



Contents lists available at ScienceDirect

Journal of Financial Economics

journal homepage: www.elsevier.com/locate/jfec

Contracts with (Social) benefits: The implementation of impact investing[☆]

Christopher Geczy^a, Jessica S. Jeffers^{b,*}, David K. Musto^a, Anne M. Tucker^c

^a Wharton School of the University of Pennsylvania, 3620 Locust Walk, Philadelphia, PA 19104, United States

^b Booth School of Business, University of Chicago, 5807 S. Woodlawn Ave, Chicago, IL 60637, United States

^c College of Law, Georgia State University, 85 Park Place NE, Atlanta 30316, Georgia

ARTICLE INFO

Article history:

Received 9 December 2019

Revised 22 April 2020

Accepted 13 May 2020

Available online xxx

JEL codes:

A13

D23

D86

G24

K12

Keywords:

Impact investing

Contracts

Venture capital

Private equity

Socially responsible investing

ABSTRACT

We draw on new data and theory to examine how private market contracts adapt to serve multiple goals, particularly the social-benefit goals that impact funds add to their financial goals. Counter to the intuition from multitasking models (Holmstrom and Milgrom, 1991), few impact funds tie compensation directly to impact, and most retain traditional financial incentives. However, funds contract directly on impact in other ways and adjust aspects of the contracts such as governance. In the cross-section of impact funds, those with higher profit goals contract more tightly around both goals.

© 2021 Published by Elsevier B.V.

[☆] We are grateful to the Wharton Social Impact Initiative, and in particular to Katherine Klein, Nick Ashburn, Jacob Gray, Harry Douglas, Michael Brown, WSII fellows, and participant fund general partners, for making this paper possible. We also thank Shawn Cole, Steve Kaplan, Adair Morse, Robert Vishny, Ting Xu, and Ayako Yasuda; attendees at NBER Entrepreneurship, PERC, MFA, Berkeley's Third Annual Corporate Law Symposium, PRI, GRASFI, the Impact & Sustainable Finance Faculty Consortium, the Grunin Center for Social Impact & Enterprise, Berkeley Impact Capital Managers, and WAPFIN; and seminar participants at the University of Chicago, the University of Miami, IFN, HEC, and LBS. Ari Conterato, Tianshu Lyu and Philip Trammell provided excellent research assistance, and we thank the Fama-Miller Center for support.

* Corresponding author.

E-mail addresses: geczy@wharton.upenn.edu (C. Geczy), jessica.jeffers@chicagobooth.edu (J.S. Jeffers), musto@wharton.upenn.edu (D.K. Musto), amtucker@gsu.edu (A.M. Tucker).

1. Introduction

The last two decades have seen impact investing emerge and rapidly grow as a sector of the private markets, exceeding 13,000 deals and \$33 billion per year in 2019.¹ The addition of a social-benefit goal alongside the goal of financial performance sets impact investing apart from conventional private equity (PE) or venture capital (VC) investing.² For example, an impact fund might finance

¹ See "2019 Annual impact investor survey," Global Impact Investing Network (GIIN), 2019.

² There is ongoing debate about the definition of impact investing (see, e.g., "The state and future of impact investing," Forbes, February 23, 2012), with some arguing that impact investment should require an outcome that would not occur but for the investment [i.e., "additionality" (Brest et al., 2018)]. The GIIN outlines its own core principles of impact in-

<https://doi.org/10.1016/j.jfineco.2021.01.006>

0304-405X/© 2021 Published by Elsevier B.V.

Please cite this article as: C. Geczy, J.S. Jeffers, D.K. Musto et al., Contracts with (Social) benefits: The implementation of impact investing, Journal of Financial Economics, <https://doi.org/10.1016/j.jfineco.2021.01.006>

the development of not just housing but housing affordable to those with incomes below a threshold, or not just food production but production with “sustainable” agricultural supply chains. This dual objective introduces a new dimension to the contracting problem for funds, investors, and portfolio companies. In this paper, we investigate how impact fund contracts adapt to reflect multiple goals and how these practices relate to contract theory.

Private investment markets are a useful setting to study contracting problems because participants encounter the canonical principal-agent problems addressed by the theoretical literature (Kaplan and Strömberg, 2003). There is the agency problem between investors and their funds, where investors (LPs) delegate capital to fund managers (GPs) to invest in deal opportunities.³ A second agency problem arises between the funds and their portfolio companies (PCs), where the GPs are the principals providing capital to entrepreneurs. Empirical work on this setting, notably Kaplan and Strömberg (2003, 2009), Gompers and Lerner (1996, 1999), Metrick and Yasuda (2010), Gompers et al. (2016), and Phalippou et al. (2018), has shed much light on contracting practices among private investors. However, the empirical literature does not address the contracting practices of funds that target additional goals alongside profit. We fill this gap by investigating how the addition of impact goals changes a fund’s contracts, both with its investors and with its PCs, and relating our empirical findings to theory.

In the theoretical literature on contracting, the multiple goals of impact funds resemble the “multitasking” problem analyzed by Holmstrom and Milgrom (1991) (hereafter HM ‘91), in which the outcomes of the tasks within an agent’s job vary in measurability and complement or substitute for each other. The analysis highlights the danger of compensating more measurable outcomes when the tasks are substitutes. In our context, it raises the question of whether paying impact fund GPs for financial performance, as we find, detracts from the impact goal. The answer hinges on whether financial performance eases or conflicts with the delivery of impact and on the extent to which other contractual terms channel effort toward impact.

Indeed, the “braiding” theory of Gilson et al. (2010) highlights the importance of oversight committees and similar mechanisms in the implementation of goals that are easier to observe than to measure, which we find describes impact goals well. A related perspective on the difficulty of measuring impact outcomes, as well as the difficulty of specifying ex ante the form impact will take ex post, is the flexible-contracting theory of Hart and Moore (2008). Their model helps explain where to be flexible and where to be rigid to elicit consummate rather than perfunctory performance.

vesting at <https://thegiin.org/characteristics>. Here we accept a more general definition of impact investing and include environmental goals in our notion of “social-benefit goal,” perhaps more in line with the “intentionality” framework used by the GIIN (<https://thegiin.org/impact-investing/need-to-know/>).

³ With a slight abuse of language but consistent with common practice, we refer to investors as LPs and fund managers as GPs regardless of the fund’s specific legal structure.

We study the insertion of impact by analyzing a unique set of 207 legal documents struck by impact funds, representing 53 separate funds and 96 of their PCs. These contracts include private limited partner agreements (LPAs), private placement memoranda (PPMs), term sheets, letters of intent, and other legal documents governing the relationships between parties. While profit-seeking in impact investing is best represented along a spectrum, the main opportunity to identify the effect of impact on contracting is the contrast between funds targeting market returns (market-rate-seeking, or MRS, funds) and those with lower financial targets (nonmarket-rate-seeking, or NMRS, funds), where the NMRS group’s willingness to forgo higher financial returns implicitly elevates the impact objective.

Our first main result is that impact funds rarely tie compensation to impact outcomes. Instead, they generally tie compensation to financial performance with the usual waterfall compensation structure, although we show innovative alternatives too, especially among NMRS funds. The focus of compensation on financial performance seems contrary to the HM ‘91 analysis, and we explore possible explanations for the deviation. One is that, as HM ‘91 note, complementarity between tasks combats the efficiency loss from rewarding only one of them. This logic could apply to some funds focusing on “embedded impact” PCs, for example, clean energy PCs, where financial success can be a precondition for impact. But many PCs have impact that is chosen rather than embedded, for example, commitments to employ convicted felons, and either way, complementarity between tasks can change over the life of the PC and fund.

Another explanation for financial incentive compensation is that impact funds take existing nonimpact contracts “off the shelf” and bolt on impact provisions, overlooking impact compensation. Yet we observe many other modifications to the contracts, suggesting that continuing to tie compensation to financial performance is a choice. Finally, we show additional contracting practices that keep agents’ attention on impact when compensation might pull them toward financial performance, especially among MRS funds. These additional terms help explain how funds balance impact and financial goals but leave open a deeper puzzle as to why funds prefer alternative arrangements to untying compensation from financial performance.

Our second main result is that both MRS and NMRS funds contract directly on impact. Moreover, we observe a flow through of impact contracting from a fund’s contracts with its investors to its contracts with its PCs, as more direct impact terms in a fund’s LP contracts correlates with more impact terms in its PC contracts. Neither recycled impact term templates nor repeat-player legal representation drive our results. Together, these patterns show funds making enforceable commitments to nonfinancial goals and thus suggest there is more to impact investing than “window dressing” or “greenwashing.” There is a range of flexibility in impact terms, and MRS funds tend to have more rigid terms than NMRS funds. We relate this pattern to the “shading” setting of Hart and Moore (2008), where MRS funds could have greater risk for shading because of divergence in preferences.

We also find that impact funds emphasize governance terms. This aligns with the “braiding” model of [Gilson et al. \(2010\)](#), who argue that the importance of governance rises when tasks are uncertain and hard to contract over ex ante. Almost all funds give LPs advisory roles that impart substantial oversight over deal selection, diligence process, conflicts of interest, and other material fund activity. This is true in impact funds of all sizes and as far as we can tell is not common in nonimpact funds. At the PC level, the vast majority of funds contract for guaranteed board seats, a guarantee perhaps necessitated by what we find to be small voting shares. The combination of these contract adaptations—direct contracting on impact and emphasis on governance—combats the distortive effects of compensating for financial performance.

Our results on impact contracting contribute to the nascent literature on impact investing, where three recent papers explore the financial implications of impact-oriented strategies ([Barber et al., 2021](#); [Kovner and Lerner, 2015](#); [Brest et al., 2018](#)). The implications of our findings also extend beyond impact investing to the general problems of balancing the benefits and costs of creating enforceable rights and incentives through contracts ([Bolton and Dewatripont, 2004](#)) and of addressing agency problems with incomplete contracts (see, e.g., [Grossman and Hart, 1986](#); [Hart and Moore, 1990](#)).

The paper proceeds in five sections. We begin by outlining our sample and empirical approach in [Section 2](#) to familiarize readers with both the field generally and our sample specifically. We report on the empirical patterns in [Section 3](#) before turning to a discussion of relevant theory in [Section 4](#) and choose this order for two reasons. First, given the lack of existing information on impact funds, we lead with these data to fix ideas. Second, the aim of this paper is not to test theory but to use it to help understand the findings and to learn whether the findings shed light on nuances in the theory. [Section 5](#) concludes.

2. Sample description

Our data come from a database of impact funds compiled by the Wharton Social Impact Initiative (WSII). Since there is no comprehensive registry of impact funds, WSII created a list of 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, three years after the first release of the survey, WSII had contacted 456 fund managers and 85 had completed the survey, representing 108 separate funds and 1295 PCs. Of these, 45 funds provided contracts. Another 12 funds provided contracts without completing the associated survey. We drop funds with no LPA or equivalent information in other documents. The result is a set of contracts from 53 distinct funds and 93 distinct PCs. These contracts, supplemented by several survey questions, form the basis of our empirical review.

We code contract terms using contract variables and coding procedures drawn from the legal and finance literatures. 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 allow us to verify coding entries, control for accuracy, and extract additional information on observable trends and nuances in contract provisions.

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—and one of these contains a provision of interest, we report the fund as having this provision. In regressions, we control for the number of contracts available for the fund. We observe two GP-LP 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 PCs.

We categorize funds in the resulting sample as MRS or NMRS primarily on the basis of their answer to the following 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).” In a few cases in which we lack survey answers but the answer is clear from the fund’s documents or public information, we use that information.

[Tables 1](#) and [2](#) summarize our samples of participating funds. Panel A of [Table 1](#) describes the 111 GP-LP contracts provided by the 53 participating funds, and Panel B describes the 96 GP-PC contracts with the 93 PCs. GP-LP contracts establish the contractual relationships between fund managers and their investors and include foundational contracts such as LPAs and operating agreements, quasicontinental documents such as PPMs and fact sheets, and side letter agreements modifying existing contract terms. GP-PC contracts include term sheets, letters of intent, and investment agreements. We see few differences between MRS and NMRS funds in the type of documents provided.

Participating funds have an average initial term of 9.2 years and a median of 10 years, with little difference between MRS and NMRS funds ([Table 2](#)). The contract dates in our sample range from 1988 to 2016, with the vast majority after 2000. The average vintage year for both GP-LP and GP-PC contracts is 2009, and the median year is 2010. MRS contracts are somewhat more recent than NMRS contracts (average 2010 versus 2005). Our results are robust to excluding contracts before 2000. We provide robustness results in the Internet [Appendix](#), including analysis where we address time effects and restrict the sample to periods that match our literature comparisons.

[Appendix Table A1](#), Panel A and [Figs. A1](#) and [A2](#) report additional descriptive fund statistics. Participating impact funds are small: the target assets under management (AUM) for our sample range from under \$10 million to over \$500 million, with more than half under \$50 million and 25% under \$10 million. Our sample mirrors smaller fund size in the impact investment market generally, where the

Table 1

Summary statistics for sample of impact funds and documents.

This table summarizes the GP-LP and GP-PC contracts for funds in the WSII database. We are unable to categorize as MRS or NMRS two of the funds in our GP-LP sample. At the GP-LP level, foundational agreements include limited partnership agreements, operating agreements, investment agreements, issue documents, and similar documents. Fund legal structure dictates the specific foundational agreement title; for example, a fund organized as an LLC will have an operating agreement as opposed to an LPA. Quasicontractual agreements include PPMs and fact sheets, and additional documents refer to side letters. We include in our sample a few funds with quasicontractual agreements and no foundational agreements but only when there is significant detail around contractual rights, such as financial rights, sufficient to describe the relationship between the LP and the GP comprehensively. We exclude funds for which we only have side letters or quasicontractual agreements with insufficient detail. At the GP-PC level, foundational agreements include term sheets (the vast majority), investment agreements, loan agreements, and similar documents. Deal structure dictates the specific foundational agreement title; for example, debt will generate a loan agreement, and equity an investment agreement or term sheet. At the GP-PC level, each document refers to a unique GP-PC relationship (three PCs are owned by different funds in our sample).

Panel A: GP-LP contracts			
	All funds	MRS funds	NMRS funds
Number of funds	53	38	13
Number of documents	111	78	31
Foundational agreements	43	30	12
Quasicontractual agreements	45	34	10
Additional documents	23	14	9
Panel B: GP-PC contracts			
	All funds	MRS funds	NMRS funds
Number of funds	15	9	6
Number of unique PCs	93	68	25
Number of documents	96	70	26
Foundational agreements	89	63	26
Quasicontractual agreements	7	7	0

median impact fund manages \$82 million.⁴ Since, on average, MRS funds are larger than NMRS funds, we replicate our analysis with MRS and NMRS funds under \$30 million AUM to verify that differential size does not drive our results. We also report results for large impact funds above \$100 million. All of these results appear in the Internet Appendix.⁵

The life cycle focus is wide, with half the funds indicating that they invest at several stages. For example, one fund indicates that it will “invest in new, early stage and mature private businesses that provide living wage job opportunities ... profit sharing and employee ownership for low-income residents of [redacted].” This language exemplifies a distinctive attribute of impact investing: whereas life cycle focus is a salient differentiator for nonimpact funds (e.g., seed funds are usually distinct from late stage funds), it is typical for impact funds to consider companies

across stages to focus on the impact goal. Table A3 further contrasts key features of PE, VC, and impact funds.

Half of the funds are domiciled in the US, though the investment focus is often elsewhere. Target industries are diverse and include agribusiness, finance, social/poverty-alleviating services, health, and technology (note that funds can have multiple industry and geographic areas of focus).

Appendix Table A1, Panel B and Fig. A3 report PC summary statistics, which are less robust because they come primarily from term sheets with abbreviated or zero descriptions of PC operations. Of the identifiable industries, finance- and agriculture-focused PCs comprise nearly 40% of the sample and match the identified industry focus of the funds. Popular industries include technology/business services and manufacturing, and popular regions of operation include Africa and South Asia.

The targeted regions and industries illustrate embedded impact in operations. For example, investors can view a fund that supports sustainable agribusiness within a target region as generating direct social or environmental benefits, embedded in the nature and location of the business itself. Embedded impact in our contracts include clean energy and clean tech, community development, education, energy efficiency, healthcare/health tech, minority-led business, websites that address social and/or environmental challenges, sustainable apparel, sustainable consumer products, sustainable food and beverages, sustainable infrastructure and materials, clean water technology, and wellness.

Are the funds in our contract database representative of impact funds in general? There is no comprehensive repository of impact funds available for comparison, so instead we address this question in Table 3 by splitting the funds that filled out the WSII survey into two groups: those that provided contracts and those that did not. Both contain about two-thirds MRS funds, with similar target internal rates of return net of fees (net IRRs), represent similar time horizons, and have similar numbers of PCs (Panel A). The firms providing contracts are smaller—a \$90 million difference at the average due to outliers but a difference that shrinks to \$10 million at the median. As reported in the Internet Appendix, we find similar patterns overall when restricting our attention to larger impact funds. The notable difference is that funds providing documents tend to be part of larger and more experienced firms measured both by the total number of funds managed by the firm and by the number of funds previously managed by the most senior GP. Reported investor types are similar between funds that did and did not provide contracts (Panel B).

In Table 4, we compare information on LPs between MRS and NMRS funds using survey responses.⁶ We focus on three questions about LPs: Which class of investors

⁴ See “2019 Annual impact investor survey,” Global Impact Investing Network (GIIN), 2019.

⁵ We chose the \$30 million subsample cutoff as a natural cutoff to get the most MRS and NMRS funds within a similar size and the \$100 million cutoff to be above the median reported by the GIIN (see previous footnote). Only two NMRS funds fall in the large bucket, so we are unable to report MRS-NMRS comparisons for that sample.

⁶ We explored supplementing the survey responses about LPs with data from other sources, including regulatory filings, but our review of data in the public domain established that no participating funds are registered investor advisors or file 13Fs, and no GPs publicly disclose that they are ERISA fiduciaries. (We carefully reviewed firm websites, the SEC IAPD database, news databases, EDGAR filings, and databases provided by Pensions and Investments.) We also explored comparing the sample impact funds with nonimpact funds from the same family, but while many of

Table 2

Horizons and years for sample of impact funds and documents.

This table summarizes the horizons and document years of the funds in the WSII database. Total term is the initial term of the fund in years plus number of years the fund has been extended, if any (note this will only apply to old enough funds). Term information is unfortunately unavailable for some funds. Likewise, document years are missing or redacted from some documents.

	N	Mean	Min	10th	25th	Percentile			Max
						50th	75th	90th	
Initial term (years)									
All	38	9.21	4	5	8	10	10	12	12
MRS	29	9.38	4	5	8	10	10	12	12
NMRS	9	8.67	5	5	7	10	10	10	10
Total term (years)									
All	38	9.67	5	6	9	10	10	12	14
MRS	29	9.81	5	7	9.5	10	11	12	14
NMRS	9	9.22	5	5	8	10	10	12	12
GP-LP doc. year									
All	104	2008.7	1996	2001	2007	2010	2012	2014	2016
MRS	73	2009.8	1999	2007	2008	2010	2013	2015	2016
NMRS	30	2005.7	1996	2000	2001	2002	2012	2013	2016
GP-PC doc. year									
All	78	2008.7	1988	2003	2005	2010	2012	2015	2016
MRS	59	2009.9	2003	2004	2007	2010	2013	2016	2016
NMRS	19	2005.0	1988	2000	2002	2004	2011	2012	2014

Table 3

Survey responses, sample versus nonsample funds.

This table presents survey answers from funds that replied to the WSII survey and provided contracts (sufficient for us to analyze), compared to funds that replied to the survey and did not provide sufficient contracts to be in our sample. Some funds did not respond to all survey questions. We include their responses when available.

	Panel A: General characteristics						
	Provided contracts			Did not provide contracts			
	N	Mean	Median	N	Mean	Median	Difference
Market-rate seeking	48	73%	1	50	68%	1	-0.05
Target net IRR	36	15%	15%	23	15%	15%	-0.01
Vintage year	48	2008	2009	41	2006	2009	-2.16
Fund's initial term (yrs.)	39	9.0	10	26	9.3	10	0.29
Committed capital (\$M)	45	102.1	31.0	38	191.6	41.2	89.44
Num. companies in which fund has invested	44	14.8	8	48	14.2	11	-0.65
Num. funds currently managed by firm	30	3.7	2	30	2.1	2	-1.60
Num. funds managed by most senior firm GP	28	8.3	5	26	3.6	3	-4.67*

	Panel B: LPs invested in fund				
	Provided contracts		Did not provide contracts		Difference
	N	Mean	N	Mean	
Investor type	30		26		
High net worth individuals	21	70%	21	81%	11%
Foundations	21	70%	17	65%	-5%
Dev. finance institutions	15	50%	11	42%	-8%
Government agencies	7	23%	4	15%	-8%
Pension funds	8	27%	6	23%	-4%
Insurance companies	7	23%	5	19%	-4%
Other institutional investors	17	57%	15	58%	1%

invests in the fund? Which type constitutes the largest amount of committed capital? Lastly, does this class represent 50% or more of committed capital? We report on all available responses from MRS and NMRS funds in Panel A and limit to our sample funds (those that provided contracts) in Panel B.

the sample funds have sibling impact funds, none reports having a sibling nonimpact fund. We therefore rely on the funds' survey responses and focus on the comparison between MRS and NMRS funds.

The most common investors across the board are foundations and high net worth individuals (76% for MRS and 74% for NMRS) and foundations (70% and 65%). Development finance institutions (DFIs) are common investors in MRS funds (58%) and less so in NMRS funds (30%), though this difference diminishes substantially in our sample funds (55% and 40%). Both MRS and NMRS funds identified some investment by pension funds, insurance companies, government agencies, and other institutional investors. However, pension funds, insurance companies, and government agencies are almost never the largest class of

Table 4

Investor types, MRS versus NMRS funds.

This table presents and compares information on investor types for the MRS and NMRS funds in the WSII database. Panel A reports statistics for all available MRS and NMRS funds, including funds that did and did not provide contracts. Statistically significant differences are reported with stars in the NMRS portion of the panel, with * for $p < 0.10$, ** for $p < 0.05$, and *** for $p < 0.01$. Panel B reports statistics only for MRS and NMRS funds that provided contracts and are in the sample. Not all sample funds provided data on investor types. We report on three sets of questions: Who are investors in the fund? What is the largest class of investors? Lastly, does this class represent more than 50% of the committed capital in the fund? N indicates the number of funds who answered affirmatively and % the corresponding percent of funds.

Panel A: Including nonsample funds (both provided and did not provide contracts)												
	MRS					NMRS						
	Invested in fund		Largest class		50%± of capital		Invested in fund		Largest class		50%± of capital	
	N	%	N	%	N	%	N	%	N	%	N	%
Investor (LP) type	33		33		33		23		23		23	
High net worth individuals	25	76%	10	30%	9	27%	17	74%	9	39%	7	30%
Foundations	23	70%	2	6%	1	3%	15	65%	5	22*	4	17%**
Dev. finance institutions	19	58%	9	27%	6	18%	7	30%**	5	22%	1	4%
Government agencies	6	18%	0	0%	0	0%	5	22%	1	4%	0	0%
Pension funds	10	30%	3	9%	1	3%	4	17%	0	0%	0	0%
Insurance companies	6	18%	1	3%	0	0%	6	26%	1	4%	0	0%
Other institutional investors	22	67%	8	24%	5	15%	10	43*	2	9%	0	0%

Panel B: Sample funds only (provided contracts)												
	MRS					NMRS						
	Invested in fund		Largest class		50%± of capital		Invested in fund		Largest class		50%± of capital	
	N	%	N	%	N	%	N	%	N	%	N	%
Investor (LP) type	20		20		20		10		10		10	
High net worth individuals	15	75%	9	45%	8	40%	6	60%	2	20%	2	20%
Foundations	14	70%	2	10%	1	5%	7	70%	3	30%	2	20%**
Dev. finance institutions	11	55%	4	20%	3	15%	4	40%	4	40%	0	0%
Government agencies	5	25%	0	0%	0	0%	2	20%	0	0%	0	0%
Pension funds	5	25%	1	5%	0	0%	3	30%	0	0%	0	0%
Insurance companies	3	15%	0	0%	0	0%	4	40%	0	0%	0	0%
Other institutional investors	13	65%	4	20%	3	15%	4	40%	1	10%	0	0%

investors. Instead, high net worth individuals typically take on that role and to a lesser extent foundations, DFIs, and other institutional investors. It is worth noting that, among the investor types we observe, pension funds are both the most likely to have traditional regulatory mandates as fiduciaries and the most likely to invest in MRS funds. Although we do not know specifically which investors are fiduciaries to others, federal or state laws are less likely to hold individuals or foundations to this standard. The survey responses regarding LPs echo PPM language targeting investors who satisfy private offering requirements. For example, one fund states that “[t]he Membership Interests will be offered only to ‘Accredited Investors’ as defined in Rule 501(a) of Regulation D.”⁷

How investors are identified and matched with funds is a separate matter. One fund shares in its PPM that “[i]ncreasingly the Company is relying on financial advisors of ‘socially responsible investing’ to procure new capital. In 2013 over half of new capital was sourced through such advisors. The Company has reached out to family foundations and offices.”

Finally, several observations situate impact funds relative to existing private market practices. Our sample funds

focus on equity with only three funds holding meaningful debt in their PCs (see [Tables A2](#) and [A3](#)), whereas PE typically deals with debt and equity and VC generally with just equity ([Coyle and Green, 2014](#)). PE funds prefer full or at least majority ownership ([Bratton, 2002](#)), whereas our sample funds tend, like VC funds, toward minority stakes. Impact funds’ exit rights resemble those of both VC and PE, including registration rights, redemption rights, and an emphasis on finding a private buyer ([Smith, 2005](#); [Gompers et al., 2016](#)). In practice, however, 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](#)).

3. Results: Impact, compensation, and governance contract terms

In this section, we analyze the sample contracts. This analysis addresses the effect of impact on contracting choices and does so primarily by contrasting the MRS and NMRS funds in our impact sample. For context, we also report relevant statistics from existing studies of nonimpact funds’ compensation, covenants, and participatory governance contract terms. We first address the GPs’ contracts with their LPs separately from their contracts with their PCs and then address them jointly by testing, in the cross-section of GPs, whether the terms in their LP contracts re-

⁷ Funds raised in non-US jurisdictions include language such as “[i]n accordance with the SIF Law, subscription for Shares in the Company is exclusively limited to institutional investors, professional investors or any other investor that complies with the status of ‘Well-Informed Investor’ as defined by the SIF Law.”

Table 5

Direct impact terms at the GP-LP level.

This table summarizes fund-level impact terms for funds in the WSII database. It is reproduced for small and large funds in Tables IA1 and IA2. The operational impact score reflects that some terms are secondary to others by giving them a lower weight (e.g., using a third-party reporting system is an add-on to measuring impact, so it receives a half weight). We provide the weights in Panel A and describe them in the Appendix. The score reflects the sum of the weighted terms, normalized to 100. Because there are only 13 NMRS funds, we interpolate the 10th and 90th percentile from the 2nd and 3rd, and 11th and 12th ranked funds for each term.

Panel A: Impact terms by fund type												
	Incidence (% funds)			Difference NMRS-MRS	Score Weight							
	All	MRS	NMRS									
Aspirational impact terms												
Social impact addressed in agreement	94%	92%	100%	7.9%								
Agreement generally prohibits negative impact	60%	58%	62%	3.6%								
Fund commitment to social impact	83%	84%	77%	-7.3%								
Fund commitment to environmental impact	64%	63%	62%	-1.6%								
Any of the above	98%	97%	100%	-2.6%								
Operational impact terms												
Fund commitment to international ESG standards	30%	32%	15%	-16.2%	0.5							
Fund GP/manager compensation tied to benefit/impact performance	9%	8%	15%	7.5%	1							
Fund investment due diligence policy addresses impact generally	77%	79%	77%	-2.0%	0.5							
Fund investment due diligence policy addresses portfolio company impact	62%	58%	77%	19.0%	1							
Fund measures social impact	72%	71%	69%	-1.8%	1							
Fund uses external, third-party monitor, or reporting system	28%	29%	31%	1.8%	0.5							
Fund has an impact committee	17%	13%	23%	9.9%	1							
Panel B: Total operational impact by fund type												
	N	Mean	S.D.	Min	Percentile						% > 0	
					10th	25th	50th	75th	90th	Max		
Operational impact												
All	53	41.5	22.7	0.0	18.2	27.3	45.5	54.6	72.7	100	94.3	
MRS	38	40.0	24.3	0.0	9.1	27.3	36.4	54.6	72.7	100	92.1	
NMRS	13	44.8	19.1	18.2	18.2	27.3	45.5	54.6	72.7	81.8	100.0	
Difference NMRS-MRS		4.80									7.89	

late to the terms in their PC contracts. Our findings can be grouped into three categories: (1) direct contracting on impact, (2) traditional compensation terms largely divorced from impact, and (3) contract terms that weave together the seemingly disconnected objectives of financial return and impact. Section 4 connects our results to theory and builds an explanatory model of impact terms' role in revealing and protecting investor preferences in dual-goal contracts.

3.1. Direct contracting on impact

We begin with direct contracting on impact, covering GP-LP contracts in Table 5 and GP-PC contracts in Table 6. In each table, Panel A addresses individual terms and Panel B provides a total summary. Figures A4 and A5 summarize the distribution of these characteristics.

We distinguish between two types of impact terms at the fund level: aspirational terms, which describe intended impact without committing the fund to a specific action, and operational terms, which outline specific actions the fund will take to further the impact goal. The actions outlined in operational terms can still be relatively high level, like incorporating impact into the due diligence process, but nonetheless create an enforceable duty that an investor could point to as being met or not. Examining how impact funds contract on impact, and how MRS and NMRS funds compare, is our first step to understanding how contracts incorporate impact goals, which we relate to contract the-

ory in Section 4. It also sheds light on the extent of window dressing in impact funds. Because we do not observe impact outcomes, we do not connect impact language to impact realizations. Still, the presence of operational impact terms sets an empirical baseline of efforts toward impact.

Table 5 summarizes the impact terms in GP-LP contracts. Panel A itemizes the impact terms that we encounter and groups them into aspirational and operational categories. Although there is no guarantee that funds follow through with the objective, virtually all funds (98%) have aspirational terms announcing their intention to pursue impact, a characteristic commonly referred to as "intentionality" (Brest and Born, 2013). Moreover, the majority of funds (60%) prohibit negative impact, and this rate is similar between MRS and NMRS. Social objectives are somewhat more common than environmental objectives (83% versus 64%), and MRS funds are somewhat more likely than NMRS funds to be explicit in this regard, though the difference is not statistically significant.

The most common operational impact terms for both MRS and NMRS funds build impact into the due diligence process and require impact metrics, both being examples of flexible-contracting dictating process, not outcome. These terms appear in roughly 70%–80% of the contracts in the full sample. Example language includes the following:

Fund commits to "positive screening" to ensure investment meets Fund's impact goals.... GP must indicate

Table 6

Direct impact terms at the GP-PC level.

This table summarizes PC-level impact terms for funds in the WSII database. It is reproduced for small and large funds in Tables IA3 and IA4. The impact score reflects that some terms are secondary to others by giving them a lower weight (e.g., internal/external impact measurements are secondary to measuring impact, so they receive a half weight). We provide the weights in Panel A and describe them in the Appendix. The score reflects the sum of the weighted terms, normalized to 100. “% funds with >0” refers to the fraction of funds in the group that have at least one PC contract with a positive impact score.

Panel A: Impact terms by fund type												
	Incidence (% funds)			Difference NMRS-MRS	Score weight							
	All	MRS	NMRS									
PC’s mission locked in at the fund’s exit	3%	4%	0%	-4.3%	1							
Fund exit right if change in location or business model or benefit	1%	0%	4%	3.8%	0.5							
Fund veto right on deviations from the business plan of the PC	43%	49%	27%	-21.7*	1							
PC has an impact committee	0%	0%	0%	0.0%	0.5							
Fund participates in PC impact committee	0%	0%	0%	0.0%	0.5							
Fund information rights include impact information	9%	10%	8%	-2.3%	1							
PC environmental or social benefit is measured	20%	17%	27%	9.8%	1							
Internal impact measurement	2%	3%	0%	-2.9%	0.5							
External impact measurement	9%	7%	15%	8.2%	0.5							
PC impact performance is reported	13%	10%	19%	9.2%	1							
Impact performance reporting done annually	8%	7%	12%	4.4%	0.25							
Compensation tied to benefit/impact performance	2%	1%	4%	2.4%	1							
Impact addressed generally	39%	39%	39%	-0.1%	0.25							
Impact identified	24%	29%	12%	-17.0*	0.25							
Additional social impact channels (e.g., ESG standards)	13%	14%	8%	-6.6%	1							
Document specifies impact performance reporting	13%	10%	19%	9.2%	0.25							

Panel B: Total PC impact by fund type												
	N	Mean	S.D.	Min	10th	Percentile					% funds with >0	
						25th	50th	75th	90th	Max		
All	96	10.9	13.5	0.0	0.0	0.0	8.5	12.8	31.9	53.2	63.5	87%
MRS	70	10.9	12.5	0.0	0.0	0.0	8.5	12.8	29.8	53.2	70.0	89%
NMRS	26	11.1	16.2	0.0	0.0	0.0	0.0	12.8	40.4	42.6	46.2	83%
NMRS-MRS		0.17									-23.85**	

in “investment recommendation documents” if PC investments “fall into the following categories in their investment pipeline tracking tools (e.g., deal log, deal pipeline)” and must elaborate on specifics of nature of PC’s business (organic farming, hybrid products, use of fertilizers, reduction of spoilage of agricultural products etc.). (Selected MRS fund)

At all times, the Partnership and the General Partner shall use all reasonable efforts to ensure the continuing operation of the S&E [social and environmental] Management System to identify, assess and manage the social and environmental performance of the Partnership Operations in compliance with the S&E Requirements. (Selected NMRS fund)

Less common (employed roughly a third of the time) yet still significant is a commitment to third-party measurement of impact and to environmental, social, and governance (ESG) standards. Contracts occasionally call for impact committees (17%) and rarely connect impact to compensation (9%). The biggest contrast between the MRS and NMRS contracts is in commitments to international ESG standards (e.g., United Nations Principles for Responsible Investment (UNPRI) Sustainable Development Goals (SDGs)), which are required for 32% of MRS funds but only 15% of NMRS funds, and in due diligence to address PC impact, which is required for 77% of NMRS compared to 58% of MRS funds. These contrasts still hold when we control

Table 7

Correlation of PC impact score with GP-LP impact terms.

This table presents the estimates of a simple correlation among the funds in the WSII database of the impact score at the GP-LP level with impact scores at the GP-PC level, controlling for the number of contracts at the fund level. The observation level is a GP-PC contract. The exact equation estimated is

$$PC\ impact\ score_i = \beta\ fund\ impact\ score_i + \gamma\ num.\ contracts_i + \epsilon_i$$

Standard errors are in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

	(1) All	(2) MRS	(3) NMRS
Fund operational impact	0.1884*** (0.0704)	0.3752*** (0.0696)	-0.2699 (0.1728)
R ²	0.122	0.327	0.218
Num. contracts fund level	Yes	Yes	Yes
N	94	70	24

for fund size. We provide examples for all impact terms in the Appendix.

We summarize the extent of direct contracting on impact with a score that aggregates operational impact terms in GP-LP documents. Scoring helps track variation across funds and fund types in the extent of their direct contracting on impact, and it is also useful in Table 7, in which we gauge the flow of GP-LP contracting on impact through to contracts with PCs. Panel B summarizes this score for MRS and NMRS funds. The distributions are close: as groups, MRS and NMRS funds have similar rates of operational

terms in their contracts with LPs. Overall, 94% of funds include operational impact terms in their GP-LP contracts.

Impact terms play a smaller role in PC contracts. One might expect all impact funds to contract on impact with their PCs; however, only 70% of MRS funds' contracts with PCs include impact terms, and this proportion is significantly higher than the 46% in NMRS funds' contracts (Table 6, Panel B). Fund size does not drive this pattern: PC direct contracting patterns are even more salient when we restrict our sample to funds of similar size. Lack of direct impact terms does not have to mean less attention to impact; impact could be baked into the PCs' operations or their industries in a way that obviates the need to contract, as with the example of embedded impact described earlier. That embedding of impact would help explain why most funds do not use impact terms in all PC contracts, but over 80% of both MRS and NMRS funds use impact terms in at least one PC contract: contracting on impact with PCs may be relevant only in some cases. This is also consistent with what we see in Panel A, which shows significantly fewer NMRS funds retaining veto rights over PCs' business plans (27% versus 49%) and also (marginally) significantly fewer NMRS funds specifying a PC's impact (12% versus 29%). We find a large minority, 39%, of both types referencing impact generally in the contracts but light use of the other individual terms.

3.2. Pass-through from LP contracts to PC contracts

How does a GP's contracting with investors relate to its contracting with its investments? Do a fund's commitments to its LPs encourage it to extract commitments from its PCs? We address these questions with cross-sectional regressions: on the left-hand side, we have the extent of impact contracting in a GP's PC contract, and on the right-hand side, the extent of impact contracting in the GP's LP contracts, with one observation per PC contract. We provide details for the construction of these variables in the Appendix.

The results, in Table 7, find a positive correlation between operational impact at the fund level and impact at the PC level, at least for MRS funds. In other words, MRS funds that make greater operational commitment to their LPs also tend to have more impact terms in their contracts with PCs. In the subset of NMRS fund contracts, the coefficient is negative but statistically insignificant, so we do not draw a conclusion for these funds. As noted above, there is also the issue that PCs with embedded impact may require less specific contracting on impact. Based on the PC characteristics that we can observe, this is a bigger consideration for NMRS than MRS funds.

It is also important to note in the regressions that contracts may not be completely independent. The contracts in our sample are rarely drafted by the same law firms across funds (in fact, in only two cases), but this does not preclude the possibility that they draw from the same inspiration. That said, we reviewed all contracts and found little evidence of "cutting and pasting" or standardized template language across contracts. Of course, within funds, GP-PC contracts are bound to share some commonality since the GP is the same and affects the form of the contract. To

show this is not driving the results in Table 7, we take the average PC impact score for each fund and compare across funds the relation between fund-level operational impact and average PC-level impact scores. The sample is substantially smaller but shows similar patterns as in Table 7 (see Appendix Table A5).

3.3. Compensation structure

Table 5 finds little direct influence of impact on compensation. What, then, determines compensation? Table 8 and Figure A6 report the funds' compensation choices, with analogous statistics from the nonimpact literature for context. As Metrick and Yasuda (2010) show, the compensation practices of PE/VC funds have settled on a "waterfall" structure, in which cash flows first compensate investors, then managers, then divide between the two, with a carried interest rate specifying the manager's share. Typically, LPs earn back their investment plus potentially a "hurdle rate," and then cash flows enter a "catch-up" period during which the managers receive most or all of the cash until a target, typically the carry rate, is met, and all remaining cash splits according to the GP's carry rate. GPs also typically enjoy management and other fees separate from these payments.

We analyze the impact funds with this framework in mind, first asking whether they follow this waterfall structure, that is, one that pays LPs at least their committed capital before paying GPs, and then, what structural parameters they choose. For instance, in one situation in our sample, LPs receive 99% of cash flows until their contributions are returned (the GP receives the remaining 1%). We classify this as a waterfall structure because LP compensation is clearly prioritized. For reference we include the analogous numbers from Metrick and Yasuda (2010), both VC and PE, and from Gompers and Lerner (1999). Recent scholarship by Hüther et al. (2019) also finds similar numbers for carried interest when calculated on a deal-by-deal basis.

Our analysis finds that most funds use a waterfall, with MRS funds using them somewhat more frequently (87%) than NMRS funds (77%). Examples of nonwaterfall arrangements include annual dividends of fixed amounts and pro rata distributions that do not prioritize LPs. The incidence of carry and catch-up terms reflects this pattern: most MRS funds have positive carry (87%) and catch-up (66%) terms, while fewer NMRS funds do (69% for carry, just 46% for catch-up). Hurdle rate incidence is higher for MRS funds (61%) than for NMRS funds (46%). Larger MRS funds drive many of these differences (see the Internet Appendix for size breakdowns of all tables).

Impact funds in our sample have management fees 81% of the time, short of what Metrick and Yasuda (2010) report for nonimpact private market funds. Within the size-controlled sample, more NMRS (89%) than MRS funds (70%) have management fees. We find that these fees vary substantially. Impact management fees are higher than Metrick and Yasuda (2010) and are more consistent with Hüther et al. (2019), who find that VC funds charge initial management fees equal to 2.5% in more than half of their sample. Higher fees appear more in NMRS than in MRS

Table 8

GP compensation.

This table presents compensation terms observed for the impact funds in the WSII database. We include for reference compensation terms observe in non-impact funds by [Metrick and Yasuda \(2010\)](#) (MY) and [Gompers and Lerner \(1999\)](#) (GL '99). We define the incidence rate as the percent of funds with a nonzero value for the term in question. We only report the mode and range for these nonzero values. For the management fee breakouts, funds with no management fees are counted in the "<2%" group. It is reproduced for small and large funds in Tables IA5 and IA6 and for the MY period in Table IA11.

	Nonimpact		All	Impact		Difference
	Reference	Nonimpact		MRS	NMRS	NMRS-MRS
Waterfall						
Incidence	MY (VC+PE)	100%	85%	87%	77%	-9.9%
Hurdle rate						
Incidence	MY (VC)	45%	58%	61%	46%	-14.4%
	MY (PE)	92%				
Mode	MY (VC)	8%	8%	8%	10%	
	MY (PE)	8%				
Range	MY (VC+PE)	6%–10%	3%–10%	5%–10%	3%–10%	
Carried interest						
Incidence	MY (VC+PE)	100%	83%	87%	69%	-17.6%
Mode	MY (VC)	20%	20%	20%	20%	
	MY (PE)	20%				
	GL '99	20%				
Range	MY (VC)	17.5%–30%	10%–25%	10%–25%	10%–20%	
	MY (PE)	all at 20%				
	GL '99	0%–45% ¹²				
Catch-up target						
Incidence	MY (VC+PE)	99%	62%	66%	46%	-19.6%
Mode	MY (VC+PE)	20% ¹³	17%	20%	10%	
Range	MY (VC+PE)	16.5%–20%	1%–25%	1%–25%	10%–25%	
Management fee						
Incidence	MY (VC+PE)	100%	81%	82%	77%	-4.7%
Range			1.5%–3.6%	1.5%–3.5%	2.5%–3.6%	
% of funds:						
< 2%	MY (VC)	43%	26%	29%	23%	
	MY (PE)	8%				
=2%	MY (VC)	47%	4%	5%	0%	
	MY (PE)	41%				
> 2%	MY (VC)	10%	70%	66%	77%	
	MY (PE)	51%				

¹² [Gompers and Lerner \(1999\)](#) note that 81% of carried interest rates they observe are in the 20–21% range.

¹³ MY use 100% to represent that the GPs get 100% of their profit allocation under the contract before splitting the remaining profits between the manager and the investors, where that profit allocation is usually 20%. We express that number directly as a catch-up target of 20%.

funds and are even higher controlling for size and year. In sum, our results show MRS funds stay close to non-impact compensation standards but NMRS funds are further afield. Higher fees could be a way for NMRS investors to offset either or both higher costs and lower returns faced by NMRS fund managers so that investors, rather than fund managers, pay for the higher impact/lower return tradeoff.

There is little information on PC financial terms. In the Internet [Appendix](#), we provide one point of comparison on PC fees paid to the fund, similar to [Phalippou et al. \(2018\)](#). The results suggest that NMRS PCs are more likely than MRS PCs are to pay fees to the fund.

3.4. Covenants

Contracts use covenants to target specific concerns about actions the other side might take. Do MRS and NMRS funds use them differently? We explore this in [Table 9](#), with GP-LP usage in Panel A and GP-PC usage in Panel B.

We subdivide the GP-LP covenants into those limiting the managers' investment discretion and those placing other restrictions on managers. By far the most common of the former are asset restrictions, which generally

enforce diversification by limiting the percentage investment in a company or an industry. The main disparity between MRS and NMRS funds is that 16% of MRS contracts limit conflict of interest transactions but no NMRS funds do (see [Appendix](#): Sample contract language). Nearly a quarter of both MRS and NMRS managers are required to invest solely within a specified geographic region.⁸ Almost as many funds (18% MRS and 23% NMRS) place caps on investments in a given region. In general, large funds tend to have more limits on manager discretion.

Among the other managerial restrictions, the main difference we find between MRS and NMRS impact funds concerns manager coinvestment rights with the fund: NMRS managers are restricted 23% of the time, compared to 61% for MRS managers and 73% for nonimpact managers found by [Gompers and Lerner \(1996\)](#). Coinvestment rights affect compensation by allowing other related funds, investors, or the manager to invest alongside the fund, usually at the manager's discretion but under constraints

⁸ Impact fund managers can be regionally constrained due to investment restrictions imposed by DFI LPs. For example, CDC Investment work, a UK-backed DFI, only invests in Africa and South Asia. See <https://www.cdcdgroup.com/en/how-we-invest/investment-strategy/where-we-invest/>.

Table 9

Covenants.

This table presents covenant terms for the impact funds in the WSII database. We include for reference statistics on nonimpact funds from [Gompers and Lerner \(1996\)](#) (GL '96), [Kaplan and Strömberg \(2003\)](#) (KS), and [Smith \(2005\)](#) (S). This table is reproduced for small and large funds in Tables IA7 and IA8.

	Nonimpact		All	Impact		Difference
	Reference	Incidence		MRS	NMRS	NMRS-MRS
Panel A: Fund limits to manager discretion and manager restrictions at the GP-LP level						
Limits to manager discretion						
Asset restrictions	n/a		91%	89%	92%	2.8%
Conflict of interest transactions	n/a		11%	16%	0%	-15.8%
Fund family coinvestment prohibition	n/a		4%	3%	8%	5.1%
Region investment cap	n/a		21%	18%	23%	4.7%
No outside region investment	n/a		23%	24%	23%	-0.6%
No outside sector investments	n/a		9%	11%	8%	-2.8%
Industry restrictions y/n	n/a		19%	16%	15%	-0.4%
Industry cap	n/a		6%	5%	0%	-5.3%
Manager restrictions						
Reinvesting fund profits	GL '96	21%	70%	68%	69%	0.8%
Coinvesting with fund	GL '96	73%	49%	61%	23%	-37.4%**
Outside fundraising	GL '96	58%	28%	29%	15%	-13.6%
Outside activities			36%	32%	38%	6.9%
Combined						
Average number of covenant classes	GL '96	5.6	3.7	3.7	3.2	-0.56
Panel B: Investment protection and exit at the GP-PC level						
	Nonimpact		All	Impact		Difference
	Reference	Incidence		MRS	NMRS	NMRS-MRS
Investment protection						
Antidilution of fund investment	KS	95%	71%	76%	58%	-18.0*
Full ratchet preemption	KS	22%	19%	16%	27%	11.2%
Weighted avg. preemption	KS	78%	13%	14%	8%	-6.6%
Founder/entrepreneur noncompete	KS	70%	50%	49%	54%	5.3%
Fund liquidation rights	KS	71%	49%	37%	81%	43.6***
Exit						
Fund put/redemption right	KS	79%	52%	53%	50%	-2.9%
	S	43%				
Registration rights	S	90%	45%	41%	54%	12.4%

negotiated with LPs (see [Metrick and Yasuda, 2010](#)). Other compensation restrictions include limits on reinvestment of fund profits, which appears in nearly 70% of impact funds, and restrictions on the manager's outside fundraising activities, a term more common in MRS (29%) than NMRS (15%) contracts. These managerial restrictions affect total compensation and managerial attention to the fund, striking a balance between fixed compensation incentives and impact objectives.

GPs' contracts with their PCs also make use of the terms found by [Kaplan and Strömberg \(2003\)](#) in VC contracts, though generally at a lower intensity. The main difference between the types of impact funds is that NMRS funds are significantly less likely, 58% versus 76%, to require antidilution protection, and are significantly more likely, 81% versus 37%, to require liquidation rights, consistent with their profit motives. Exit rights are similar between MRS and NMRS funds. We find a higher frequency of registration rights for NMRS funds, but this difference is not statistically significant.

3.5. Participatory governance

The last contract terms we address are the governance rights of LPs over GPs and of GPs over PCs. We call

this group of terms participatory governance to emphasize their active nature, in contrast with more passive, latent terms like covenants. We report impact funds' use of participatory governance terms, along with matching statistics on nonimpact funds from [Gompers et al. \(2016\)](#) and from [Kaplan and Strömberg \(2003\)](#), in [Table 10](#), with GP-LP usage in Panel A and GP-PC usage in Panel B.

Impact funds, we find, give their LPs formal advisory committee roles over 90% of the time. Small size does not drive this: all of the large impact funds have these advisory committees, with meaningful roles. As far as we can tell, this is a characteristic specific to impact funds, much less common in nonimpact funds.⁹

Between MRS and NMRS funds, the overall result in Panel A is that the MRS LPs have more oversight in a number of ways: investment strategy, due diligence, investment approval, and compliance. For example, one MRS fund lists the duties of an Impact Committee as those "enumer-

⁹ PE advisory committees are a feature of some investments but with more limited roles than what we observe (See "Venture capital & private equity funds: deskbook series - LP Advisory Committees," Morgan et al., 2015). We are grateful to Steve Kaplan for confirming with us that advisory committees were not common in surveys that he conducted or in the contracts that he has observed.

Table 10

Participatory governance.

This table presents participatory governance terms for the impact funds in the WSII database. We include reference statistics on nonimpact funds from [Compers et al. \(2016\)](#) (GKM) and from [Kaplan and Strömberg \(2003\)](#) (KS). This table is reproduced for small and large funds in Tables IA9 and IA10.

Panel A: Participatory governance at the GP-LP level						
	Nonimpact Incidence	All	Impact MRS	NMRS	Difference NMRS-MRS	
Advisory committee incidence	n/a	94%	95%	92%	-2.4%	
Advisory committee role						
Generally advise GP or BOD	n/a	64%	63%	69%	6.1%	
Technical assistance to GP or BOD	n/a	9%	5%	23%	17.8%*	
Policy assistance to GP or BOD	n/a	13%	11%	23%	12.6%	
Evaluate loans	n/a	4%	0%	15%	15.4%**	
Investment strategy	n/a	43%	50%	31%	-19.2%	
Due diligence	n/a	40%	47%	23%	-24.3%	
Approve investments	n/a	43%	53%	15%	-37.3%**	
Investment financial performance review	n/a	8%	11%	0%	-10.5%	
Investment impact review	n/a	6%	5%	8%	2.4%	
Approve conflict of interests	n/a	40%	39%	46%	6.7%	
Asset valuations	n/a	32%	32%	31%	-0.8%	
Approve exit scenarios	n/a	23%	24%	15%	-8.3%	
Approve reports and audits	n/a	8%	11%	0%	-10.5%	
Approve budgets, reserves, draw downs, and/or fees	n/a	17%	18%	15%	-3.0%	
Fund compliance	n/a	26%	34%	8%	-26.5%*	
Fund life: terminate or extend the fund	n/a	8%	11%	0%	-10.5%	
No description	n/a	8%	5%	15%	10.1%	

Panel B: Governance at the GP-PC level						
	Nonimpact		All	Impact	NMRS	Difference
	Reference	Incidence		MRS		NMRS-MRS
Investor board seats guaranteed		n/a	80%	84%	69%	-15.1%
Number of guaranteed seats	GKM	2.80	1.4	1.3	1.7	0.38***
PC board size	GKM	5-7 mem.	6.0	6.1	5.9	-0.11
	KS	6 mem.				
Investor majority control	KS	25.4%	0%	0%	0%	0%
Investor min. voting%	KS	53.6%	21%	25%	9%	-16.33***

ated in the Investors' Agreement, including, without limitation, screening of early stage investment opportunities pursuant to the Terms of Reference (including ensuring alignment with the Investor Charitable Goal Requirements)." This agreement also states that "investment opportunities must be approved by the Impact Committee on a no objections basis (i.e., each voting member must either affirmatively approve or state that they have no objection to such investment opportunity)."

Oversight of NMRS funds is significantly higher only for loan evaluation, which does not even come up in the MRS contracts, and for technical assistance to the GP. Example NMRS language includes "[the Advisory Council may] provide technical and policy guidance to the General Partner on an 'as-needed' basis . . . [and] may meet with the [GP] to review investment strategy and to advise regarding relations with portfolio companies on an annual basis . . . [may give] professional advice concerning the management and/or operations of portfolio companies."

These cross-sectional patterns hold controlling for size. As we discuss in the next section, impact funds' emphasis on governance is consistent with the theory developed in [Gilson et al. \(2010\)](#) and helps explain our results on compensation.

The funds in our sample exercise governance without majority control: they never have a majority of the votes,

and the average initial vote, that is, the fund's percentage of votes at the time of its investment in the PC, is 25% for MRS funds and just 9% for NMRS funds. Perhaps because of the weaker control over the PC imparted by their voting power, impact funds and MRS funds in particular frequently contract for guaranteed PC board seats. When controlling for size, we see more governance at the GP-PC level for MRS relative to NMRS funds: 93% of MRS funds below \$35 million contract for guaranteed board seats, relative to 69% for similarly small NMRS funds. The same MRS funds have an average voting position of 24%, relative to just 6% for NMRS funds.

This section shows the distinctive features of impact investing contracts. In the next section, we relate these findings to theories of contracting to help bring out the economic considerations underlying the contracting choices.

4. Discussion

In this section, we use contract theory to identify the economic tensions underlying the impact fund contracts. We tackle the puzzling results of financial incentives for multitasking agents, drawing on HM '91, and then we explore the role of other contract terms by drawing on the braiding theory of [Gilson et al. \(2010\)](#) and the flexible-

contracting theory of [Hart and Moore \(2008\)](#), among others.

The canonical problem for contract theory is efficient allocation of costly effort by an agent on behalf of a principal. In the case of GP-LP contracts, we can think of LPs collectively as the principal, investing their money, with GPs collectively as the agent. GPs determine the fate of the LPs' investment by vetting, selecting, and then engaging with the PCs. The classic contract-theory question is then how do GPs allocate their efforts across the tasks relevant to determining this fate?

Since the defining characteristic of impact investing is the simultaneous pursuit of multiple goals—a social or environmental benefit as well as a financial return—a natural place to turn is the literature on contracts with multitasking. The seminal HM '91 paper considers an agent allocating effort across tasks of varying measurability and shows that rewarding only the measurable activities tends to lower effort on the other activities, when these are substitutes. [Prendergast \(1999\)](#) makes a similar argument, arguing that complex tasks should be rewarded in a “holistic” way rather than tied to piecemeal metrics of performance. The implication for impact investing is that if impact performance is hard to measure and therefore hard to contract on, it might be suboptimal to tie compensation to financial performance, because doing so would risk inattention to impact.

Our finding, that most impact funds reward GPs for financial performance but not impact, seems at odds with the theory and could suggest that funds are risking low effort toward impact. There are a few possible explanations for this pattern, which we discuss below.

First, HM '91 observe that complementarity between observable and unobservable activities in an agent's cost function improves the efficiency of compensating only the observable activity. Could this apply to impact investing? Contract language reflects the idea that effort toward financial performance could have a positive relation with the marginal cost of effort toward impact: “[t]he General Partner believes that financial return maximization and sustainable development are complementary objectives.” An example of this complementarity could be the need for a PC to be financially viable to generate impact. Take, for instance, a PC dedicated to providing clean energy solutions in rural areas. Staying financially viable may be a key hurdle to generating the desired impact, namely pollution reduction in these areas. In this case, the GP's effort toward the PC's viability (and therefore the fund's returns) is also a step toward generating impact, and there would be less reason to tie compensation to impact separately.

But this argument does not apply evenly across impact funds. While some PCs and funds pursue embedded-impact strategies like the one described above, others have impact that could be more easily separated from the PC's existence. For example, some PCs in our sample have a commitment to hiring from marginalized communities, such as convicted felons. In principle, the PC could maintain its viability, or sadly even improve it, if it stopped hiring from the target community at the expense of the impact goal. (Indeed, this logic may explain why we often see protections against deviating from the original business

plan.) In this case, if investors compensate the GP only on financial performance without other terms encouraging impact focus, the GP may lack incentive to protect the impact goal. More generally, complementarity between financial and impact performance varies across PCs. For most funds, tying compensation to financial performance without parallel impact terms would risk inattention to impact, at least some of the time. We return to the presence of other terms below.

A very different potential explanation for the relative absence of impact compensation is that contracts are the product of “narrow framing.” Since impact investing is still a young field, it is possible that many of these contracts are adapted from those of nonimpact funds, with terms added to address the additional impact goal. If funds simply bolt on impact clauses, without considering the overall effect of the contract, the compensation structure will continue to reflect nonimpact fund priorities.

The limit to this explanation is that we do see funds make changes to other parts of the contracts. Beside the direct impact terms described in [Tables 5 and 6](#), [Table 9](#) shows that some covenants appear with different frequencies than in nonimpact funds, and [Table 10](#) shows that impact funds place particularly high emphasis on participatory governance. Moreover, while most impact funds retain a traditional waterfall compensation structure, 23% of NMRS funds and 13% of MRS funds use alternative arrangements. For those funds with waterfall compensation, we see a wider range of values for hurdle, carried interest, and catch-up target rates than what has been documented for nonimpact funds. This dispersion indicates that if funds do not tie compensation to impact, it is a choice and not an oversight.

Both explanations above note that other contractual constraints beside compensation can channel effort toward impact. Indeed, impact GP-LP contracts show widespread use of terms pointing management's attention toward impact (through direct impact terms) and allowing the LPs to monitor management's behavior (through participatory governance). In PC contracts, MRS funds in particular often use operational impact terms, consistent with a need to balance MRS funds' stronger bias toward financial performance. This view, that operational impact terms address the risk arising from compensating only financial performance, also helps explain the positive relation between financial incentive and operational impact terms in [Table A4](#).

This result does not explain, however, why most funds seem to prefer other contractual constraints to the alternative of untying compensation from financial performance. Whether it reflects path dependency on nonimpact fund terms, or a deeper structural issue with other compensation arrangements, remains an open question. We may see new practices emerge as the field matures and grows, and we hope future work will shed light on the dynamics at play.

The braiding theory of [Gilson et al. \(2010\)](#) further explains the governance patterns we observe. While [Gompers and Lerner \(1996\)](#) also highlight the importance of covenants, especially in GP-LP contracts, their work offers no specific predictions for impact funds. Braiding, in contrast, emphasizes contract terms allowing parties to ob-

serve outcomes that are not verifiable but important in achieving the desired ends of a contract. In the braiding dynamic, formal mechanisms in contracts, such as information rights and participatory governance, provide the data necessary for informal components of contract performance, such as trust and willingness to problem solve. For example, one MRS contract provides for “annual sustainability interviews between Investor and named Key Persons, quarterly telephone calls with Investor and at least two named Key Persons to provide an update and status report for the Fund and Portfolio Companies.”

The participatory governance results in [Table 10](#) show an abundance of terms forging feedback loops between GPs and LPs. There are advisory roles for LPs giving them oversight of deal selection, the diligence process, conflicts of interest, and several other aspects of GP operations. In the PC contracts, there are guaranteed board seats. These provisions can drive the process that [Gilson et al. \(2010\)](#) argue is crucial to adapting to evolving circumstances. They can also help address the risk of low effort toward impact, since this effort might be easier to observe in real time than to measure or adjust ex post.

The aspirational impact terms we show do not hold the same threat of legal action as operational impact terms but rather help to set reference points as part of the total mix of impact terms. Contracts’ reference points may also help explain relative flexibility in contracting for impact where parties care not only about perfunctory performance (box-checking) but also about consummate performance (going the extra mile). For example, one fund has the following language: “[w]hile not required, the Partnership intends to operate as a GIIRS-rated fund [a third-party sustainability rating system].” In the view of [Hart and Moore \(2008\)](#), such avowals are reference points that play an important role by setting the parties’ expectations and thereby determining whether parties perform well or just adequately under the contract. Furthermore, as in [Prendergast \(1999\)](#), they can serve as screening devices to select for counterparties truly committed to impact.

We find that contracting on impact is more flexible than contracting on compensation. For example, the language in one MRS contract in which terms set goals and require “best efforts” without creating a threshold on outcome states that the: “[p]artnership agrees to use its best efforts to promote ‘community development’ within the meaning of the CRA [Community Reinvestment Act] for the purpose of and to the extent that it supports permanent job creation, retention, and/or improvement for persons who are currently low or moderate income or in low or moderate income areas or areas targeted for redevelopment by federal, state, local or tribal governments; or activities that revitalize or stabilize low or moderate income geographies.”

[Hart and Moore \(2008\)](#) warn that this flexibility risks shading: after signing the LPA, both the LPs and the GPs face uncertainty about consummate performance as the partnership plays out. Since the shading worsens as a party’s utility falls short of the highest utility the party could have gotten within the limits of the flexibility, the risk increases with misalignment between the parties’ preferences. To put it another way, if the parties prefer

similar impact choices, the shortfall is small and shading is light. The [Hart and Moore \(2008\)](#) analysis associates the flexibility of impact terms with alignment of preferences over impact.¹⁰

In our setting, this logic suggests more rigid contracting around financial terms and less around the nature of impact, which is consistent with what we observe. Funds typically do not specify hard quotas for impact (a rigid way of contracting) but instead emphasize incorporating impact into due diligence, measurement, and reporting (more flexible terms).¹¹ We see this in our sample. MRS funds, where LP impact preferences may not align, tend to use relatively more rigid forms of contracting, like veto rights and ESG standards (boxes to check). With impact-prioritizing NMRS funds, shading costs are smaller.

The contracts shed light on not only whether but also how impact enters the contracting parties’ utility. The investors and managers of a fund could get utility from the world becoming a better place, but they could also get utility from making the world a better place. The theory of [Hart and Zingales \(2017\)](#) embodies the latter instrumental view rather than the former, and it is consistent with much of what we see in the contracts. The contract terms, especially the operational impact terms, show a high incidence of contractual duties through which the LPs enjoy significant oversight over the GPs, and the GPs enjoy significant oversight over the PCs. This oversight likely serves a functional and productive role, as emphasized by [Gilson et al. \(2010\)](#), but to the extent that oversight imparts a sense of instrumentality (earned or not), from the [Hart and Zingales \(2017\)](#) perspective it creates value as direct utility to the participants.

5. Conclusion

The essence of impact investing is the service of two goals at once: the traditional goal of profits combined with an additional goal intended to deliver a social benefit. The additional goal presents new challenges for the layers of contracting that address the agency problems among investors, funds, and portfolio companies. We use a new database of impact funds’ legal documents to explore these challenges by first identifying the effect of impact on contracting choices and then using contract theory to surface the tensions underlying these choices. The identification is primarily through the variation across funds in the intensity of impact, between funds seeking market-rate financial returns and those aiming lower.

We find that impact funds generally choose not to tie compensation to impact, opting instead for the waterfall compensation for financial performance chosen by their nonimpact peers. Rewarding only financial performance

¹⁰ There could be parties who care only about box-checking to give the appearance of impact (“virtue signaling”). We derive predictions assuming that most principals care about meaningful impact, because this is the more interesting conceptual problem and the one in line with [Hart and Moore \(2008\)](#). If LPs are only motivated by virtue signaling, we should expect only box-checking measures that are relatively “cheap” and strong compensation terms to avoid diversion.

¹¹ See “Annual Report 2018 - New and delisted signatories,” United Nations Principles for Responsible Investment (UNPRI), 2018.

appears contrary to the analysis of multitasking agency problems in HM '91, and we explore multiple explanations for this pattern. Funds adapt other elements of the contract to channel effort toward impact, and in some cases, effort toward financial performance may be complementary with effort toward impact. Ultimately, however, it remains a puzzle why funds prefer other contractual constraints to the alternative of untying compensation from financial performance.

Contracting for impact is likely to be less complete than contracting for dollars because the parties know little about the nature of the best impact opportunities until the fund is well underway. Impact funds adapt to this incompleteness, we find, with both direct contracting on impact and participatory governance terms. Contract terms devoted to impact often take a more flexible form, focusing on process and reporting. Participatory governance terms likewise allow the LPs to implement their impact goals dynamically, braiding what they learn from monitoring into the funds' operational decisions along the lines of [Gilson et al. \(2010\)](#). In this way, impact elevates the role of informal governance in the financing of innovation.

Contracting for private investment is challenging enough when everyone is just in it for the money. The additional goal of social impact adds a new dimension to the challenge, and the new database of impact investing contracts shows us how this growing sector has risen to it. The existing theory on contracting helps us understand the contracting choices, but the economics of this sector could be both different and important enough to merit contracting theory of its own. As the sector continues to develop, we may also see new practices evolve that either confirm or depart from the state of play shown here. This is a promising area for future research.

Appendix

Sample contract language

Fund level (GP-LP documents)

Aspirational impact (impact addressed)

"The Partnership's primary objective is to invest in and operate affordable and workforce multifamily housing Properties in the Target Markets where the need for affordable, safe and well-maintained housing is particularly acute, and also to achieve an investment return consistent with other socially-responsible investments."

Due diligence

Example 1: "The Fund will conduct comprehensive due diligence on all potential investments in order to ascertain their financial situation, management practices, operational procedures, market potential and/or social impacts."

Example 2: "In order to ensure that the Company's funds are invested in businesses that offer the opportunity for growth and development in the Region, the Company, similar to ECD, requires that any applicant for a loan or an investment demonstrate that at least 50% of the jobs created or retained as a result of the proposed loan or investment will be in a county in a region that (1) county

median for family income is less than 80% of national median; (b) 20% or more of county residents live at or below the poverty level; (c) the county rate of unemployed exceeds the national rate by 50% or more; (d) the rate of decline in county population between the years 1980 and 1990 was 10% or more."

Impact measurement

"[O]n a per-rental unit basis taking into account all rental units in all Properties, at least 40% of all tenants in all Properties are at or below 60% of the area median income applicable to the Property in which their rental units are located, and/or at least 20% of all tenants in all Properties are at or below 50% of the area median income applicable to the Property in which their rental units are located, and 'area median income' as to each Property shall be determined by reference to accepted low income housing industry data references."

Adherence to ESG standards

"The Fund and any related fund shall procure that each Investee Company over which it has Effective Control signs an undertaking confirming that It will operate in accordance with the ESG Investment Code. ... [R]epresentatives of the Shareholders shall have the right to visit, upon a reasonable notice, any of the premises where the business of such Investee Company is conducted and to have access to its books of account and records to the extent reasonably necessary to monitor compliance with the ESG Investment Code."

Impact committee

"The duties of the Impact Committee shall be those enumerated in the Investors' Agreement, including, without limitation, screening of early stage investment opportunities pursuant to the Terms of Reference (including ensuring alignment with the Investor Charitable Goal Requirements) ... investment opportunities must be approved by the Impact Committee on a no objections basis (i.e., each voting member must either affirmatively approve or state that they have no objection to such investment opportunity). Any investment opportunity that does not meet the screening criteria set forth in the Terms of Reference shall not be presented to the Investment Committee."

Compensation tied to impact

Example 1: "The closing of the escrow account for the distribution of the Carried Interest in favour of the Participating Shareholders will be subordinated on the achievement of the Social Returns on the basis of the favourable opinion of the Advisory Committee. In case of negative opinion the Carried Interest will contribute to the Fund for the distribution to Limited Shareholders."

Example 2: "The Manager shall further be entitled to an annual incentive fee calculated at fifty basis points (0.5%) of invested capital at the end of each year, which fee shall be based upon the social and developmental returns achieved as a result of the Company's investment in the Portfolio Companies."

Table A1

Additional summary statistics for sample of impact funds and documents.

This table presents extended summary statistics for the funds and documents in the WSII database. Panel A presents information from GP-LP contracts, and Panel B presents information from GP-PC contracts.

Panel A: GP-LP contracts						
Panel A: GP-LP contracts	All funds		MRS funds		NMRS funds	
	N	%	N	%	N	%
Number of funds	53		38		13	
Number of documents	111		78		31	
Fund size						
< \$10 M	13	25%	10	26%	3	23%
\$10–50 M	20	38%	13	34%	6	46%
\$50–100 M	3	6%	3	8%	0	0%
\$100–500 M	12	23%	10	26%	2	15%
> \$500 M	2	4%	1	3%	0	0%
Unknown	3	6%	1	3%	2	15%
Stage focus						
Early	11	21%	8	21%	3	23%
Later	9	17%	6	16%	3	23%
Multiple	26	49%	19	50%	5	38%
Sector focus	5	9%	4	11%	1	8%
SME focus	5	9%	3	8%	1	8%
Undefined	15	28%	11	29%	3	23%
Stage unknown	7	13%	5	13%	2	15%
Geographic focus						
Undefined	5	9%	5	13%	0	0%
United States and Canada	17	32%	12	32%	5	38%
Africa	14	26%	7	18%	5	38%
Latin America	10	19%	6	16%	4	31%
South Asia	6	11%	6	16%	0	0%
Europe	6	11%	2	5%	4	31%
Asia - other	6	11%	3	8%	3	23%
Southeast Asia	3	6%	3	8%	0	0%
Global	5	9%	5	13%	0	0%
Other	3	6%	3	8%	0	0%
Industry focus						
Agribusiness/farming	17	32%	13	34%	4	31%
Finance and microfinance	13	25%	9	24%	4	31%
Social/poverty	13	25%	12	32%	1	8%
Health	13	25%	9	24%	4	31%
Tech. and business services	11	21%	7	18%	4	31%
Water and sanitation	10	19%	8	21%	2	15%
Sustainable development	9	17%	7	18%	1	8%
Essential individual products	9	17%	8	21%	1	8%
Education	9	17%	9	24%	0	0%
Manufacturing	9	17%	6	16%	3	23%
Energy	8	15%	8	21%	0	0%
Environment	7	13%	6	16%	1	8%
Housing	5	9%	4	11%	1	8%
Employment	3	6%	3	8%	0	0%
Handicrafts	1	2%	1	3%	0	0%
Other	10	19%	7	18%	3	23%
Undefined	6	11%	5	13%	0	0%
Country or territory of origin						
Belgium	1	2%	0	0%	1	8%
Botswana	2	4%	1	3%	0	0%
British Virgin Islands	1	2%	1	3%	0	0%
Canada	4	8%	4	11%	0	0%
Cayman Islands	5	9%	5	13%	0	0%
India	1	2%	1	3%	0	0%
Luxembourg	5	9%	1	3%	4	31%
Mauritius	3	6%	2	5%	1	8%
Netherlands	2	4%	2	5%	0	0%
London	1	2%	1	3%	0	0%
South Africa	2	4%	1	3%	0	0%
United Kingdom	2	4%	0	0%	2	15%
United States	24	45%	19	50%	5	38%

(continued on next page)

Table A1 (continued)

	All funds		MRS funds		NMRS funds	
	N	%	N	%	N	%
Panel B: GP-PC contracts						
Number of funds	15		9		6	
Number of PCs	93		68		25	
Number of documents	96		70		26	
Industry focus						
Agribusiness/farming	21	22%	12	17%	9	35%
Finance and microfinance	16	17%	14	20%	2	8%
Tech. and business services	9	9%	8	11%	1	4%
Manufacturing	5	5%	5	7%	0	0%
Health	5	5%	5	7%	0	0%
Handicrafts	3	3%	3	4%	0	0%
Water and sanitation	2	2%	2	3%	0	0%
Energy	2	2%	2	3%	0	0%
Housing	2	2%	2	3%	0	0%
Essential individual products	1	1%	0	0%	1	4%
Education	1	1%	1	1%	0	0%
Social/poverty	1	1%	1	1%	0	0%
Sustainable development	0	0%	0	0%	0	0%
Environment	0	0%	0	0%	0	0%
Employment	0	0%	0	0%	0	0%
Other	3	3%	2	3%	1	4%
Undefined	40	42%	25	36%	15	58%
Geographic focus						
United States and Canada	4	4%	1	1%	3	12%
Europe	2	2%	1	1%	1	4%
Latin America	6	6%	5	7%	1	4%
Africa	16	17%	7	10%	9	35%
South Asia	11	11%	11	16%	0	0%
Southeast Asia	3	3%	3	4%	0	0%
Asia - other	0	0%	0	0%	0	0%
Global	2	2%	2	3%	0	0%
Undefined	53	55%	41	59%	12	46%
Fund investment position						
0%–10%	6	6%	2	3%	4	15%
10%–25%	29	30%	27	39%	2	8%
25%–50%	22	23%	18	26%	4	15%
50%+	7	7%	7	10%	0	0%
Unknown	32	33%	16	23%	16	62%

Table A2

Characteristics of PE, VC, and impact spaces.

This table outlines similarities and differences between PE and VC to put into context our choice to compare to both literatures and the results that we report in [Tables 8–10](#).

	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.	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

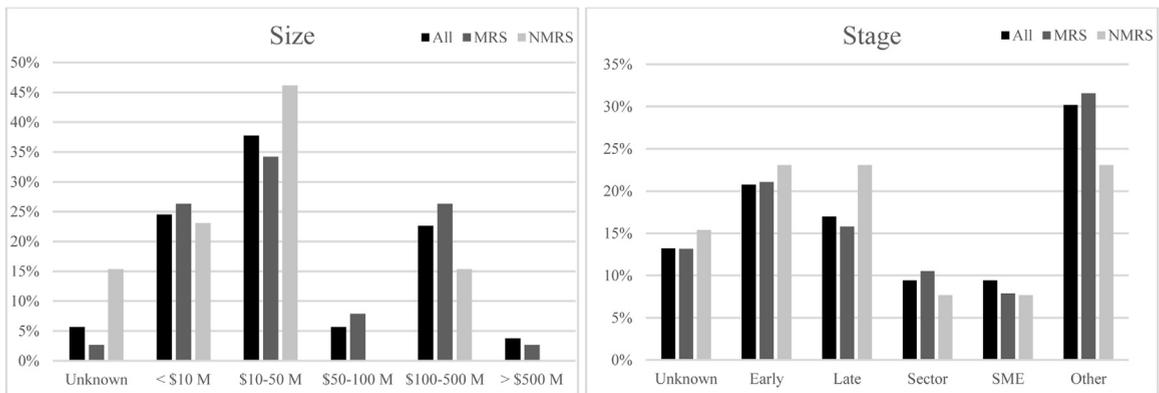


Fig. A1. Fund size and stage. The figure on the left presents the fraction of funds in the WSII database by size range. The figure on the right presents the fraction of funds in the WSII database by lifecycle stage focus.

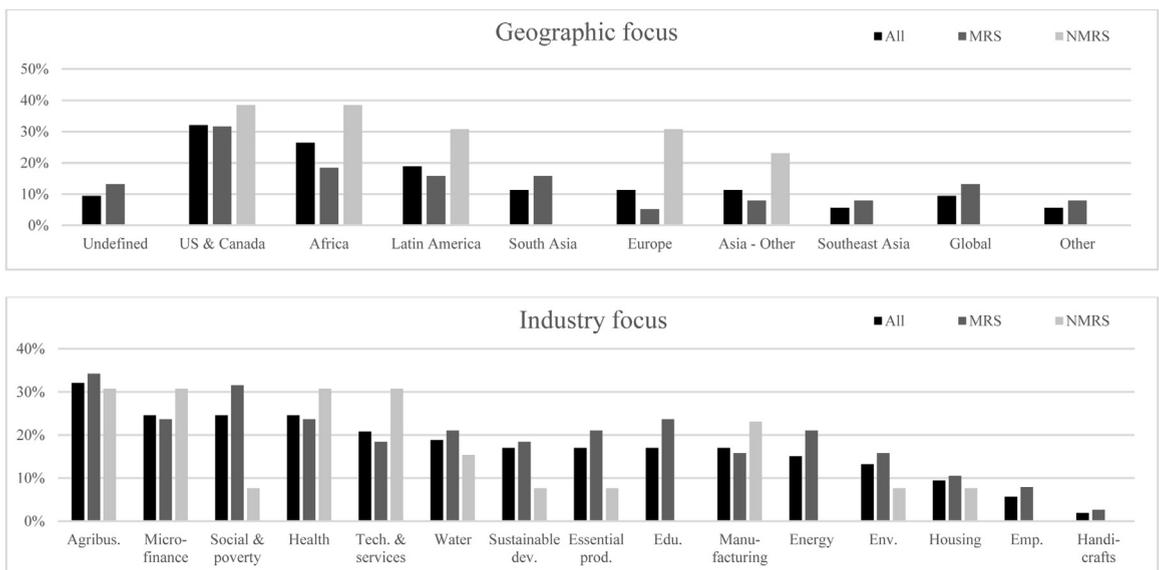


Fig. A2. Fund geography and industry focus. The figure on top presents the fraction of funds in the WSII database by geographic focus. The figure on the bottom presents the fraction of funds in the WSII database by industry focus.

Alternatives to waterfall compensation

“The Management Board, by unanimous decision, shall decide to allocate the profits of the LLP between the Members in accordance with the Ownership Proportion set out in Schedule [x].”

“Except as provided in Section [x] regarding liquidating distributions, Net Cash Flow shall be determined by the General Partner in accordance with Section [x] and shall be distributed to the Partners annually in proportion to their capital interest.”

Manager coinvestment provision

“Where possible and appropriate, the General Partner may, in its discretion, provide co-investment opportunities to Limited Partners, including the Founding Investor, before making such opportunities available to non-Limited Partners. The General Partner may also in its discretion offer

co-investment opportunities to other parties that are non-Limited Partners that the General Partner believes may facilitate the consummation of a Portfolio Investment.”

Manager reinvestment provision

“All or any portion of any Funded Commitments used to make an Investment that, at any time within 24 months of the date on which the Investment was completed, is disposed of by, or repaid or returned to, the Partnership, together with the amount of any income received by the Partnership within such 24-month period in respect of such Investment (but, in each case, net of all costs and expenses related thereto), may, at the option of the General Partner, be retained by the Partnership, for a period of up to 12 months from the date the Investment is disposed of, or repaid or returned, for the purpose of making additional Investments prior to the date that the Investment Period

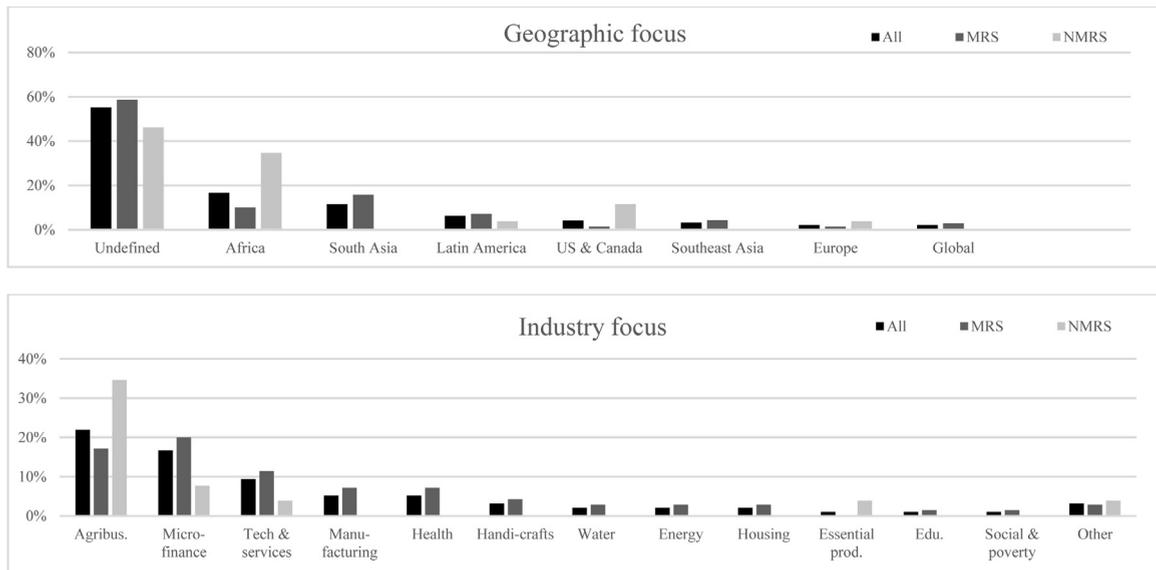


Fig. A3. PC geography and industry focus.

The figure on top presents the fraction of PCs in the WSII database by geographic focus. The figure on the bottom presents the fraction of PCs in the WSII database by industry focus.

Table A3

Comparison points from literature on VC/PE.

This table summarizes characteristics of the papers we use as references for the statistics we present in Tables 8–10. We are not the first to group private company investments for the sake of comparison (Cumming and Walz, 2010). Blending PE/VC also reflects market-wide trends as the two historically distinct fields move closer to a combined private markets approach (Bain & Company, Inc., "Global private equity report," 2019).

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 & Strömberg (2003)	213	Portfolio company investments	VC	1986–1999	KS
Metrick & Yasuda (2010)	238	Funds (contracts + fund research)	VC/PE	1993–2006	MY
Gompers et al. (2016)	79	Investor surveys	PE	2011–2013	GKM
Gompers et al. (2020)	885	Investor surveys	VC	2016–2016	GGKS
Smith (2005)	367	Registration statements of IPOs backed by venture capital	VC	1997–2002	S

Table A4

Correlation of operational impact and compensation terms at the GP-LP level.

This table presents the estimates of a simple correlation of different compensation terms with the impact scores, controlling for the number of contracts at the fund level. The equation estimated is

$$\text{compensation outcome}_i = \beta \text{fund impact score}_i + \gamma \text{num. contracts}_i + \epsilon_i \quad (2)$$

In Panel A, the compensation outcome is an indicator for the presence of the term. In Panel B, the outcome is the level of the compensation term in percentage points (e.g., 8 for an 8% hurdle rate, 0 if none). Standard errors are in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Panel A: Presence of compensation terms				
	(1) Hurdle rate	(2) Carry rate	(3) Catch-up target	(4) Management fee
Operational impact	29.6450 (31.8688)	4.8517 (24.2206)	29.7045 (31.4909)	11.3497 (25.5487)
Control for num. contracts	✓	✓	✓	✓
Observations	53	53	53	53
R-squared	0.034	0.039	0.026	0.016
Panel B: Levels of compensation terms				
	(1) Hurdle rate	(2) Carry rate	(3) Catch-up target	(4) Management fee
Operational impact	0.8358 (2.5033)	1.0053 (4.9686)	5.8032 (6.1642)	0.8867 (0.7131)
Control for num. contracts	✓	✓	✓	✓
Observations	53	53	53	53
R-squared	0.043	0.037	0.017	0.033

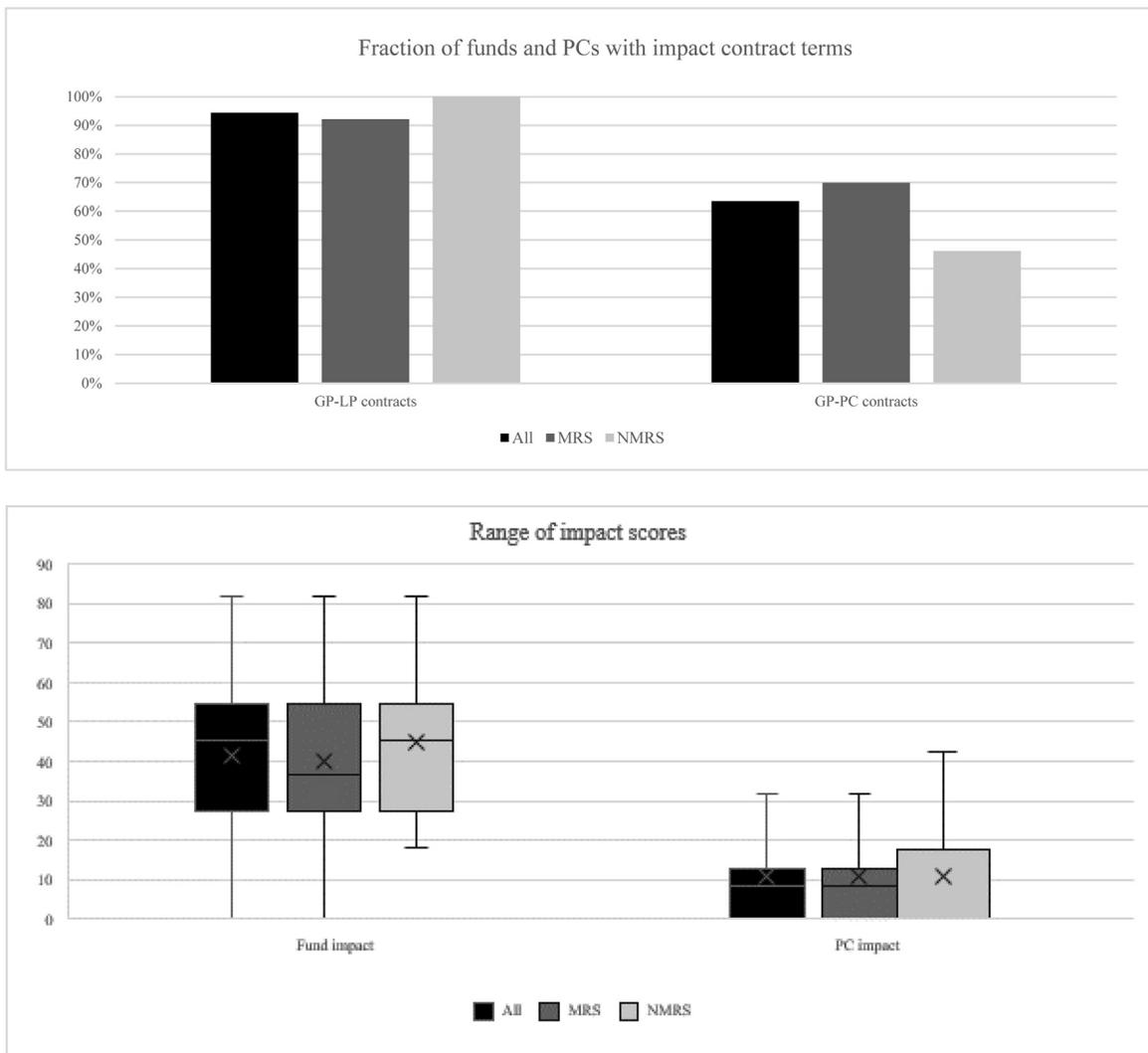


Fig. A4. Impact score distribution. The figure on top presents the fraction of funds and PCs in the WSII database with any impact terms in their contracts. The figure on the bottom presents the range of fund and PC impact scores in the contracts.

Table A5
Correlation of average PC impact score with GP-LP impact terms. The table presents estimates of a simple correlation of the impact score at the GP-LP level with the average impact score at the GP-PC level, controlling for the number of contracts at the fund level.

	(1) All	(2) MRS	(3) NMRS
Fund operational impact	0.1019 (0.1967)	0.4086** (0.1520)	-0.5838 (0.4425)
R ²	0.027	0.559	0.641
Control for num. contracts	✓	✓	✓
N	13	9	4

has ended or is deemed to have been ended. The amount retained shall not exceed the aggregate Funded Commitments used to make such Investment that has been disposed of, repaid or returned together with any income received thereon during such 24 month period."

Conflict of interest transaction provision
"Without the consent of a majority of the members of the Investment Committee, the Partnership shall not purchase or otherwise acquire any securities from, or transfer any assets to, (i) a Managing Member, including members of his or her immediate family and entities over which any such Managing Member has investment control (ii) the General Partner or its Affiliates, or (iii) any other investment fund managed by the GP or its Affiliates."

Asset restrictions
Example 1: "The Fund will not, without the prior approval of the Advisory Board, invest more than 15% of Commitments in any one Portfolio Company or more than 35% of Commitments in any one business sector alone."
Example 2: "The GP ... without written consent or ratification of the specific act by the Advisory Committee, cause or permit the Partnership to (1) invest more than

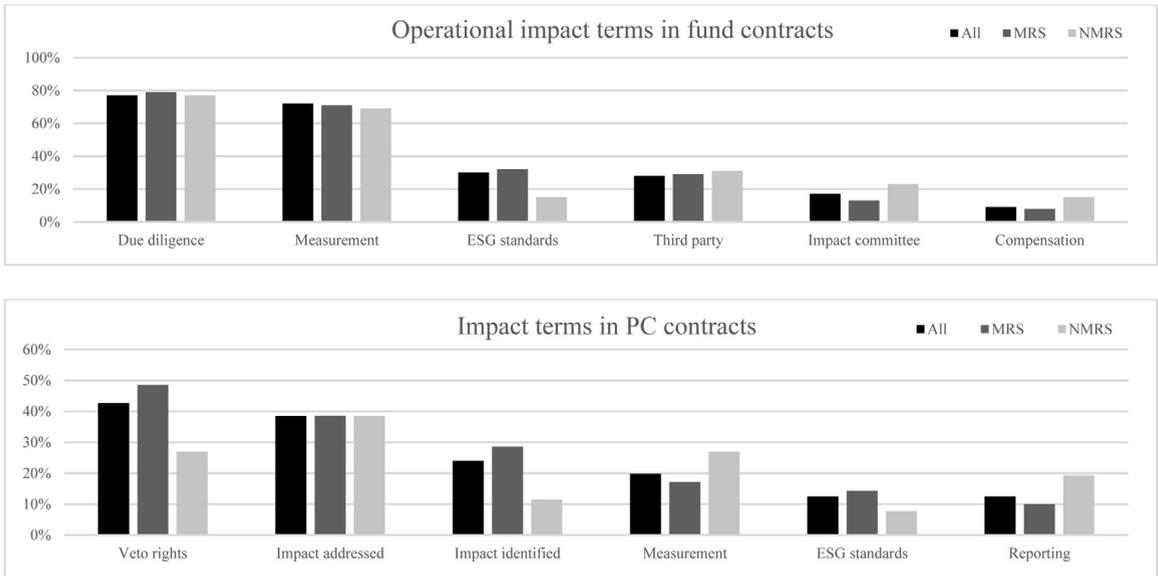


Fig. A5. Most frequent operational impact terms. The figure on top presents the fraction of funds in the WSII database with each type of operational impact term in their GP-LP contracts. The figure on the bottom presents the fraction of GP-PC contracts in the WSII database with each type of impact term.

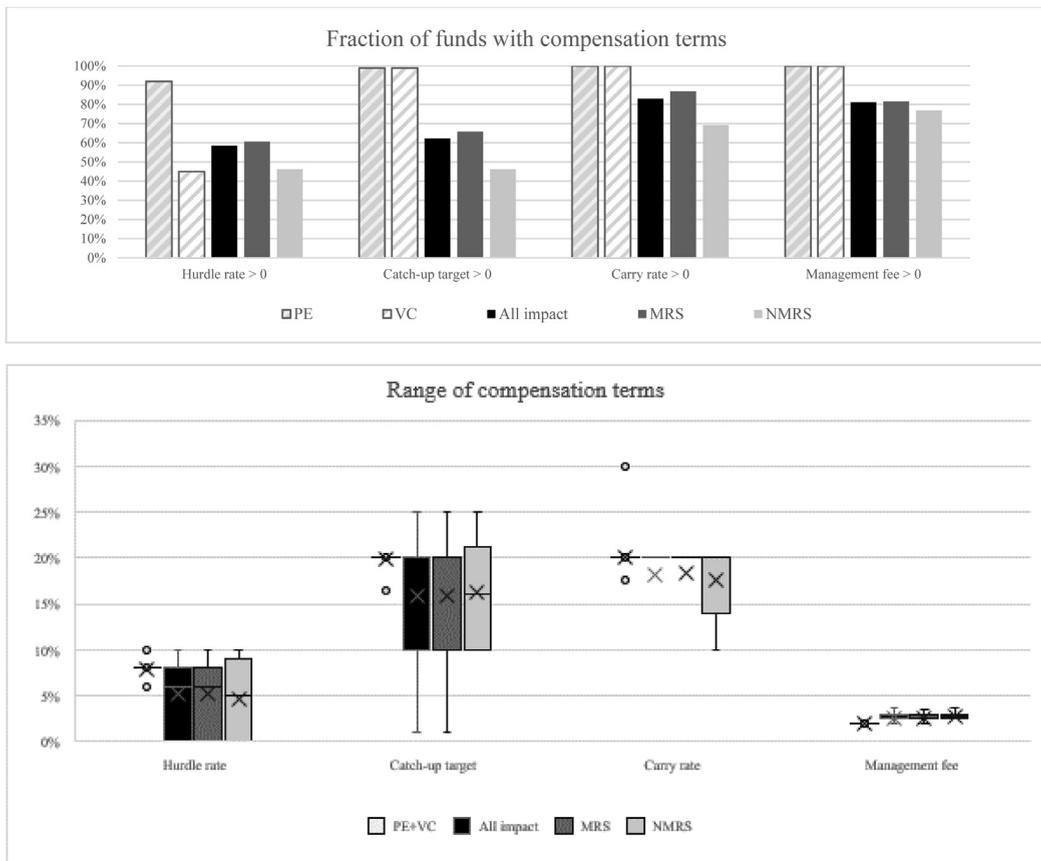


Fig. A6. Distribution of financial incentive terms. The figure on top presents the fraction of funds in the WSII database with positive rates for each compensation term. The figure on the bottom presents the range of compensation rates in GP-LP contracts. PE and VC numbers are drawn from Metrick and Yasuda (2010). The range of terms in their sample is denoted by outlier circles because we do not know the distribution within their sample. Impact numbers are drawn from the WSII database.

20% of the Partners' aggregate Capital commitments in the securities of any one Portfolio Company, including guarantees and bridge financings; (2) invest in any Portfolio Company whose primary source of income is derived from real estate investment, oil and gas exploration and production, or mining."

PC level (GP-PC documents)

Veto on change in business plan. "For as long as Investor owns an interest in the Company, and promptly after submission to Investor of each draft annual budget, the Promoter and Investor shall discuss the business plan, and any material change from the previously approved business plan shall require written approval by the investor."

Impact addressed. "The Final Agreements will include language assuring adherence to the US Foreign Corrupt Practices Act and the Investor's Investment Codes, which require compliance with environmental covenants, IFC Performance Standards, ILO Core Conventions and the UN Declaration of Human Rights, among other aspects."

Impact defined. "[PC] shall utilize the proceeds of the Offering in furtherance of its primary objective to make available regular, reliable and efficient financial services to the economically active urban and rural poor, enabling them to become self reliant and meet their aspirations for a better and secure future."

Adherence to ESG standards.

Example 1: "[PC] shall comply with the Social and Environmental Guidelines of the International Finance Corporation."

Example 2: "The Company undertakes to comply with all [country] legal provisions on all applicable environmental laws as well as the ESG."

Impact measurement and reporting.

Example 1: "The Company hereby agrees to request and secure an impact certification on behalf of the Global Impact Investing Rating System ('GIIRS') within 3 (three) months post-Closing."

Example 2: "Purchasers will be provided with ... a series of measures of social impact as agreed by the Company and Purchasers, as Purchasers may reasonably request. Purchasers will be entitled to inspection rights of the books and registers maintained by the Company."

Example 3: [PC must] "(vi) Deliver to Investor not later than forty-five (45) days, or such longer period as Investor

deems reasonably appropriate following the end of the Company's fiscal year, data on the number and nature of jobs created during the fiscal year."

References

- Barber, B., Morse, A., Yasuda, A., 2021. Impact investing. *J. Financ. Econ.* 139, 162–185.
- Bolton, P., Dewatripont, M., 2004. *Contract Theory*. MIT Press, Cambridge.
- Bratton, W., 2002. Venture capital on the downside: preferred stock and corporate control. *Mich. Law Rev.* 100, 891–945.
- Brest, P., Born, K., 2013. Unpacking the impact in impact investing. *Stanford Soc. Innov. Rev.* 14, 33.
- Brest, P., Gilson, R., Wolfson, M., 2018. How Investors Can (and can't) Create Social Value. European Corporate Governance Institute Unpublished working paper.
- Coyle, J., Green, J., 2014. Contractual innovation in venture capital. *Hastings Law J.* 66, 133–183.
- Cumming, D., Walz, U., 2010. Private equity returns and disclosure around the world. *J. Int. Bus. Stud.* 41, 727–754.
- Geczy, C., Jeffers, J., Musto, D., Tucker, A., 2015. Institutional investing when shareholders are not supreme. *Harvard Bus. Law Rev.* 5, 73–139.
- Gilson, R., Sabel, C., Scott, R., 2010. Braiding: the interaction of formal and informal contracting in theory, practice, and doctrine. *Columbia Law Rev.* 110, 1377–1447.
- Gompers, P., Gornall, W., Kaplan, S., Strebulaev, I., 2020. How do venture capitalists make decisions? *J. Financ. Econ.* 135, 169–190.
- Gompers, P., Kaplan, S., Mukharlyamov, V., 2016. What do private equity firms say they do? *J. Financ. Econ.* 121, 449–476.
- Gompers, P., Lerner, J., 1996. The use of covenants: an empirical analysis of venture partnership agreements. *J. Law Econ.* 39, 463–498.
- Gompers, P., Lerner, J., 1999. An analysis of compensation in the US venture capital partnership. *J. Financ. Econ.* 51, 3–44.
- Grossman, S., Hart, O., 1986. The costs and benefits of ownership: a theory of vertical and lateral integration. *J. Political Econ.* 94, 691–719.
- Hart, O., Moore, J., 1990. Property rights and the nature of the firm. *J. Political Economy* 98, 1119–1158.
- Hart, O., Moore, J., 2008. Contracts as reference points. *Q. J. Econ.* 123, 1–48.
- Hart, O., Zingales, L., 2017. Companies should maximize shareholder welfare not market value. *J. Law, Financ. Account.* 2, 247–274.
- Holmstrom, B., Milgrom, P., 1991. Multitask principal-agent analyses: incentive contracts, asset ownership, and job design. *J. Law, Econ. Organ.* 7, 24–52.
- Hüther, N., Robinson, D., Sievers, S., Hartmann-Wendels, T., 2019. Paying for performance in private equity: evidence from venture capital partnerships. *Manag. Sci.* 66, 1756–1782.
- Kaplan, S., Strömberg, P., 2003. Financial contracting theory meets the real world: an empirical analysis of venture capital contracts. *Rev. Econ. Stud.* 70, 281–315.
- Kaplan, S., Strömberg, P., 2009. Leveraged buyouts and private equity. *J. Econ. Perspect.* 23, 121–146.
- Kovner, A., Lerner, J., 2015. Doing well by doing good? Community development venture capital. *J. Econ. Manag. Strat.* 24, 457–685.
- Metrick, A., Yasuda, A., 2010. The economics of private equity funds. *Rev. Financ. Stud.* 23, 2303–2341.
- Phalippou, L., Rauch, C., Ueber, M., 2018. Private equity portfolio company fees. *J. Financ. Econ.* 129, 559–585.
- Prendergast, C., 1999. The Provision of Incentives in Firms. *J. Econ. Lit.* 37, 7–63.
- Smith, D., 2005. The exit structure of venture capital. *UCLA Law Rev.* 53, 1–36.