	94	58	25

***: p < 1% , **: p < 5%, *: p < 10%; Standard errors in parentheses.

Appendix 1

Table A-1: Additional Summary Statistics for Sample of Impact Funds & Documents

Panel A: GP-LP contracts

	All funds		MRS funds		NMRS funds	
Panel A: GP-LP contracts	N	%	N	%	N	%
Number of funds	54		29		14	
Number of documents	106		60		31	
Document type						
Fact Sheet	1	0.9%	1	1.7%	0	0.0%
Investment Agreement	4	3.8%	1	1.7%	1	3.2%
Issue Document	2	1.9%	0	0.0%	2	6.5%
Limited Partnership Agreement	25	23.6%	17	28.3%	4	12.9%
Operating Agreement	8	7.5%	4	6.7%	3	9.7%
PPM	43	40.6%	27	45.0%	10	32.3%
Side Letter	20	18.9%	9	15.0%	10	32.3%
Other	3	2.8%	1	1.7%	1	3.2%
Fund Size						
$0 <= Target < $10M	12	22.2%	9	31.0%	1	7.1%
$10M <= Target < $20M	8	14.8%	3	10.3%	5	35.7%
$20M <= Target < $30M	3	5.6%	3	10.3%	0	0.0%
$30M <= Target < $40M	2	3.7%	1	3.4%	0	0.0%
$50M <= Target < $75M	3	5.6%	3	10.3%	0	0.0%
$100M <= Target < $125M	3	5.6%	2	6.9%	1	7.1%
$150M <= Target < $175M	0	0.0%	0	0.0%	0	0.0%
$175M <= Target < $200M	0	0.0%	0	0.0%	0	0.0%
Target >= $200M	3	5.6%	1	3.4%	0	0.0%
Unknown	20	37.0%	7	24.1%	7	50.0%
Stage focus						
Growth	20	37.0%	13	44.8%	4	28.6%
Growth: Early-stage / Emerging / Startup	7	13.0%	4	13.8%	1	7.1%
Growth: Pre-seed / Seed	6	11.1%	4	13.8%	1	7.1%
Mature	2	3.7%	1	3.4%	1	7.1%
Other	2	3.7%	2	6.9%	1	7.1%
Unknown	17	31.5%	5	17.2%	6	42.9%
Geographic focus						
Undefined	19	35.2%	11	37.9%	3	21.4%
United States and Canada	20	37.0%	10	34.5%	6	42.9%
Europe	4	7.4%	1	3.4%	3	21.4%

Latin America	10	18.5%	5	17.2%	4	28.6%
Africa	15	27.8%	4	13.8%	6	42.9%
South Asia	7	13.0%	6	20.7%	1	7.1%
Southeast Asia	3	5.6%	2	6.9%	0	0.0%
Asia - Other	6	11.1%	3	10.3%	3	21.4%
Global	1	1.9%	1	3.4%	0	0.0%
Other	3	5.6%	3	10.3%	0	0.0%
Industry focus						
Undefined	21	38.9%	13	44.8%	5	35.7%
Finance and Microfinance	14	25.9%	6	20.7%	5	35.7%
Agribusiness/Farming	17	31.5%	12	41.4%	4	28.6%
Sustainable Development	9	16.7%	6	20.7%	1	7.1%
Technology and Business Services	9	16.7%	5	17.2%	3	21.4%
Water and Sanitation	10	18.5%	7	24.1%	2	14.3%
Energy	8	14.8%	7	24.1%	0	0.0%
Housing	6	11.1%	3	10.3%	1	7.1%
Essential Individual Products	10	18.5%	7	24.1%	1	7.1%
Education	9	16.7%	8	27.6%	0	0.0%
Manufacturing	9	16.7%	4	13.8%	3	21.4%
Handicrafts	1	1.9%	1	3.4%	0	0.0%
Environment	7	13.0%	6	20.7%	1	7.1%
Social/Poverty	13	24.1%	10	34.5%	1	7.1%
Health	13	24.1%	8	27.6%	4	28.6%
Employment	3	5.6%	3	10.3%	0	0.0%
Other	12	22.2%	5	17.2%	3	21.4%
Equity vs. debt strategy						
Accepts equity	48	88.9%	27	93.1%	12	85.7%
Accepts debt	42	77.8%	23	79.3%	11	78.6%
Accepts convertible securities	35	64.8%	19	65.5%	10	71.4%
Legal entity type						
Inc.	3	5.6%	0	0.0%	1	7.1%
Inv. Co.	2	3.7%	0	0.0%	2	14.3%
LLC	14	25.9%	8	27.6%	4	28.6%
LP	27	50.0%	18	62.1%	4	28.6%
Other	2	3.7%	0	0.0%	0	0.0%
Private Trust	2	3.7%	2	6.9%	0	0.0%
Public LLC	1	1.9%	1	3.4%	0	0.0%
SICAV	1	1.9%	0	0.0%	1	7.1%
Specialized Investment Fund (SIF)	1	1.9%	0	0.0%	1	7.1%
Unknown	1	1.9%	0	0.0%	1	7.1%
Country of origin						

BVI	1	1.9%	1	3.4%		0.0%
Belgium	1	1.9%		0.0%	1	7.1%
Botswana	2	3.7%		0.0%		0.0%
Canada	4	7.4%	4	13.8%		0.0%
Cayman Islands	3	5.6%	3	10.3%		0.0%
India	1	1.9%	1	3.4%		0.0%
Luxembourg	5	9.3%	1	3.4%	4	28.6%
Mauritius	3	5.6%	2	6.9%	1	7.1%
Netherlands	2	3.7%	1	3.4%		0.0%
South Africa	2	3.7%		0.0%		0.0%
United Kingdom	1	1.9%		0.0%	1	7.1%
United States	28	51.9%	16	55.2%	6	42.9%
Unknown	1	1.9%		0.0%		0.0%
Governing law						
Arkansas	1	2.1%		2.1%	1	2.1%
Canada	1	2.1%	1	2.1%		2.1%
Cayman Islands	2	4.3%	1	4.3%		4.3%
Cayman Islands (generally) and Delaware, USA (standard of gross negligence)	1	2.1%	1	2.1%		2.1%
Delaware	17	36.2%	11	36.2%	2	36.2%
EU/Belgium	1	2.1%		2.1%	1	2.1%
England	1	2.1%		2.1%	1	2.1%
India	1	2.1%	1	2.1%		2.1%
Luxembourg	5	10.6%	1	10.6%	4	10.6%
Maine	2	4.3%	1	4.3%	1	4.3%
Mauritius	3	6.4%	2	6.4%	1	6.4%
Mauritius (East Africa)	1	2.1%		2.1%		2.1%
Mississippi	1	2.1%		2.1%	1	2.1%
Netherlands	2	4.3%	1	4.3%		4.3%
Ontario and the federal laws of Canada as applicable to Ontario.	1	2.1%	1	2.1%		2.1%
Ontario, Canada	1	2.1%	1	2.1%		2.1%
Pennsylvania	1	2.1%		2.1%	1	2.1%
Quebec, Canada	1	2.1%	1	2.1%		2.1%
RSA	1	2.1%		2.1%		2.1%
USA	1	2.1%	1	2.1%		2.1%
United States	1	2.1%		2.1%		2.1%

Panel B: GP-PC documents

	All funds		MRS funds		NMRS funds	
	N	%	N	%	N	%
Number of funds	16		8		6	
Number of PCs	92		57		25	
Number of documents	96		58		26	
Document type						
Term Sheet	66	68.8%	37	63.8%	20	76.9%
Other	3	3.1%	0	0.0%	2	7.7%
Letter of Intent	7	7.3%	6	10.3%	0	0.0%
Loan Agreement	3	3.1%	0	0.0%	2	7.7%
Investment Agreement	17	17.7%	15	25.9%	2	7.7%
Industry focus						
Undefined	0	0.0%	0	0.0%	0	0.0%
Finance and Microfinance	16	16.7%	13	22.4%	2	7.7%
Agribusiness/Farming	21	21.9%	8	13.8%	9	34.6%
Sustainable Development	0	0.0%	0	0.0%	0	0.0%
Technology and Business Services	9	9.4%	8	13.8%	1	3.8%
Water and Sanitation	2	2.1%	2	3.4%	0	0.0%
Energy	2	2.1%	1	1.7%	0	0.0%
Housing	2	2.1%	2	3.4%	0	0.0%
Essential Individual Products	1	1.0%	0	0.0%	1	3.8%
Education	1	1.0%	1	1.7%	0	0.0%
Manufacturing	5	5.2%	3	5.2%	0	0.0%
Handicrafts	3	3.1%	3	5.2%	0	0.0%
Environment	0	0.0%	0	0.0%	0	0.0%
Social/Poverty	1	1.0%	1	1.7%	0	0.0%
Health	5	5.2%	4	6.9%	0	0.0%
Employment	0	0.0%	0	0.0%	0	0.0%
Other	3	3.1%	2	3.4%	1	3.8%
Geographic focus						
Undefined	48	52.2%	37	64.9%	11	44.0%
United States and Canada	4	4.2%	1	1.7%	3	11.5%
Europe	2	2.1%	1	1.7%	1	3.8%
Latin America	6	6.3%	4	6.9%	1	3.8%
Africa	16	16.7%	5	8.6%	9	34.6%
South Asia	11	11.5%	7	12.1%	0	0.0%
Southeast Asia	3	3.1%	0	0.0%	0	0.0%
Asia - Other	0	0.0%	0	0.0%	0	0.0%
Global	2	2.1%	2	3.4%	0	0.0%
Other	0	0.0%	0	0.0%	0	0.0%

Business stage						
Growth	11	11.5%	4	6.9%	1	3.8%
Growth: Early-stage / Emerging / Startup	1	1.0%	1	1.7%	0	0.0%
Growth: Pre-seed / Seed	8	8.3%	8	13.8%	0	0.0%
Mature	4	4.2%	2	3.4%	2	7.7%
Undefined	72	75.0%	43	74.1%	23	88.5%
Fund investment position						
5% <= Own < 10%	6	6.3%	1	1.7%	4	15.4%
10% <= Own < 15%	7	7.3%	6	10.3%	0	0.0%
15% <= Own < 20%	7	7.3%	4	6.9%	2	7.7%
20% <= Own < 25%	15	15.6%	13	22.4%	0	0.0%
25% <= Own < 30%	7	7.3%	6	10.3%	1	3.8%
30% <= Own < 40%	12	12.5%	9	15.5%	3	11.5%
40% <= Own < 50%	3	3.1%	3	5.2%	0	0.0%
50% <= Own < 60%	2	2.1%	2	3.4%	0	0.0%
Own >= 70%	5	5.2%	4	6.9%	0	0.0%
Unknown or NA	32	33.3%	10	17.2%	16	61.5%

Panel C: Comparison of Survey Responses, Sample v. Non-Sample Funds

	Provided Contracts					Did Not Provide Contracts					Difference
	N	mean	p25	p50	p75	N	mean	p25	p50	p75	t-statistic
Market-rate seeking indicator	43	0.67	0	1	1	54	0.72	0	1	1	-0.51
Vintage year	44	2008	2005	2009	2012	45	2007	2006	2009	2011	0.59
Committed capital ($million)	42	92	12	28	74	41	195	12	42	220	-1.57
Fund's initial term (years)	35	9.3	8	10	10	30	8.9	8	10	10	0.68
Latest age of fund	29	7.1	4	6	9	31	7.1	4	6	9	-0.02
# companies in which fund has invested	40	14	4.5	8	12	52	15	7	12	17	-0.05
# funds currently managed by firm	29	3.7	1	2	3	31	2.1	1	2	3	1.64
# funds managed by most senior firm GP	27	8.4	2	4	7	27	3.6	2	3	5	2.02**
Target net IRR	33	0.15	0.1	0.15	0.2	26	0.14	0.06	0.15	0.17	0.30

Appendix 2: Scoring Notes

Available here.