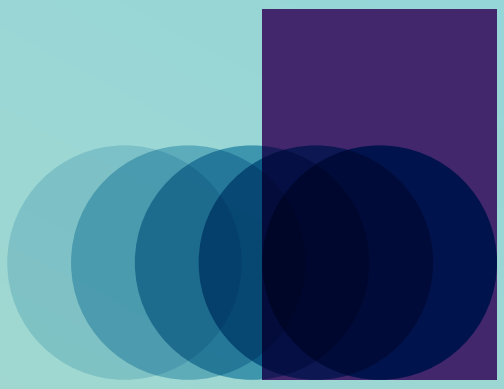
Moving toward gender balance

in private equity and venture capital



OLIVER WYMAN

RockCreek

IFC International Finance Corporation
WORLD BANK GROUP

Creating Markets, Creating Opportunities

IFC. IFC—a sister organization of the World Bank and member of the World Bank Group—is the largest global development institution focused on the private sector in emerging markets. We work with more than 2,000 businesses worldwide, using our capital, expertise, and influence to create markets and opportunities in the toughest areas of the world. In fiscal year 2018, we delivered more than $23 billion in long-term financing for developing countries, leveraging the power of the private sector to end extreme poverty and boost shared prosperity. For more information, visit www.ifc.org.

Oliver Wyman. Oliver Wyman is a global leader in management consulting. With offices in 50+ cities across nearly 30 countries, Oliver Wyman combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation. The firm has more than 5,000 professionals around the world who work with clients to optimize their business, improve their operations and risk profile, and accelerate their organizational performance to seize the most attractive opportunities. Oliver Wyman is a wholly owned subsidiary of Marsh & McLennan Companies [NYSE: MMC]. For more information, visit www.oliverwyman.com. Follow Oliver Wyman on Twitter @OliverWyman.

RockCreek. RockCreek is a leading global investment management firm that applies data-driven technology and innovation to investing. Its portfolio managers invest in emerging markets and alternatives, and its asset allocation teams invest in multi-asset class and outsourced CIO portfolios and customized solutions. RockCreek's client base is made up of sophisticated institutional investors, including endowments, foundations, pension plans, and sovereign funds. The firm is highly focused on the integration of environmental, social, and governance (ESG) factors and sustainable impact across portfolios to generate long-term returns. RockCreek has a culture of diversity, debate, and relentless drive to excel. For more information, visit www.therockcreekgroup.com.

© International Finance Corporation 2019. All rights reserved.

International Finance Corporation ("IFC"), a member of the World Bank Group ("WBG")
2121 Pennsylvania Avenue, N.W.
Washington, D.C. 20433

Internet: www.ifc.org

TABLE OF CONTENTS

Abbreviations and Acronyms 4
Boxes, Case Studies, Figures, and Tables 5
Forewords 8
Acknowledgments 11

EXECUTIVE SUMMARY 13

Top Ten Findings 15
Recommendations 17

I. OVERVIEW AND APPROACH 20

Report Objectives 20
Overview of Private Equity 20
Gender Diversity and Financial Performance 21
Methodology 24

II. GENDER GAPS IN PRIVATE EQUITY AND VENTURE CAPITAL 27

Women as allocators of capital 27
Women as recipients of capital 31

III. THE RELATIONSHIP BETWEEN GENDER BALANCE AND PERFORMANCE 36

Gender balanced fund performance 36
Benefits of gender balanced General Partners 43
Gender balanced portfolio company performance 50
Benefits of gender balanced portfolio companies 51

IV. STEPS GENERAL AND LIMITED PARTNERS CAN TAKE TO MOVE TOWARD GENDER BALANCE 54

General Partners–Managing the Talent Pipeline 54
General Partners–Managing the Investment Funnel 75
Limited Partners–Catalyzing Change in General Partners 94

V. CONCLUSION 101

Bibliography 102
Appendix A: Detailed Methodology 108
Appendix B: Overview of existing research on gender diversity and performance 135

ABBREVIATIONS AND ACRONYMS

AP2	Andra AP-fonden
AUM	Assets under management
B2C	Business to consumer
BCa	Bias corrected and accelerated
CAGR	Compound annual growth rate
CEO	Chief executive officer
CI	Confidence interval
CPP	Canada Pension Plan
CPPIB	Canada Pension Plan Investment Board
DDQ	Due diligence questionnaire
DPI	Development Partners International
DPI	Distributions to paid-in
EBIT	Earnings before interest and taxes
EBITDA	Earnings before interest, tax, depreciation and amortization
ECA	Europe and Central Asia
EPS	Earnings per share
GIVE	Goals, invest, volunteer, educate
GP	General Partner
IFC	International Finance Corporation
ILPA	Institutional Limited Partners Association
IPO	Initial public offering
IRR	Internal rate of return
LAC	Latin America and Caribbean
LP	Limited Partner
LPAC	Limited Partner Advisory Committee
MENA	Middle East and North Africa
MMC	Marsh and McLennan Companies
OLS	Ordinary least squares
OW	Oliver Wyman
PE	Private Equity
PEWIN	Private Equity Women Investor Network
RVPI	Residual Value Paid-in
SSA	Sub-Saharan Africa
STEM	Science, technology, engineering and mathematics
TVPI	Total-value to paid-in
VC	Venture Capital
WBG	World Bank Group

BOXES, CASE STUDIES, FIGURES, AND TABLES

BOXES

Box 1: Chinese Private Equity and Venture Capital 29

CASE STUDIES

Case Study 1: Development Partners International 42
Case Study 2: Lightspeed Venture Partners 49
Case Study 3: Canada Pension Plan Investment Board 60
Case Study 4: The RockCreek Group 65
Case Study 5: Multiples Alternate Asset Management 70
Case Study 6: 500 Startups 81
Case Study 7: Flat6Labs 82
Case Study 8: Village Capital 85
Case Study 9: Kapor Capital 88
Case Study 10: General Atlantic 92
Case Study 11: Andra AP-fonden 96
Case Study 12: Institutional Limited Partners Association 98

FIGURES

Figure 1: Aggregate Capital Raised by Private Equity and Venture Capital Funds Focused on Emerging Markets, 2008–17 21
Figure 2: Stakeholders in Private Equity and Venture Capital 22
Figure 3: Definition of Gender Balanced and Male or Female Dominated Teams 24
Figure 4: Framework for understanding Female Representation in Leadership in General Partners and Portfolio Companies 28
Figure 5: Percent of Senior Investment Professionals Across Private Equity and Venture Capital who are Female 29
Figure 6: Female Ownership Rates in Businesses across Emerging Markets 29
Figure 7: Sample of female-led Chinese Private Equity and Venture Capital Firms and "unicorn" portfolio companies 29
Figure 8: Gender Composition of Senior Teams 30
Figure 9: Percent of Capital Recipients who are Female by Geography 31
Figure 10: Percent of Capital Recipients who are Female by Investment Stage 32
Figure 11: Path of Portfolio Companies Based on Gender of Company's CEO at Time of Identified Deal 33

Figure 12: Gender Composition of Senior Leadership Teams of Portfolio Companies 34
Figure 13: Performance of Emerging Market Funds, Excess Net IRR to Relevant Benchmark given Vintage, Geography and Strategy 37
Figure 14: Performance of Emerging Market Funds by Strategy, Excess Net IRR to Relevant Benchmark given Vintage, Geography and Strategy 38
Figure 15: Performance of Emerging Market Funds by Geography, Excess Net IRR to Relevant Benchmark given Vintage, Geography and Strategy 39
Figure 16: Performance of Emerging Market Funds, Excess Net TVPI to Relevant Benchmark given Vintage, Geography and Strategy 40
Figure 17: Performance of Emerging Market Funds by Strategy, Excess Net TVPI to Relevant Benchmark given Vintage, Geography and Strategy 40
Figure 18: Performance of Emerging Market Funds by Geography, Excess Net TVPI to Relevant Benchmark given Vintage, Geography and Strategy 41
Figure 19: Percent of General Partners who Believe that Increased Gender Diversity would Improve Performance 43
Figure 20: Emerging Markets General Partners' View on Benefits of Gender Diversity 44
Figure 21: Emerging Markets General Partners' View on Additional Benefits of Gender Diversity 45
Figure 22: Limited Partners' View on Importance of General Partners' Gender Diversity 46
Figure 23:Percent of Deals with Female CEO by Deal Partner Gender 48
Figure 24: Valuation Change of Portfolio Company by Gender Composition of Senior Leadership Team 50
Figure 25: Annualized Valuation Change of Portfolio Companies Relative to Benchmarks given Year of Investment and Geography 51
Figure 26: General Partners' View on Benefits of Gender Diversity in Portfolio Companies 52
Figure 27: General Partners' View on Drivers of Low Gender Diversity 55
Figure 28: Percent of General Partner Employees who Believe Increasing Gender Diversity is a Firm Priority 56
Figure 29: Types of Gender Diversity Targets 57
Figure 30: Most common recruiting channels for junior and senior hiresets 62
Figure 31: Most Important Qualities when Hiring Junior Talent 63
Figure 32: Most Common Prior Industry Experience of Junior and Senior Hires 64
Figure 33: Parental Leave and Junior Employee Perceptions 67
Figure 34: Junior Employees' Career Perceptions by Gender 71
Figure 35: Female Respondents' View on Drivers for Low Gender Diversity 72
Figure 36: Percent of General Partner Investment Employees who are Female 74
Figure 37: General Partners' View on Drivers for Low Female Representation in Portfolio Companies 76
Figure 38: Total Female Entrepreneurship Rates Compared to Percent of Female-Led Companies Receiving Private Equity or Venture Capital Investments by Market 77
Figure 39: Percent of Deals by Industry in Overall Market and Female-Led Businesses 78
Figure 40: Most Common Channels for Deal Sourcing 80
Figure 41: Most Important Attributes of Portfolio Companies for Investment Decision Making by General Partners 83
Figure 42: Most Common Channels for Sourcing Portfolio Companies' Senior Leadership 87

Figure 43: General Partners' Perception of Limited Partners 94
Figure 44: Overview of Iterative Research Method 109
Figure 45: Percent of General Partners with Gender Data by Geography and Investment Strategy 111
Figure 46: Percent of Funds with Performance Data by Geography and Investment Strategy 112
Figure 47: Funds with Performance Data by Vintage, 2003–2018 113
Figure 48: Median Net IRR by Geography for Benchmark Data 114
Figure 49: Median Net IRR by Investment Strategy for Benchmark Data 115
Figure 50: Median Net IRR by Vintage for Benchmark Data 116
Figure 51: Distribution of Excess Net IRR for Benchmark Data 116
Figure 52: Median Difference of Baseline Gender Balance Definition Histogram from Bootstrapped Simulations 118
Figure 53: Portfolio Companies by Geography and Deal Type 124
Figure 54: Annualized Company Valuation Increases by Region and Initial Investment Year 125
Figure 55: Distribution of Excess Annualized Valuation Increase 126
Figure 56: Distribution of Differences in Median Excess Valuation Changes for Portfolio Companies from Bootstrapped Simulations 127
Figure 57: Share of Emerging Market Survey Respondents by Geography 132
Figure 58: Survey Respondents by Primary Investment Location 133
Figure 59: Percent of General Partners by Assets Under Management and Investment Strategy 134
Figure 60: Percent of Limited Partners Firms by Assets Under Management and Investment Strategy 134

TABLES

Table1: Bootstrap Resampling Results for Different General Partner Diversity Levels 119
Table 2: BCa Confidence Intervals for Median Difference in Gender Balanced vs. Male/Female Dominated Funds' Excess Returns 120
Table 3a: Median Difference Estimate and BCa Confidence Intervals in Fund Size Quantile Regression 120
Table 3b: Median Difference Estimate and BCa Confidence Intervals in Fund Size Quantile Regression 120
Table 4: Performance Comparison across Benchmark Options 121
Table 5: Performance Comparison across Vintage Year Cut-Offs 122
Table 6: Percentile Comparison for Excess Net Internal Rate of Return (IRR) 122
Table 7: Percentile comparison for eEcess Total Value to Pain-in (TVPI) multiple 122
Table 8: Bootstrap Resampling Results for Different Portfolio Company Diversity Levels 128
Table 9: BCa Confidence Intervals for Median Difference in Gender Balanced vs. Male/Female Dominated Portfolio Companies' Excess Valuation Changes 129
Table 10: Performance Comparison across Benchmark Options 129
Table 11: Performance Comparison at Different Percentiles 129
Table12: Valid Responses by Seniority and Gender from Emerging Markets within General Partners and Limited Partners 131
Table 13: Emerging Market Survey Respondents by Role and Gender 133
Table 14: Summary of Existing Research on Relationship between Gender Diversity and Performance 135

FOREWORDS

IFC

At IFC, we have long enabled companies and economies to grow by strengthening women's participation in the private sector, and we have witnessed the benefits that materialize from gender diversity in building companies that deliver financial returns as well as positive social benefits.

And yet, in the private equity and venture capital industry, women remain severely underrepresented as investment decision-makers. There are few women in the leadership of private equity and venture capital firms, or in the leadership of the companies in which these firms invest.

This report, Moving Toward Gender Balance in Private Equity and Venture Capital has several objectives. For the first time, it shares data on gender diversity in emerging markets' private equity and venture capital firms. The report examines the correlation between diversity and fund performance. It looks at the relationship between gender diversity at fund management and the impact on access to capital for women founders. And based on evidence collected on these three issues, the report makes recommendations about what can be done to increase gender diversity in funds and at the portfolio company level, with an aim of optimizing returns and social outcomes.

We looked at 6,000 funds and over 5,000 portfolio companies for gender data, and of those, 700 funds and 500 portfolio companies provided performance data. We analyzed this database along with survey responses from more than 500 fund managers and institutional investors, and interviews with more than 50 industry practitioners and academic experts.

Among the report's many findings: Data shows that when companies have gender-balanced teams their returns can be as much as 20 percent higher; and women partners invested in almost two times more in many women-owned companies as did their male partners, giving women more opportunity to grow their businesses and create jobs.

By sharing the results of this report and demonstrating that diverse teams yield higher returns and enhanced outcomes, IFC seeks to promote positive change in the private equity and venture capital industry. We encourage our clients and partners to use this report to define their goals on gender diversity, and we hope the report will serve as an inspiration to assess gaps and drive change to achieve gender balance.

On behalf of IFC, I would like to thank RockCreek and Oliver Wyman, and all others who generously shared their data and perspectives. I am confident that these findings will support the growth of private equity and venture capital in emerging markets while providing women with more equal opportunities as entrepreneurs, investors, and business leaders.

Philippe Le Houérou
Chief Executive Officer, IFC

ROCKCREEK

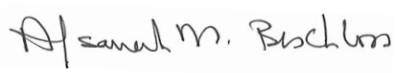
When RockCreek was founded in 2002, we set out to build a different kind of investment-management firm: one that nurtures a dynamic team with a global perspective to generate strong returns and develop innovative solutions for institutional investors. We realized that our inclusive culture, which celebrates a diversity of backgrounds and perspectives, would also reflect positively in our investment decisions.

Today, RockCreek is recognized as one of the largest women-founded firms with around $14 billion in assets under management, proudly leading the industry in generating high returns for some of the most sophisticated investors. Ninety percent of our senior management team come from diverse backgrounds and more than half of our underlying private portfolio companies are female-led businesses.

That's why we are excited to share our expertise for this report, Moving Toward Gender Balance in Private Equity and Venture Capital, in collaboration with IFC and Oliver Wyman. The report uses data to quantify the relationship between fund performance and gender diversity and identifies several actions investors can take to move the private equity industry toward gender balance. At RockCreek, we are committed to exploring data-driven ways to reshape the investment landscape both internally and externally with our investors and the larger industry with whom we collaborate.

As the report suggests, there still is work to be done to ensure that the benefits of gender diversity are embraced by all in the alternative investment industry. While we are proud to be considered a gender-balanced firm, the reality is that many investors in both developed and emerging markets are not. At RockCreek, we believe the best way to improve gender balance in the industry is to provide leadership and focus on performance. We were fortunate to work with IFC and Oliver Wyman on this important research to share the potential performance benefits that can be gained by firms if they focus on increasing gender diversity of their leadership and investments. Institutional investors have a tremendous opportunity to drive long-term change in the industry.

I hope the data-driven insights and the recommendations offered in this report inspire investors, asset allocators and fund managers to take the steps to increasing gender diversity - ask questions, set goals, and measure progress. These simple actions will lead the industry towards better performance for all.



Afsaneh Beschloss
Founder and CEO, RockCreek

OLIVER WYMAN

More women today are rising to the top leadership ranks of business, government, and society than a generation ago. But progress has been too slow and much work remains to be done.

Oliver Wyman is committed to strengthening the role of women leaders everywhere. The challenge—and opportunity—is to figure out how to close the gap more quickly by refusing to accept that "we are already doing everything we can to ensure more women join and help lead our organizations." Diversity gaps will not fix themselves; solving the problem requires determination, persistence, advocacy, open-mindedness, and, sometimes, hard decisions.

Oliver Wyman regularly conducts leading edge research on gender diversity across regions and industries, including our bi-annual Women in Financial Services series and reports on gender leadership gaps in healthcare and in the nation of Brazil.

Moving Toward Gender Balance in Private Equity and Venture Capital furthers our contribution to this important topic. It shines a light on gender imbalances inside private equity firms operating in emerging markets, as well as inside the companies those firms own. The analysis is rooted in performance data and enhanced and enlivened by information gathered through a bespoke survey and through detailed interviews of senior business leaders and other experts. We also explore the underlying drivers of persistent gender gaps and outline the business case for change. While our findings, analysis, and recommendations are aimed at private equity, they apply not only across the financial services industry but the entire business community and beyond.

We hope you find the report useful and that it stimulates ideas for achieving greater gender diversity.

On behalf of Oliver Wyman, we thank IFC and RockCreek, as well as our advisers, interviewees, and survey respondents, for their support and insights.

John Romeo
Managing Partner, OW Forum, Oliver Wyman

Julia Hobart
Partner, Wealth Asset Management, Oliver Wyman

ACKNOWLEDGMENTS

This publication, *Moving Toward Gender Balance in Private Equity and Venture Capital*, is brought to you by International Finance Corporation (IFC), Oliver Wyman (OW), and RockCreek. Funding for this report was provided by RockCreek, one of the largest female-founded investment firms, and the Government of Canada. In its partnership with Canada, IFC is committed to identifying key constraints affecting women's economic empowerment and reducing gender inequalities through business environment reforms, strengthening women-owned enterprises, and creating better employment opportunities for women.

This publication was developed under the overall guidance of Stephanie von Friedeburg, Chief Operating Officer IFC, Hans Peter Lankes, Vice President IFC Economics and Private Sector Development, Atul Mehta, Senior Director IFC Telecom, Media and Technology, Venture Capital & Funds, Maria Kozloski, Global Head & Senior Manager IFC Private Equity Funds, Nikunj Jinsi, Senior Manager IFC Venture Investing, Henriette Kolb, Manager IFC Gender Secretariat, Afsaneh Beschloss, Founder and CEO RockCreek, Laura Tyson, Senior Advisor RockCreek, Mina Mashayekhi, Senior Advisor RockCreek, Alifia Doriwala, Managing Director RockCreek, John Romeo, Managing Partner OW Forum, Dominik Treeck, Partner Public Sector OW, Julia Hobart, Partner Wealth Asset Management OW, Samir Misra, Partner Wealth Asset Management, Oliver Wyman.

The core working group of the initiative, jointly led by Shruti Chandrashekar and Heather Kipnis, comprises Stephanie Bamfo, Bhattiprolu Murti, Robert Wright, and Anjani Vedula from IFC; Elena Blueggel, Paul Tyger and Rachel Li from OW; and Anda Bordean, Caleb Chertow, Maryam Mashayekhi, and Sherri Rossoff from RockCreek.

The research was guided by an advisory committee whose contributions were essential to the report. The team would like to thank these advisors:

- Runa Alam, Co-founder and CEO, Development Partners International
- William (Bill) E. Ford, CEO and Managing Director, General Atlantic
- Caren Grown, Senior Director Gender, World Bank
- Jenny Lee, Managing Director, GGV Capital
- Shelby Wanstrath, Senior Investment Manager of Private Equity, Teacher Retirement System of Texas
- Claudia Zeisberger, Senior Affiliate Professor of Entrepreneurship & Family Enterprise at INSEAD; Academic Director of its Global Private Equity Initiative (GPEI)

IFC, OW, and RockCreek thank the many experts around the world who generously contributed their time and expertise, and who were willing to share data and their experience to add to the richness of the report: Albert Alsina, Mediterrania Capital Partners; Amy Luinstra, IFC; Ana Carla Abrao, OW; Andrea Auberach, Cambridge Associates; Andrea Heinzer, Obviam; Annie Paydar, General Atlantic; Baris Gen, IFC; Bedy Yang, 500 Startups; Camilla Axvi, AP2; Carlotta Saporito, CDC Group; Catherine Leung, MizMaa Ventures; Christina Gaw, Gaw Capital; Clara Chan, HK Monetary Authority; Clarisa de Franco, CDC Group; Cyril Collon, Partech; Deepak Menon, Village Capital; Dina el-Shenoufy, Flat6 Labs; Freada Klein, Kapor Capital; Hale Ozsoy, Turkven Private Equity; Heidi Gardner, Harvard Law School; Issa Aghabi, IFC; Jennifer Petrini, IFC; Jeremy Liew, Lightspeed Partners; Jesus Arguelles, former OTPP; Joslin Jose, Village Capital; Katherine Klein, Wharton Social Impact Initiative; Leigh Moran, Calvert Lopa Rahman, IFC; Magda Magnuszewska, Innova Capital; Michelle Dipp, General Atlantic; Nashat Masri, Foursan Capital Partners; Priscila Rodrigues, Bozano; Ralph Keitel, IFC; Rupal Kantaria, OW; Sara Taylor, CDC Group; Shalaka Joshi, IFC; Suyi Kim, CPPIB; Suzanne Biegel, Catalyst at Large; Tamsin Jones, The Boardroom Africa; Tidjane Deme, Partech; Ulili Onovakpuri, Kapor Capital; Vinika Rao, INSEAD; Vipul Baghat, IFC; Xiaomin Mao, IFC; Yan Wang, RockCreek; Yemi Lalude, TPG Growth.

EXECUTIVE SUMMARY

Women are significantly underrepresented among the investment decision-makers at private equity and venture capital firms, as well as in the leadership of companies that receive this investment capital. Women hold only 10 percent of all senior positions in private equity and venture capital firms globally, and women-led enterprises collected less than 3 percent of global venture capital in 2017 (Preqin 2017; Zarya, 2018).

These firms provide a unique and sizable source of capital for entrepreneurs in emerging markets. Although this asset class represents a small portion of total global assets under management, it provides entrepreneurs access to funding when public equity markets and debt may be less viable sources of capital. Private equity and venture capital represent approximately US$3 trillion of more than US$75 trillion global assets under management.[1] Nearly US$800 billion is dedicated to funds investing in emerging markets (Preqin 2018a, 2018b).[2]

Our research examines gender balance—defined as leadership teams with at least 30 percent of men and women—in private equity and venture capital funds and the companies they invest in within emerging markets. Our focus includes East Asia (including Southeast Asia), Europe and Central Asia, Latin America and the Caribbean, Middle East and North Africa, South Asia, and Sub-Saharan Africa. We explore the relationship between gender balance and fund performance, and the roles that general partners, the vehicles investing private equity and venture capital funds, and limited partners, the source of capital, can play in alleviating gender gaps in investment funds and their portfolio companies.

We find that the gender gaps in the representation of women as allocators and recipients of capital put access to financing at risk for female entrepreneurs and may reduce investment returns for funds. Given that private equity and venture capital are still nascent in many emerging markets, changes made now can have a significant impact in the long run to move the industry toward gender balance. This would impact General Partners and Limited Partners, as well as entrepreneurs receiving capital to grow their businesses. This report answers three questions:

- How gender balanced are leadership teams of General Partners, which allocate capital, and of portfolio companies, which receive investments?
- Are there benefits of moving leadership teams toward gender balance within General Partners and portfolio companies?
- What can General Partners do to move toward gender balance in their leadership teams and those of the portfolio companies they invest in?

To answer these questions, IFC, RockCreek, and Oliver Wyman used gender data across thousands of General Partners and portfolio companies operating in emerging markets. We gathered performance and gender diversity data for more than 700 funds and 500 portfolio companies. We analyzed this database along with survey responses from more than 500 General Partners and Limited Partners and interviews with more than 50 industry practitioners and academic experts.

MOVING TOWARD GENDER BALANCE IN PRIVATE EQUITY AND VENTURE CAPITAL

INSTITUTIONAL INVESTORS

Committing capital to funds

65% Consider **gender diversity important** when investing

BUT

25% **Ask about gender diversity** in due diligence

PRIVATE EQUITY VETURE CAPITAL FUNDS

Investing capital in companies

15% Senior investment teams are **gender balanced**

AND

Gender balanced teams have **better returns**

20% HIGHER NET IRR

Female partners invested in almost **2X MORE** female entrepreneurs than male partners

PORTFOLIO COMPANIES

20% Of leadership teams are **gender balanced**

AND

Gender balanced teams have **higher valuation** increases

64% vs. 55%

Gender balanced teams have between 30% to 70% female in leadership roles

OLIVER WYMAN

RockCreek

IFC International Finance Corporation WORLD BANK GROUP

Creating Markets, Creating Opportunities

TOP TEN FINDINGS

LIMITED PARTNERS

1. **Limited Partners generally view gender diversity as important, but this importance is not seen by General Partners**. About 65 percent of limited partners interviewed and surveyed view gender diversity of a firm's investment team as important when committing capital to funds. However, General Partners report that less than 30 percent of their Limited Partners view gender diversity as an important consideration when making investment decisions.
2. **Limited Partners investing in emerging market General Partners are not asking about gender diversity or incentivizing General Partners to move toward gender balance.** According to General Partners, only about 25 percent of their Limited Partners ask about gender diversity of their investment teams when conducting due diligence. Furthermore, General Partners report that only about 20 percent of their Limited Partners encourage them to improve gender diversity outcomes as a condition of committing capital. The lack of action by Limited Partners could explain the disconnect between the importance Limited Partners place on gender diversity and what is perceived by General Partners. In any case, it is clear that more can be done by Limited Partners to drive long-term change in the industry.

GENERAL PARTNERS

3. **Eleven percent of senior investment professionals in emerging markets private equity and venture capital are women**. Emerging market female representation is largely comparable to that of developed markets (10 percent), but this statistic is largely buoyed by China. Excluding China, in which 15 percent of senior investment professionals are women, female representation in emerging markets falls to 8 percent. To put these numbers into context, women in leadership in private equity and venture capital lags female senior representation in businesses from other sectors by about 17 percentage points.
4. **Only 15 percent of senior investment teams are gender balanced and nearly 70 percent are all male**. As such, most investment and capital allocation decisions are being made by teams that are male dominated and likely not reaping the potential benefits afforded to gender balanced teams. Our research finds these benefits likely include enhanced investment decision making and deal sourcing.
5. **The performance of gender balanced investment teams is correlated with higher returns.** Gender balanced funds realized excess net internal rate of return of 1.7 percentage points greater than male- or female-dominated funds when controlling for vintage, geography, and strategy.[3] This difference in performance is about 20 percent of the median net internal rate of return in emerging markets. This positive correlation between gender balance and performance holds across investment strategies and geographies, as well as when controlling for fund size.
6. **The lack of gender balance is likely reinforced by insufficient diversity goal setting and exclusive recruiting practices**. Sixty-seven percent of General Partners surveyed said achieving gender balance in their investment partner teams is important to their firm. Yet less than 10 percent of General Partners have strategies or targets for improving the promotion rate for female employees. The most common means of sourcing junior and senior hires is through referrals and professional networks. Identified candidates are then predominantly evaluated in terms of "culture fit," which is viewed as 50 percent more important than the next

most important factor, work experience. Individually, each practice puts male-dominated firms at risk of perpetuating the male status quo in leadership within the industry. When combined, the problem is exacerbated and potentially less visible to male leaders. This could explain, in part, why women are about 67 percent more likely to attribute low female senior representation to internal firm factors than men.

PORTFOLIO COMPANIES

7. **Seven percent of private equity and venture capital is invested in female-led businesses.** The median female-led business has received only 65 percent of the funding received by the median male-led business. This gap is largely explained by the fact that more female-led businesses receive more funding in early stages (e.g., accelerator or incubator) where the investment sizes are smaller than later stages (e.g., later stage VC, growth equity, and buyout) where the investment sizes are larger. This skew in part may be because female-led businesses are slightly less likely to receive second round funding than male-led businesses (13 percent compared with 17 percent, respectively). It also may be explained by greater frequency with which female leaders receiving initial rounds of funding appear to be replaced by male leaders in subsequent rounds
8. **About 20 percent of portfolio companies have gender balanced senior leadership teams, while nearly 70 percent are all male.** Emerging market private equity and venture capital funds tend to invest in few gender balanced leadership teams, despite the belief, as evidenced through surveyed respondents, that gender balanced teams have improved decision making, enhanced governance, and a better ability to tap into larger markets by serving a more diverse customer base.
9. **Gender balanced leadership teams are correlated with approximately 25 percent greater increases in valuation than unbalanced teams.** The median gender balanced portfolio company experienced a 64 percent increase in company valuation between two rounds of funding or liquidity events. This was about 10 percentage points greater than that of gender-imbalanced portfolio companies. When controlling for vintage, geographic market, and holding period of investments, the median gender balanced portfolio company outperformed peers by more than 5.5 percentage points in valuation increase per year.
10. **Imbalance in portfolio companies appears related to imbalance in General Partner investment teams.** Our data show that female deal partners invested in almost twice as many female-led businesses than male deal partners. Our survey suggests that networks play a crucial role in both sourcing investment opportunities and identifying senior management for portfolio companies, so expanding General Partner talent pools across genders could help General Partners invest in and move portfolio companies toward gender balance.

RECOMMENDATIONS

This report finds that the private equity and venture capital industry in emerging markets can close gender gaps between men and women while maintaining or increasing returns. However, several barriers prevent women from fully capturing the opportunity to participate as leaders that allocate and receive investment capital. Some barriers—such as those related to closed networks, unconscious biases, or lack of gender diversity commitments—require concerted efforts from multiple stakeholders to be overcome. Nevertheless, these challenges must be factored in by leading General Partners in their talent management activities and by both General Partners and Limited Partners in their investment decision making to close gender gaps in the industry. This report identifies several actions General Partners and Limited Partners can take to move the private equity industry toward gender balance.

LIMITED PARTNERS

Ask about gender diversity in the due diligence process. Asking General Partners questions about their current diversity levels and plans to improve outcomes is a key step in influencing General Partners, but General Partners are not being asked these questions in due diligence by most of their Limited Partners. This gap is important, because General Partners and Limited Partners said the most significant change in the industry on gender diversity will come only when Limited Partners collectively bring this issue to the forefront. Limited Partners can adopt standardized due diligence questions, such as the questions proposed in the diversity and inclusion section of the Institutional Limited Partners Association Due Diligence guide, which includes questions covering initiatives and policies (e.g., harassment, discrimination, and family leave) in both General Partners' and their funds' portfolio companies.[4]

Establish investment goals or targets related to the diversity of investments. Most Limited Partners believe gender diversity of General Partner investment teams is important when committing capital, but less than half have established goals related to gender diversity. Interviews with both General and Limited Partners suggest that goals send a strong signal to General Partners that the organization is committed to issues of diversity, while also providing a backdrop to measure and assess progress toward gender balance. Examples of goals include increasing the number of General Partners that provide sex-disaggregated data on women in their funds and portfolio companies, improving the proportion of capital allocated to gender balanced investment teams, and investing only in General Partners with gender diverse teams.

GENERAL PARTNERS:

Establish a tone at the top for improving gender diversity. Two-thirds of General Partners view achieving gender balance in investment partners as a priority, but less than half have strategies for achieving it.[6] This lack of action is reflected in the perceptions of junior female employees of General

Partners, resulting in a mismatch between how senior leaders have prioritized gender diversity and how this is perceived by junior employees.

This mismatch has consequences, because retention of junior female employees is essential for future progress in closing the gender gap within the leadership of General Partners. Junior female respondents are 50 percent less likely than junior men to believe men and women have an equal opportunity to become partner and about 40 percent less likely to believe their firms' senior leaders are making gender diversity a priority. To change this, General Partners can do the following

- Set and communicate ambitious gender diversity goals to demonstrate commitment.
- Collect the necessary data to assess progress toward gender diversity against short-term targets.
- Make senior leadership accountable for progress towards gender diversity goals and targets.

Support an internal environment that does not force a choice between family and career. Nearly 25 percent of surveyed General Partners do not offer maternity leave, and more than half do not offer paternity leave. For junior employees, women are more than three times likelier to believe that taking parental leave would greatly inhibit their careers. To change this, General Partners can take steps such as: :

- Offering maternity leave benefits.
- Providing and supporting equal maternity and paternity leave benefits.
- Enabling work–family management upon return from parental leave.
- Supporting flexible work initiatives for employees to balance work and family commitments

Engage portfolio companies at the time of and after investment to drive change on gender diversity. Although most General Partners believe gender balance in portfolio companies' management would improve returns, their actions don't demonstrate buy-in. Less than 40 percent of surveyed emerging market General Partners track sex-disaggregated employment data, and about 33 percent actively pursue diverse candidates when sourcing talent for portfolio companies. General Partners can do the following:

- Affirm the General Partner's commitment to diversity at the time of investment.
- Actively pursue gender-diverse talent for portfolio companies.
- Provide guidance and feedback on best practices in achieving better gender diversity outcomes.

EXECUTIVE SUMMARY NOTES

1 See the IPE website, "Total Global AUM Table 2018." https://www.ipe.com/top-400/total-global-aum-table-2018/10007066.article.

2 These statistics (Preqin 2018b) include venture capital, growth equity and buyout, but do not include real estate or infrastructure investments.

3 Male or female dominated teams are ones in which there is not at least 30 percent representation of both men and women. This includes male dominated teams (i.e., less than 30 percent women) and female dominated (i.e., less than 30 percent men).

4 Institutional Limited Partners Association Due Diligence Questionnaire (DDQ) can be found on its website, https://ilpa.org/due-diligence-questionnaire/.

5 Limited Partner survey statistics are sourced from survey responses of 28 respondents from LPs. From IFC Gender Diversity in Private Equity and Venture Capital Survey, 2018.

6 General Partner survey statistics are sourced from survey responses of 476 respondents from General Partners, of which 250 are based in emerging markets. From IFC Gender Diversity in Private Equity and Venture Capital Survey, 2018.

I. OVERVIEW AND APPROACH

REPORT OBJECTIVES

It is well documented that women are significantly underrepresented as investment decision makers in private equity (PE) and venture capital (VC) firms, as well as in the leadership of companies that receive this investment capital. Only 10 percent of all senior positions in PE/VC firms globally are held by women, and less than 3 percent of global VC was invested in women-led teams in 2017 (Preqin 2017; Zarya 2018).

Our research analyzes these gender gaps in PE/VC in emerging markets, and their relationship to performance through the view of gender balance: leadership teams with at least 30 percent of both men and women. Specifically, this report answers three questions:

- How **gender balanced are leadership teams** of General Partners (GPs), which allocate PE/VC capital, and of portfolio companies, which receive private equity and venture capital investments?
- Are there **benefits of moving leadership teams toward gender balance** within GPs and portfolio companies?
- **What can GPs do to move toward gender balance** in their leadership teams and those of the portfolio companies they invest in?

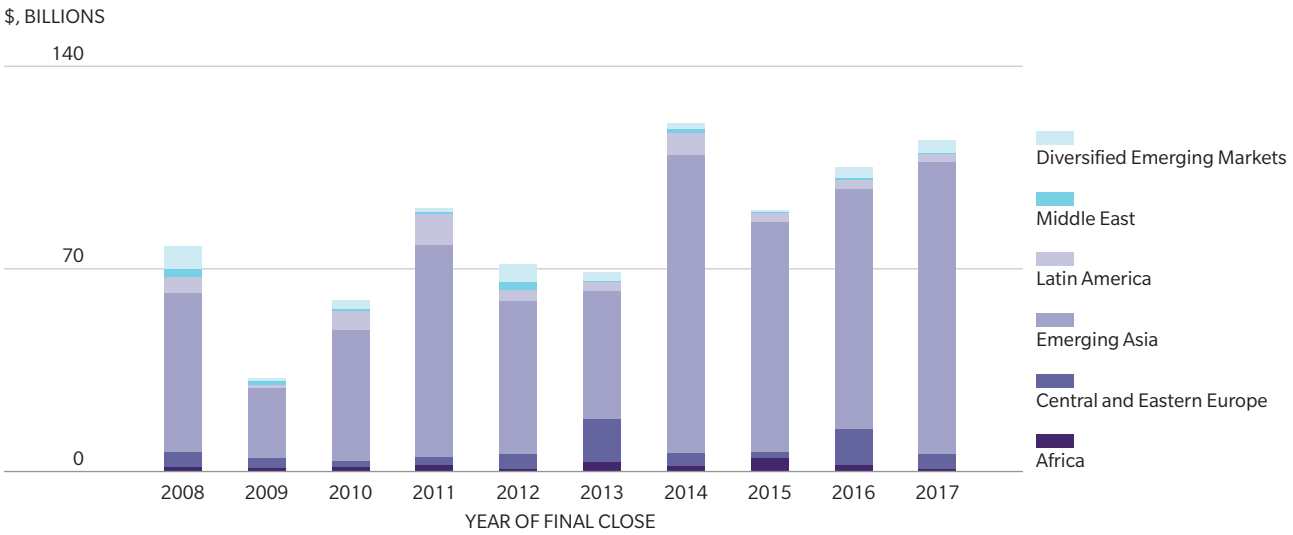
The report is organized around these questions. The remainder of this chapter provides context on the PE/VC industry in emerging markets, a summary of the existing research on the preceding key questions, and an overview of the fact base we use to answer the questions. Chapter 2, "Gender Gaps in Private Equity and Venture Capital," explores female representation within senior investment professionals allocating capital and leaders of portfolio companies receiving capital. It then analyzes how this representation influences gender balanced leadership teams for both GPs and their portfolio companies. Chapter 3, "Relationship between Gender Balance and Performance," assesses the correlations between gender balanced leadership teams and the performance of both GPs and portfolio companies. Chapter 4, "Steps General Partners and Limited Partners Can Take to Move Toward Gender Balance," identifies the most significant barriers to gender balance in PE/VC and actionable steps that investors can take to overcome the barriers.

OVERVIEW OF PRIVATE EQUITY

Though PE/VC is less than 5 percent of global assets under management, it is an important source of capital for catalyzing the growth of businesses (IPE 2018; Preqin 2018a). PE/VC assets under management totaled more than US$3 trillion at the end of 2017, of which nearly US$800 billion is dedicated to funds investing in emerging markets (Preqin 2018a, 2018b). Approximately 25 percent, or US$825 billion, of PE/VC capital raised between 2008 and 2017 was for funds focused on emerging markets.[1] Emerging Asia, which was predominantly driven by China, accounts for nearly 80 percent of this fundraising (Preqin 2018b). Figure 1 shows a breakdown of capital raised in different regions.

There are three types of PE/VC stakeholders covered by this research: (a) LPs, which allocate capital to funds; (b) GPs, which manage a fund and invest capital raised; and (c) portfolio companies, which receive capital from

Figure 1: Aggregate Capital Raised by Private Equity and Venture Capital Funds Focused on Emerging Markets, 2008–17



Source: Preqin 2018b

Note: Diversified Emerging Markets includes funds that invest in multiple emerging market regions. Emerging Asia excludes Hong Kong, Japan, and Singapore

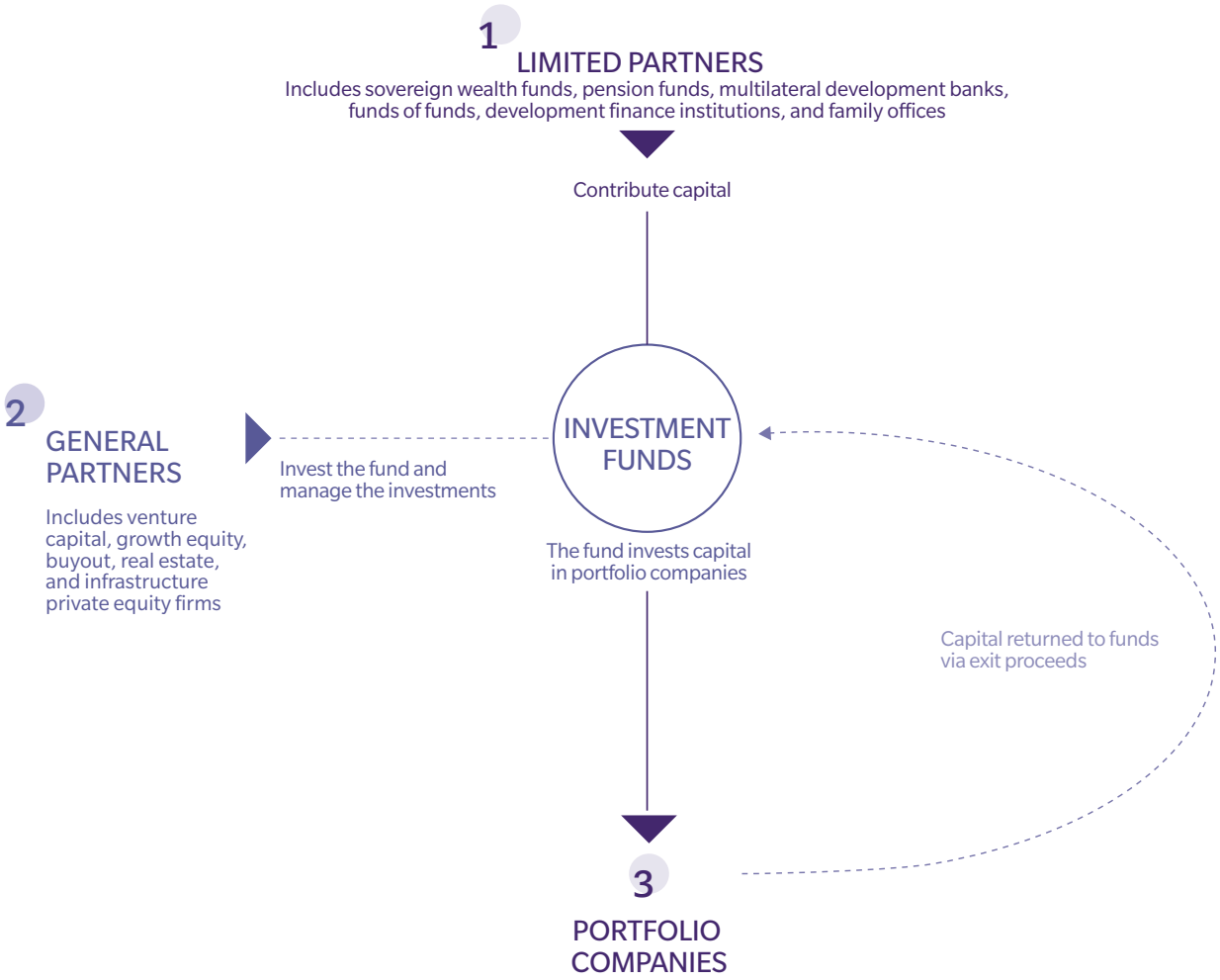
a fund to grow their businesses. Returns are generated from these investments when a fund successfully exits a business, which includes selling its equity stake to another party at a value higher than the investment cost (e.g., through an initial public offering, trade sale to a strategic partner, sale to another PE/VC fund, or acquisition by another company). The relationships between these stakeholders are highlighted in Figure 2. The primary focus of this research is on gender diversity in GPs (e.g., PE/VC firms) as allocators of capital and portfolio companies as recipients of capital. This research also explores the role LPs can play in driving change through its role investing in funds.

GENDER DIVERSITY AND FINANCIAL PERFORMANCE

There is significant research outlining the benefits of diversity in leadership. The expected benefits of increasing diverse perspectives within teams, of which gender diversity is one component, are well documented and generally accepted in business and academia. Diverse leadership teams are less likely to exercise group think and carry conscious and unconscious biases in decision-making processes. They tend to encourage team members to become more aware of their entrenched ways of thinking and question their assumptions, which in return helps them better process information and avoid making errors in decision-making processes (Rock and Grant 2016). Gender diversity—the equitable or fair representation of people of different genders[2] —can introduce different perspectives, problem-solving approaches, and increase innovation and risk management effectiveness (Rock and Grant 2016).

However, researchers seeking to quantify the benefits of diversity, including gender diversity, on organizational performance face several hurdles. These problems are often exacerbated at the intersection of illiquid PE/VC investments and emerging markets. For instance, decision-making dynamics vary across organizations, and it is hard to ascertain and reflect those idiosyncrasies both at scale and through time. Sufficiently large samples of reliable gender and performance data are hard to acquire in consistent forms. Finally, the lack

Figure 2: Stakeholders in Private Equity and Venture Capital



of gender diversity and the expected barriers to equal opportunity for men and women within PE/VC could bias any data sample (e.g., limited female representation, less female industry experience) that could be used to assess the relationship between performance and gender balance.

Previous research on gender diverse leadership and performance has been mixed, though most findings point to either positive correlations or no statistically significant relationships between gender diversity and performance. Few findings suggest that increasing gender diversity would negatively affect organizational performance, with some exception to compulsory changes driven by regulations (e.g., mandatory board quotas [Ahern and Dittmar 2012]).

Developed public markets have been analyzed, but generally focus on the gender diversity of boards of directors, which have repeatedly found a positive relationship between greater board diversity levels and company performance (Eastman, Rallis, and

Mazzucchelli 2016; Stiehler and Freedman 2016). Public emerging markets have been studied in isolation and focused on specific geographies, but divergent methodologies and fact bases have shown positive and negative correlations between gender diversity and performance (Morningstar 2018; Nathan 2013; Pletzer et al. 2015; Sherif 2015). However, a meta-analysis of 20 academic studies on the relationship between female representation on corporate boards and firm financial performance has found that the effect of greater gender diversity was small and nonsignificant (Pletzer et al. 2015). Outside of direct financial performance, other researchers have found statistically significant correlations between higher shares of women on boards and greater stability within banks (Sahay, R., M. Čihák, and IMF Staff 2018), as well as benefits of stronger environmental, social, and governance (ESG) performance, which would be expected to lead to better business performance (Di Miceli and Donaggio 2018).

Initial research in private markets, particularly venture capital in the United States, has generally found a positive relationship between diversity and performance, though some findings are mixed. Private markets have been analyzed from the perspective of individual venture capital funds, such as First Round Capital,[3] and at portfolio levels for private debt, such as Calvert Impact Capital (Moran 2018). In both instances, the analysis has yielded a positive relationship between gender diversity and performance, though the findings have not been evaluated for statistical significance. More comprehensively, a research team from Harvard Business School focusing on investment decision makers in venture capital has found a positive relationship, suggesting that "firms that increased their proportion of female partner hires by 10 percent saw, on average, a 1.5 percent improvement in overall fund returns each year." (Gompers and Kovvali 2018) However, findings of research sponsored by the Knight Foundation have found that U.S.-based funds managed by diverse-owned firms generally do not perform better or worse than nondiverse-owned firms within typically accepted statistical confidence intervals after controlling for relevant characteristics (Lerner et al. 2019).

Little to no research has been done to explore the relationship in PE/VC in emerging markets. Our research aims to fill the void. We test the correlation between gender diverse leadership and performance in PE/VC for GPs—focusing on partner level in

investment roles—and portfolio companies—focusing on executive team and board members—operating within emerging markets. Though the existing research is mixed on the relationship between gender diversity and performance, we hope our research will contribute to the discussion by looking at these questions from a unique perspective (gender balanced leadership, PE/VC, emerging markets). A summary of the existing research is provided in Appendix B.

METHODOLOGY

This research explores whether the representation of gender (e.g., both men and women) in the leadership of GPs and portfolio companies is imbalanced, and the impact that moving toward gender balance could have on financial performance. This research does not explore the optimal gender mix of decision makers, but rather tests whether moving toward greater gender balance could be positively related with returns. Thirty percent was used as the minimum threshold of the opposite gender required to consider a team gender balanced (see Figure 3), which is based on tipping points identified by other organizations and research.[4] Though research has not converged on one inflection point, and a single tipping point for all organizations is likely overly precise, sensitivity analyses were performed to assess the impact of the selected cut-off and are detailed in Appendix A, "Detailed Methodology."

The exploration of our research on gender balance in PE/VC is framed in terms of two funnels—talent management and investment pipeline—whose components can explain gender diversity outcomes of senior investment professionals in GPs and the leadership teams of portfolio companies. Both funnels, which are depicted in Figure 4, are influenced by a combination of internal and external factors. We also explore whether the funnels affect one another, e.g., if low diversity in senior

Figure 3: Definition of Gender Balanced and Male or Female Dominated Teams

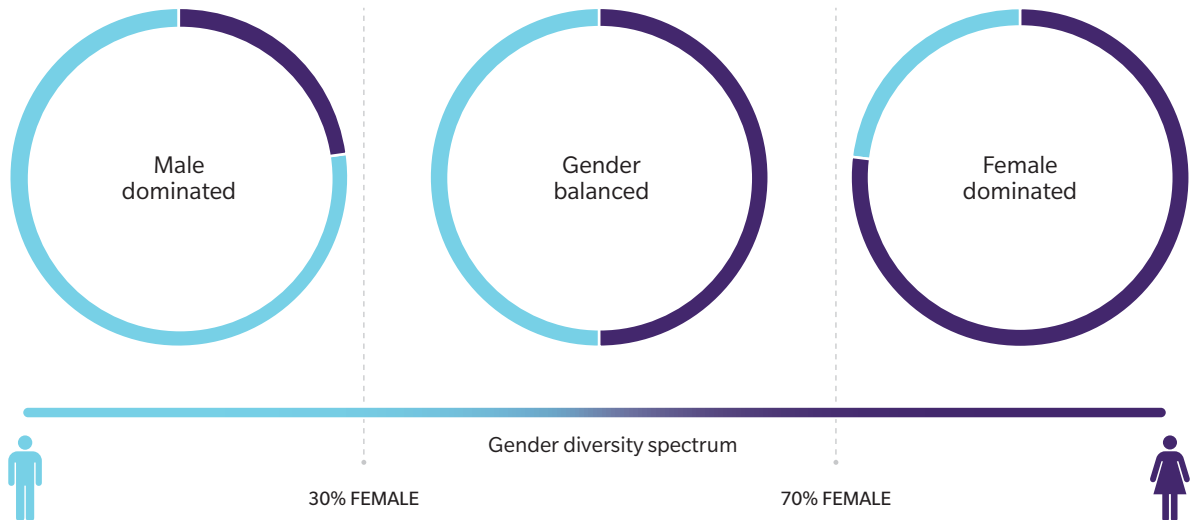
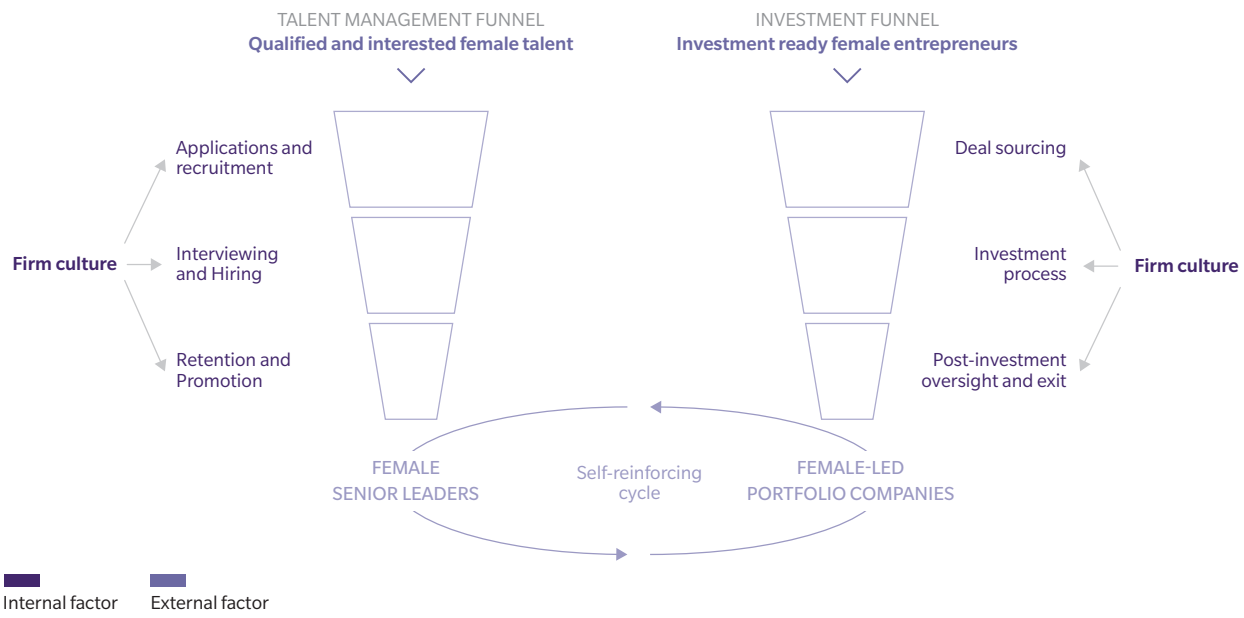


Figure 4: Framework for understanding Female Representation in Leadership in General Partners and Portfolio Companies



Note: Firm culture is a factor that affects all internal components of both the talent management and investment funnels.

investment professionals is correlated with low diversity in portfolio companies. This framework was used to understand the barriers that exist across the talent management and investment pipelines that are most significantly driving the low representation of women in the senior leadership of GPs, and in the leadership of portfolio companies, as well as the changes that can be made at each step in a GP's talent management and investment processes.

Our research aims to unpack these two funnels to answer our three research questions. Both primary and secondary research were conducted. The four principal methods for the primary research include the following:

- **Quantitative analysis** of gender diversity in leadership of more than 6,000 GPs and more than 5,400 portfolio companies and performance of more than 700 funds and more than 500 portfolio companies to assess the size of gender gaps and analyze their relationship to financial performance. These data were sourced through a combination of proprietary, third-party and publicly available sources, including data from IFC, RockCreek, PitchBook, and Preqin.
- **Interviews** of more than 50 GPs, LPs, and gender experts across developed and emerging markets to understand drivers of the low representation of women in the industry and recommendations for improving diversity.
- **Survey responses** of more than 500 practitioners from developed and emerging market PE/VC firms to test hypotheses on drivers of the business case and gender gaps in leadership and entrepreneurship at scale.
- **Case studies** of more than 10 PE/VC GPs and LPs from emerging markets and developed markets to showcase approaches in the industry that are being undertaken by investors to move toward more gender balanced outcomes.

Further details on the research fact base—including a breakdown of the analyzed firms and survey respondents—and the detailed methodology used to analyze this information are provided in Appendix A.

CHAPTER I NOTES

1 In Preqin (2018b), emerging markets include all economies in Africa, Asia (excluding Hong Kong SAR, China; Japan; and Singapore), Central and Eastern Europe, Latin America (South and Central America and the Caribbean) and the Middle East (excluding Israel).

2 The full scope of research on gender diversity would require a study of the full spectrum of gender identities; however, data are most easily available using the simplest form of the gender binary and does not evaluate nonmale or female gender identities.

3 See First Round 10 Year Project's website, http://10years.firstround.com/.

4 Other organizations, such as the Thirty Percent Coalition and the 30% Club, seek to address gender imbalance in corporate boardrooms with 30 percent as an aspirational target. Separate research has supported a broad range as well. Research by Calvert Impact Capital, for instance, has found that return on assets of companies in their private debt portfolio steadily increased at around 30 percent women in senior leadership positions, peaked at approximately 50 percent, and tapered off after 70 percent (Moran 2018). Newton-Small (2016) finds that the presence of women begins to significantly change a diverse set of institutions between 20 percent to 30 percent.

5 Includes over 2,000 emerging market GPs and 4,000 developed market GPs

II. GENDER GAPS IN PRIVATE EQUITY AND VENTURE CAPITAL

Chapter 2 explores the first question of our research: how gender balanced are leadership teams of GPs, which allocate PE/VC capital, and portfolio companies, which receive PE/VC investments? Using data from more than 6,000 GPs and 5,400 portfolio companies, we analyze female representation of senior investment professionals and leaders of portfolio companies. We then analyze the extent of gender balance amongst leadership teams in both GPs and portfolio companies.

For GPs, we find that only 11 percent of senior investment professionals in emerging markets are women, which is roughly comparable to the 10 percent observed in developed markets. Only 15 percent of senior GP investment teams are gender balanced, while nearly 70 percent are all male. For portfolio companies, emerging market female entrepreneurs receive only about 7 percent of investment capital, and less than 20 percent of senior leadership teams that receive capital are gender balanced.

11%
of senior investment professionals in emerging market Private Equity and Venture Capital are female

WOMEN AS ALLOCATORS OF CAPITAL

In aggregate, women make up only 11 percent of senior investment professionals in PE/VC in emerging markets. This rate is largely similar to that of developed markets, but entails significant variance across emerging market regions. Aggregate emerging market diversity statistics are buoyed by relatively high representation of female senior investment professionals in East Asia, particularly China. Female representation in emerging markets, excluding China, is only 8 percent. These gender diversity statistics are summarized in Figure 5.

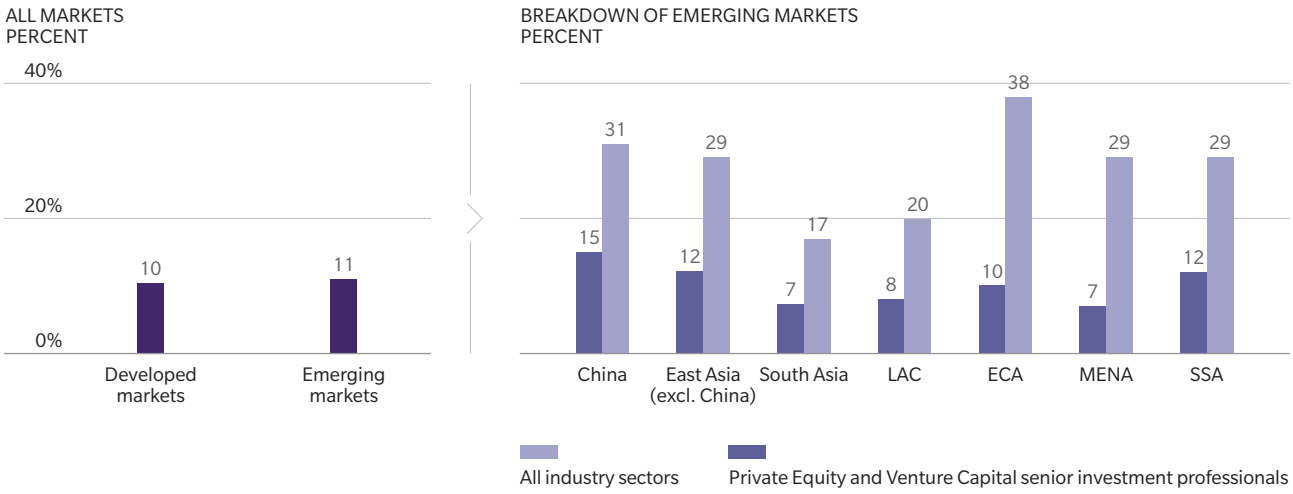
China, which makes up more than 90 percent of East Asia's senior investment professionals, has more than 40 percent of the emerging market investment professionals in absolute number and a female representation rate of 15 percent. See Box 1 on Chinese Private Equity and Venture Capital Sub-Saharan Africa leads non–East Asian emerging market peers with roughly 12 percent of senior

investment professionals. Other markets, including Middle East and North Africa (MENA), Latin America and the Caribbean (LAC), and South Asia, where 95 percent of senior investment professionals are based in India, appear to lag other emerging markets as well as overall developed markets.

Female representation in PE/VC is, at least in part, a function of the social and cultural nuances of the markets in which these firms operate. For instance, female labor force participation in India fell from about 37 percent in 2005 to about 27 percent in 2018, which may be symptomatic of broader trends in the labor market that could reduce female participation in PE/VC.[1] In either case, the gap between female representation in leadership in PE/VC and leadership in the broader market is an important contextual point to understand where PE/VC may lag other sectors. Overall, female representation in leadership positions in PE/VC in emerging markets appears to be less than half of midmarket businesses from similar regions, lagging by 17 percentage points, with the most significant gaps in ECA and MENA.[2]

Unsurprisingly, most of emerging market GPs do not have gender balanced senior investment teams.[3] In fact, just 15 percent of

Figure 5: Percent of Senior Investment Professionals Across Private Equity and Venture Capital who are Female



Source: Aggregated private equity and venture capital firms dataset (including International Finance Corporation, RockCreek, PitchBook, Preqin, and publicly available data)

Note: Senior investment professionals are defined as partners, C-Suite executives, and managing directors. Share of senior roles (chief executive officers, managing directors, chairmen and other senior decision makers) held by women in other industry sectors is sourced from Grant Thornton (2017), PE = private equity; VC = venture capital.

CHINESE PRIVATE EQUITY AND VENTURE CAPITAL

Our findings on China's outperformance in the representation of female senior investment professionals is in line with other indicators on female leadership. For instance, statistics from the World Bank World Development Indicators show that 64 percent of Chinese firms have female participation in ownership, which exceeds the average of economies in the next best region—LAC—by more than 33 percent. See Figure 6.

The trend of strong female leadership in China holds in both GPs and portfolio companies. There are many examples of female-led PE/VC firms in China, and China has five of the most recent nine female-founded unicorns[a] since 2010. It is the only economy in emerging markets that has more than one female-led unicorn. See Figure 7.

Figure 6: Female Ownership Rates in Businesses across Emerging Markets

Source: World Bank WDI.

Note: ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa ; SSA = Sub-Saharan Africa.

Figure 7: Sample of female-led Chinese Private Equity and Venture Capital Firms and "unicorn" portfolio companies

CHINESE FIRMS

	Female leader	Year	Total AUM US$
Asia Alternatives	Rebecca Xu, Melissa Ma (Co-founders)	2005	11 billion
GGV Capital	Jenny Lee (Managing Partner)	2000	6 billion
Capital Today	Kathy Xu (Founder)	2005	1.5 billion
Zhen Fund	Anna Fang (Partner, CEO)	2011	1.2 billion
Keytone Ventures	Stella Jin (Founder)	2008	600 million
HAO Capital	Elaine Wong (Co-founder)	2006	600 million

CHINESE "UNICORNS"

	Female founder(s)	Year	Valuation US$
Didi	Jean Liu	2015	56 billion
Tujia	Melissa Yang	2011	1.5 billion
Vip Kid	Cindi Mi, Jessie Chen	2013	1.5 billion
Xiaohongshu	Miranda Quo	2013	1 billion
Dt Dream	Wu Jing Chaun	2015	1 billion

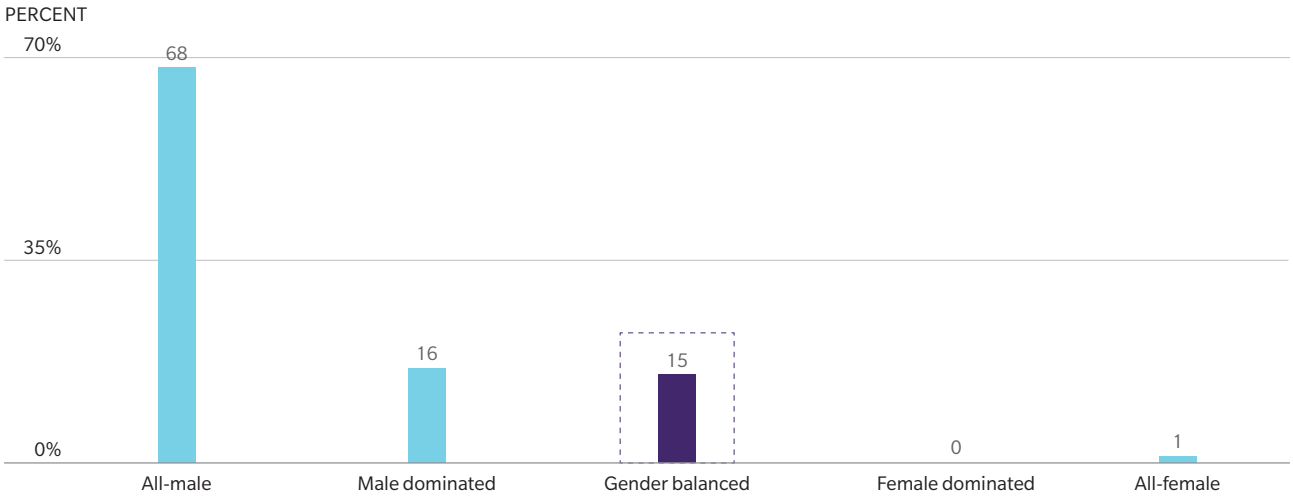
Source: PitchBook.

Note: AUM as of January 2019. AUM = assets under management; PE = private equity; VC = venture capital.

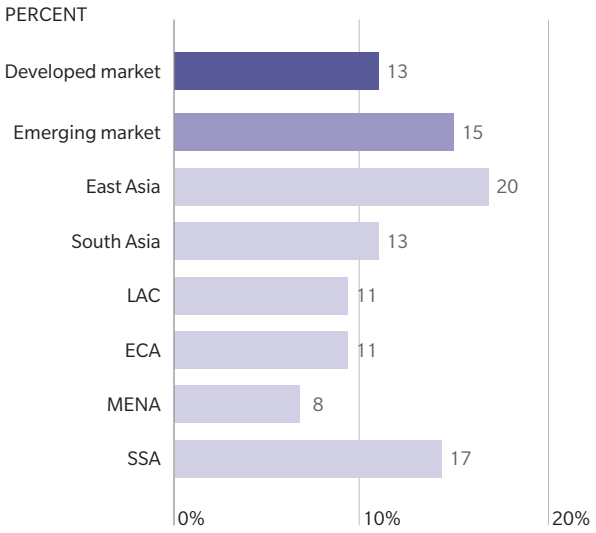
emerging market GPs have gender balanced senior investment teams, as shown in Figure 8, while about 68 percent of GPs are all male. Similarly, emerging markets are slightly ahead of developed markets in terms of gender balanced GPs, with significant variance across regions and investment strategies. See Figure 8, panels B–C.

Figure 8: Gender Composition of Senior Teams

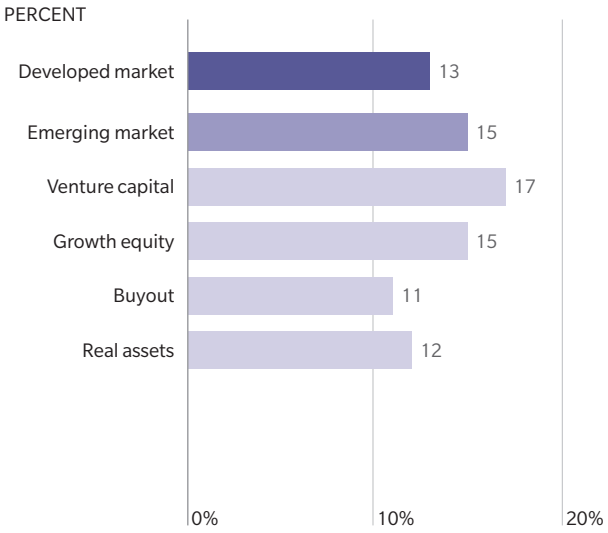
A. EMERGING MARKET FIRMS BY GENDER DIVERSITY



B. GENERAL PARTNERS GENDER BALANCED BY GEOGRAPHY



C. GENERAL PARTNERS GENDER BALANCED BY INVESTMENT STRATEGY



Sources: Aggregated Private Equity and Venture Capital from International Finance Corporation; PitchBook; Preqin; RockCreek; and other publicly available datasets.

Note: ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa PE = private equity; SSA = Sub-Saharan Africa; VC = venture capital.

WOMEN AS RECIPIENTS OF CAPITAL

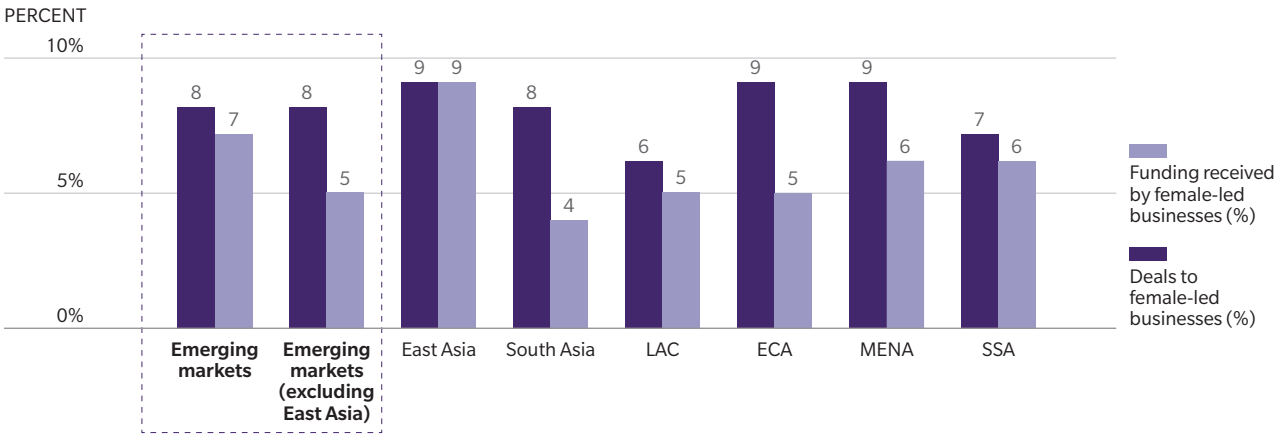
Women are underrepresented as founders and leaders of companies receiving PE/VC funding. Only 7 percent of total PE/VC funding in emerging markets goes to female-led businesses, as shown in Figure 9, though women are the leading executives in 8 percent of deals. The representation of female-led businesses varies significantly across regions, with East Asia, predominantly China, having the highest representation by value and count. Most other regions, however, have meaningfully higher number of deals versus value of deals, particularly South Asia and ECA.

Our data suggest that the median funding received by female-led businesses is 65 percent of the median funding received by male-led businesses; however, this appears to be mainly driven by larger number of deals in earlier stages. Women whose companies receive funding in emerging markets are much more likely to receive it in earlier funding rounds than in later rounds. For instance, female-led businesses are nearly twice as prevalent (11 percent to 13 percent, by count) in accelerator or incubator stages, with median funding

7%

total Private Equity and Venture Capital funding in emerging markets goes to female-led businesses

Figure 9: Percent of Capital Recipients who are Female by Geography



MEDIAN FUNDING (US$, THOUSANDS)	Emerging markets	Emerging markets (excluding East Asia)	East Asia	South Asia	LAC	ECA	MENA	SSA
FEMALE-LED	**7,000**	**6,400**	12,100	12,600	500	3,800	5,200	500
MALE-LED	**11,000**	**9,800**	30,000	14,800	12,000	2,800	10,000	9,700
RATIO (FEMALE/MALE) (%)	**65**	**65**	40	85	5	135	50	5

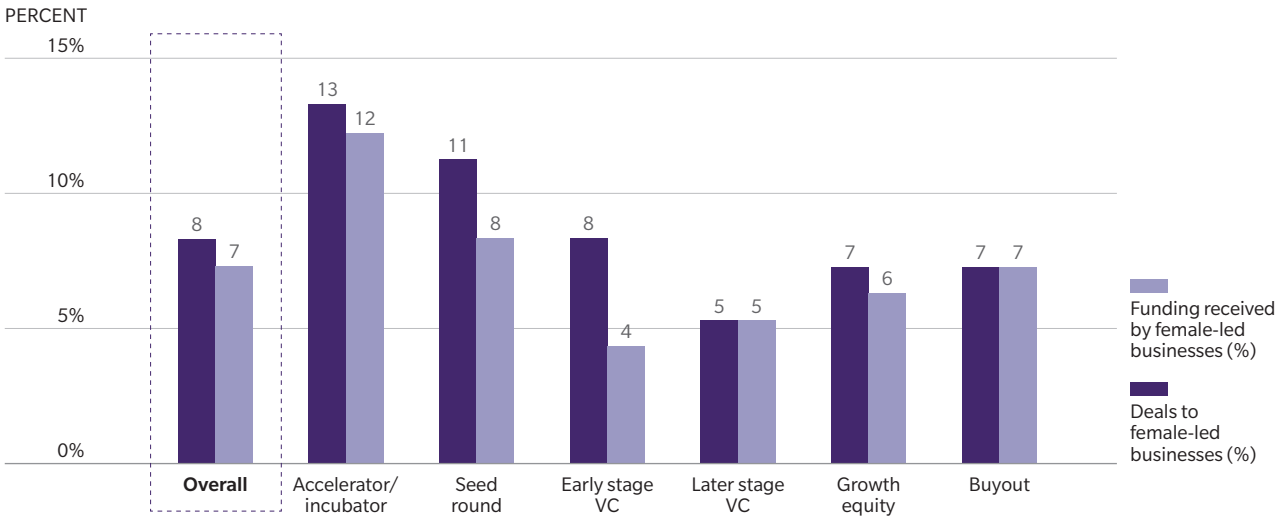
Sources: Aggregated datasets from International Finance Corporation; PitchBook; and other publicly available datasets.

Note: Total number of companies analyzed is more than 5,400. ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa.

between US$10,000 and US$100,000. In growth and buyout stages, when median funding is between US$10 million and US$100 million, women represent only 7 percent of investments (by count). See Figure 10. When controlling for the stage of the investments, the gap in median funding between male and female entrepreneurs reduces significantly.

The driver of the higher proportions of female-led businesses in earlier stage investments is difficult to define, because data for deals not made are unavailable. One optimistic perception expressed in the research interviews is that the higher numbers in earlier stages of funding represents a healthy pipeline of diverse entrepreneurs that has potential to translate to a more diverse mix of later stage deals in the future as the early stage companies grow and attract more capital for growth. There may be unconscious biases, however, that make it harder for female entrepreneurs to acquire higher growth funding (Kanze et al. 2017).

Figure 10: Percent of Capital Recipients who are Female by Investment Stage

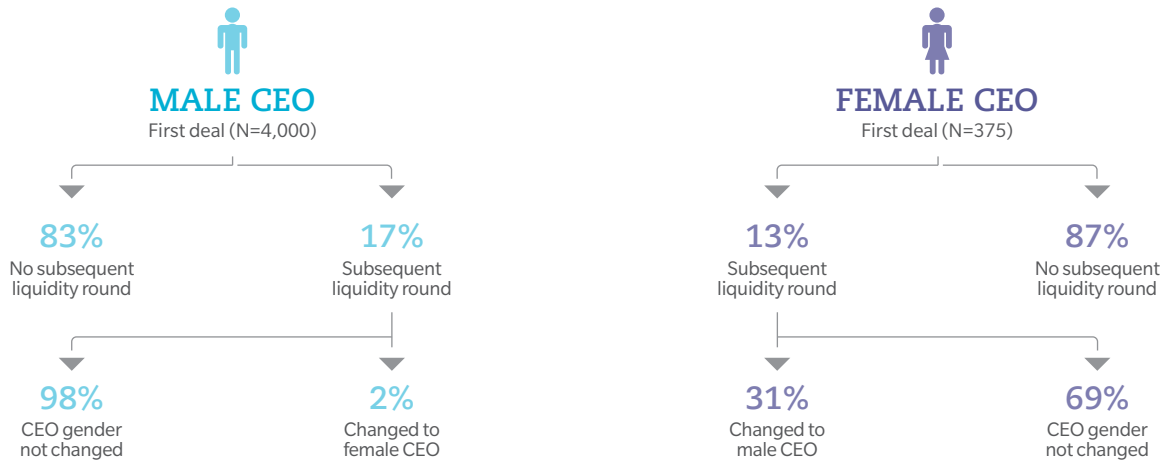


MEDIAN FUNDING (US$, THOUSANDS)							
FEMALE-LED	**7,000**	35	500	2,200	37,100	19,500	32,900
MALE-LED	**11,000**	30	400	3,000	26,000	20,000	55,600
RATIO (FEMALE/MALE) (%)	**65**	120	130	70	140	100	60

Sources: Aggregated datasets from International Finance Corporation; PitchBook; and other publicly available datasets.
Note: Total number of companies analyzed is more than 5,400. VC = venture capital.

Our data (albeit small) suggest that female Chief Executive Officer (CEO) were slightly less likely to secure a subsequent round of funding after the first investment, and female CEOs associated with the first round of funding were sometimes changed to or replaced by men in subsequent financing. As is shown in Figure 11, 13 percent of businesses with female CEOs in the initial round of investment received subsequent funding, compared to 17 percent for male CEOs. However, for the companies that did receive subsequent rounds of funding, there was a significant difference in the propensity of a CEO change to a male CEO, when female CEOs led the first deal. Thirty-one percent of businesses led by female CEOs in the first round of funding that received a second round of funding were replaced by a man as the leader of the deal for the company. In about half of these cases, the original female CEO did not appear to still be associated with the business or as a CEO. In the other half, the original female CEO could still be identified as a co-founder or co-CEO, but was not identified as the lead executive on the second round of funding. In any case, a change between CEO gender happened only 2 percent of the time for situations with male CEOs in the first round of funding. Though this data could suggest there may be biases that make it harder for female entrepreneurs to acquire later rounds of funding (e.g., through CEO replacement), more gender data will need to be collected through time to fully assess this hypothesis given the small sample.

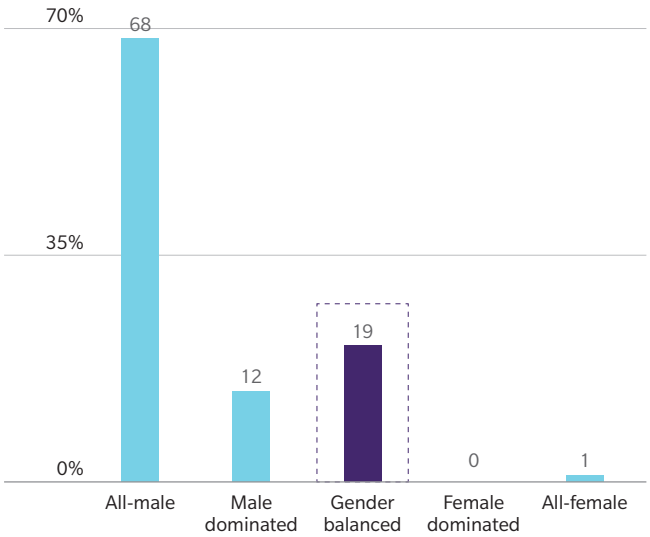
Figure 11: Path of Portfolio Companies Based on Gender of Company's CEO at Time of Identified Deal



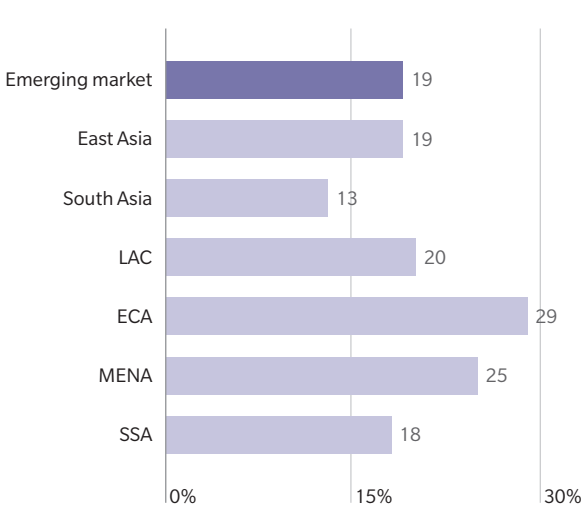
Sources: Aggregated datasets from International Finance Corporation; PitchBook; and other publicly available datasets.
Note: CEO Chief Executive Officer

Figure 12: Gender Composition of Senior Leadership Teams of Portfolio Companies

A. PORTFOLIO COMPANIES BY GENDER DIVERSITY



B. GENDER BALANCED PORTFOLIO COMPANIES BY GEOGRAPHY



Source: Aggregated datasets from International Finance Corporation; PitchBook; and other publicly available datasets.

Note: Based on 810 portfolio companies with gender data for company leadership teams. ECA = Europe and Central Asia; EM = emerging market; LAC = Latin America; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa.

In terms of the leadership of emerging market PE/VC portfolio companies, most teams are male dominated. Our analysis shows that gender balanced teams accounted for only 19 percent of all portfolio company senior leadership teams, whereas all-male and male dominated teams accounted for 68 percent and 12 percent, respectively, as shown in Figure 12, panels A and B. There is significant variance across the emerging market regions in terms of percentage of companies with gender balanced senior leadership teams, with ECA at 29 percent and South Asia at 13 percent. Overall, the representation of gender balanced senior leadership teams is slightly better than the senior investor teams making these investments (15 percent gender balanced), but still lags the emerging market average of women in senior management positions in emerging markets, which averages 28 percent. (Grant Thornton 2017).[4]

CHAPTER II NOTES

1 See the World Bank's "Labor force participation rate, female (% of female population ages 15+) (modeled ILO estimate)" data, https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS.

2 Findings based on interviews and surveys with midmarket businesses in all industry sectors in 36 economies. Emerging market average is calculated using weighted average of East Asia (China), South Asia (India), LAC (Latin America and the Caribbean), ECA (Eastern Europe and Central Asia), MENA (Middle East and North Africa), and SSA (Sub-Saharan Africa) weighted by number of senior investment professionals within each region. Note that professionals in India make up over 95 percent of South Asian senior investment professionals.

3 Gender balanced teams are those with a share of partners who are female between 30 percent and 70 percent; male dominated and female dominated teams are defined as firms with a share of partners who are female to be smaller than 30 percent and larger than 70 percent, respectively.

4 Investee companies with at least two executives identified are analyzed. Executives are defined as CEO, founder, C-Suite, managing director, president, and chairman.

5 Proportion of senior roles (C-Suite, managing directors, and partners) held by women sourced from Thornton (2017). Findings based on interviews and surveys with midmarket businesses in all industry sectors in 35 countries. Emerging market average is calculated using weighted average of East Asia (China), South Asia (India), LAC (Latin America and the Caribbean), ECA (Eastern Europe and Central Asia), MENA (Middle East and North Africa), and SSA (Sub-Saharan Africa) weighted by number of senior investment professionals within each region. Note that professionals in India make up over 95 percent of South Asian senior investment professionals.

III. RELATIONSHIP BETWEEN GENDER BALANCE AND PERFORMANCE

Chapter 3 explores the second question of our research: are there benefits of moving toward gender balance in leadership of GPs and portfolio companies? We use data from more than 700 PE/VC funds and 500 portfolio companies to assess correlations between gender balanced leadership and performance, while using peer benchmarks to control for nondiversity variables (e.g., fund vintage and geographic focus).

Our findings suggest that there is a positive correlation between the gender diversity levels of GPs and portfolio companies and their performance. The median gender balanced fund outperformed median unbalanced peers by as much as 20 percent in annual returns. Our research suggests this is primarily driven by enhanced investment decision making and expanded deal sourcing through broader entrepreneurial networks. For instance, female investment partners have more than 70 percent more female-led businesses in their portfolios than male partners. Portfolio companies with gender balanced leadership teams have outperformed unbalanced peers in median valuation increases by as much as 25 percent. Thus gender balanced GPs can take advantage of tendencies for people to maintain relationships with others who are similar to themselves, and invest in gender balanced.

GENDER BALANCED FUND PERFORMANCE

A key piece of our research was assessing the correlation—positive, negative, or null—between gender balance and fund performance in emerging markets. Our analysis uses net internal rate of return (IRR) and total value to paid-in (TVPI) multiples as our measures for performance, which are two of the most common metrics in the PE/VC industry.[1]

There are several nondiversity variables, such as vintage, geography, investment strategy, and fund size, that could explain differences in net IRR and TVPI outside of diversity. We control for many of these variables by normalizing all performance data against a peer benchmark, which is in-line with industry practice. The peer benchmark is the median performance of funds that are invested in similar vintages, geographies, and strategy types. We develop a view of "excess returns" (the difference between a fund's return and the returns of its peers) to analyze the correlation between diversity and performance.[2] Using excess returns as our dependent variable reduces the chances that any performance differences between gender balanced and male or female dominated funds is driven by factors outside of the gender mix of decision-making teams. We used the median performance of gender balanced and male or female dominated funds to minimize the effect of outliers. Finally, we test the impact that including a variable for fund size would have on the correlation between gender balance and fund performance.

Our analysis of emerging market PE/VC funds suggests that there is a positive correlation between gender balanced senior investment teams in GPs and performance of their funds. Though this positive correlation holds when using standard control variables, including vintage, geography, and investment strategy, we do not establish a causal relationship between greater diversity and higher returns. This relationship also holds when controlling for fund size. Controlling for fund size does not significantly affect the correlation between gender balance and fund performance because gender balance and fund size are minimally correlated with each other. More details of our methodology, the uncertainty of our estimate and the impact of fund size can be found in Appendix A .

For excess net IRR, we find that funds managed by gender balanced investment teams have a median excess IRR of 1.7 percent, while funds led by male or female dominated teams have a median excess net IRR of -0.1 percent.[3] See Figure 13 panels A–B. When normalized for the median net IRR of emerging market funds, which is approximately 8 percent, performance for funds of gender balanced teams is approximately 20 percent higher than funds of male or female dominated teams.[4]

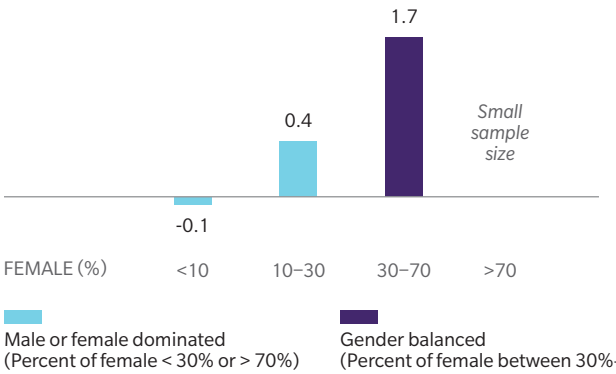
Funds managed by gender balanced teams outperformed male or female dominated teams across emerging market geographies and investment strategies. This includes venture capital—in which investments are typically focused on the technology industry—which tends to have a lower incidence of female participation than female labor participation in the overall market (UKCES 2015). Across investment strategies, for instance, median excess returns have been higher in VC (more than 4.5 percentage points), growth equity and buyout (more than 1.6 percentage points) and real assets (more than 1.3 percentage points) funds. See Figure 14 panels A-C. Across

20%
higher returns from funds managed by gender balanced versus male or female dominated teams

Figure 13: Performance of Emerging Market Funds, Excess Net IRR to Relevant Benchmark given Vintage, Geography and Strategy

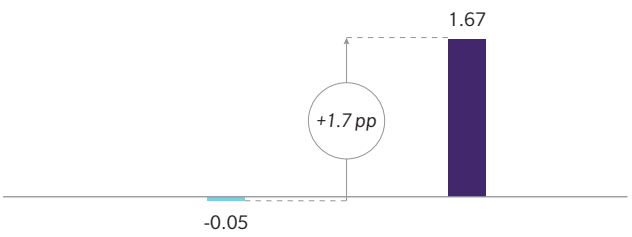
A.BY GENDER DIVERSITY GROUP

PERCENT



B. GENDER BALANCED VS. MALE OR FEMALE DOMINATED

PERCENT



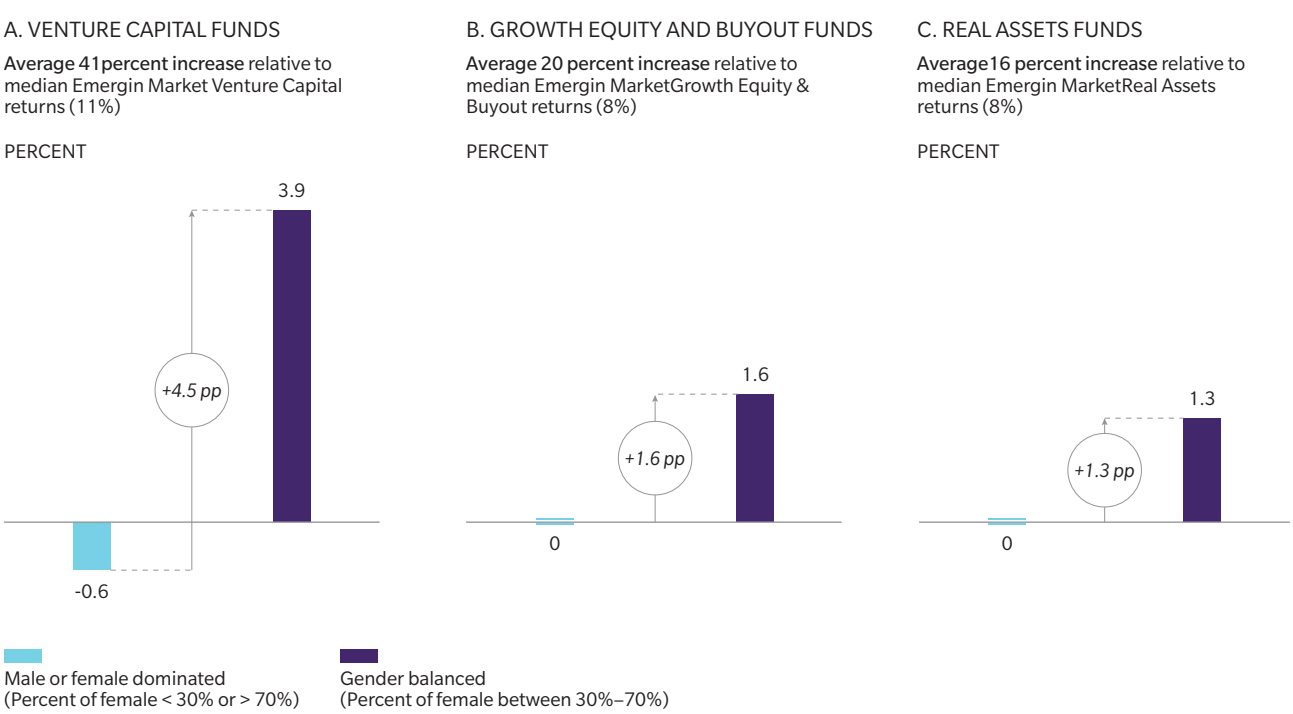
Source: Aggregated private equity and venture capital firms dataset (including International Finance Corporation, RockCreek, PitchBook, Preqin, and publicly available data).

Note: Median excess net IRR is relative to vintage, strategy, and geography benchmarks. Total number of emerging market funds with performance and gender data analyzed was 591. This includes 46 gender balanced firms. 424 firms had less than 10 percent of female senior investment professionals, 112 between 10 percent to 30 percent, and 9 with more than 70 percent female senior investment professionals. The difference is 1.7 percentage points between unrounded numbers for funds managed by male or female dominated and gender balanced teams. IRR = internal rate of return.

geographies, median excess returns were highest in East Asia (more than 2.0 percentage points), but held true for the other emerging markets (more than 1.3 percentage points). See Figure 15 panels A–B.

Our analysis of TVPI multiples, which do not account for the time value of money, also showed that the median fund managed by gender balanced teams outperformed the median fund managed by male or female dominated teams. Funds managed by gender balanced investment teams had a median excess TVPI of 0.17x, while funds led by male or female dominated teams had a median excess TVPI of -0.01x. When normalized for the median TVPI of analyzed emerging market funds, which is approximately 1.37x, performance for funds of gender balanced teams was approximately 13 percent

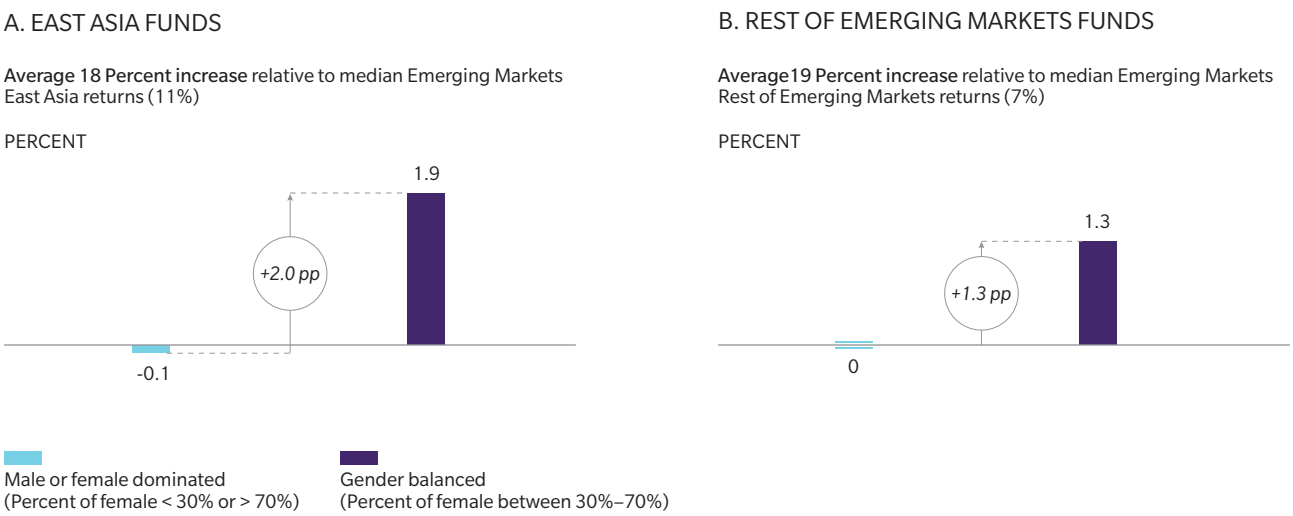
Figure 14: Performance of Emerging Market Funds by Strategy, Excess Net IRR to Relevant Benchmark given Vintage, Geography and Strategy



Source: Aggregated private equity and venture capital firms dataset (including International Finance Corporation, RockCreek, PitchBook, Preqin, and publicly available data).

Note: Median excess net IRR is relative to vintage, strategy, and geography benchmarks, by strategy. Total number of emerging market funds with performance and gender data analyzed was 591. Out of that total, 85 funds were VC, of which 13 were gender balanced; 396 were growth equity or buyout, of which 23 were gender balanced; and 110 were real assets funds, of which 10 were gender balanced. EM = emerging market; IRR = internal rate of return.

Figure 15: Performance of Emerging Market Funds by Geography, Excess Net IRR to Relevant Benchmark given Vintage, Geography and Strategy



Source: Aggregated Private Equity and Venture Capital data sets from International Finance Corporation; PitchBook; Preqin; RockCreek; and other publicly available datasets

Note: Median excess net IRR relative to vintage, strategy, and geography benchmarks, by geography. Total number of emerging market funds with performance and gender data analyzed was 591. Of that total, 229 were East Asia, of which 22 were gender balanced; 362 funds were "rest of emerging markets," of which 24 were gender balanced. EM = emerging market; IRR = internal rate of return.

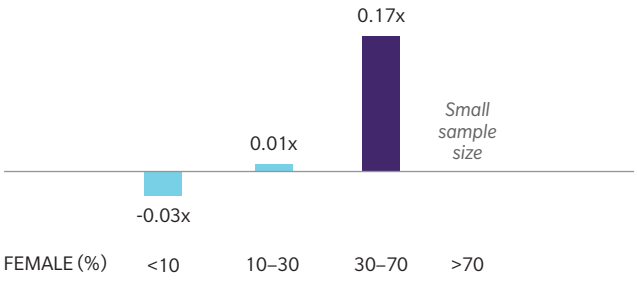
higher than funds of male or female dominated teams.See Figure 16 panels A–B.

Funds managed by gender balanced teams outperformed male or female dominated teams across emerging market geographies and investment strategies in terms of TVPI multiples as well. Across investment strategies, for instance, median excess returns were higher in Venture Capital (more than 0.20x), Growth Equity and Buyout (more than 0.18x) and Real Assets (more than 0.15x) funds. See Figure 17 panels A–C. Across geographies, median excess returns were higher in East Asia (more than 0.26x) and Rest of Emerging Markets (more than 0.05x). See Figure 18 panels A–B.

Figure 16: Performance of Emerging Market Funds, Excess Net TVPI to Relevant Benchmark given Vintage, Geography and Strategy

A. BY GENDER DIVERSITY GROUP

PERCENT

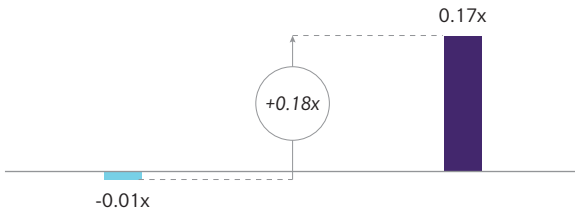


Male or female dominated
(Percent of female < 30% or > 70%)

Gender balanced
(Percent of female between 30%–70%)

B. GENDER BALANCED VS. MALE OR FEMALE DOMINATED

PERCENT



Source: Aggregated private equity and venture capital firms dataset (including International Finance Corporation, RockCreek, PitchBook, Preqin, and publicly available data).

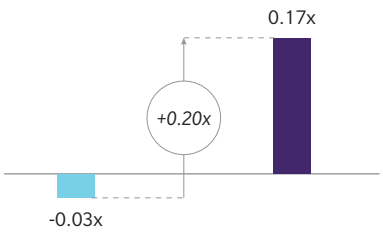
Note: Median excess net TVPI is relative to vintage, strategy, and geography benchmarks. Total number of emerging market funds with performance and gender data analyzed was 591. This includes 46 gender balanced firms. Of 591, 424 had less than 10 percent of female senior investment professionals, 112 between 10 percent to 30 percent, and 9 with more than 70 percent female senior investment professionals. The difference is 0.18 times between unrounded numbers for funds managed by male or female dominated and gender balanced teams. TVPI = total value to paid-in

Figure 17: Performance of Emerging Market Funds by Strategy, Excess Net TVPI to Relevant Benchmark given Vintage, Geography and Strategy

A. VENTURE CAPITAL FUNDS

Average 13 Percent increase relative to median Emerging Markets Venture Capital returns (1.52)

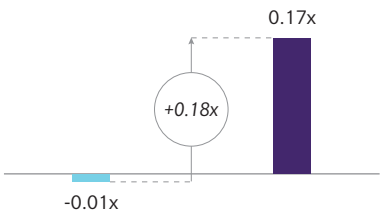
PERCENT



B. GROWTH EQUITY AND BUYOUT FUNDS

Average13 Percent increase relative to median Emerging Markets Growth Equity and Buyout returns (1.34)

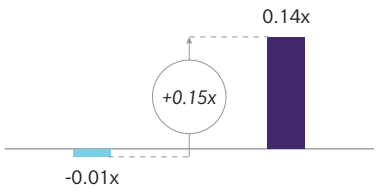
PERCENT



C. REAL ASSETS FUNDS

Average 12 Percent increase relative to median Emerging Markets Real Assets returns (1.28)

PERCENT



Male or female dominated
(Percent of female < 30% or > 70%)

Gender balanced
(Percent of female between 30%–70%)

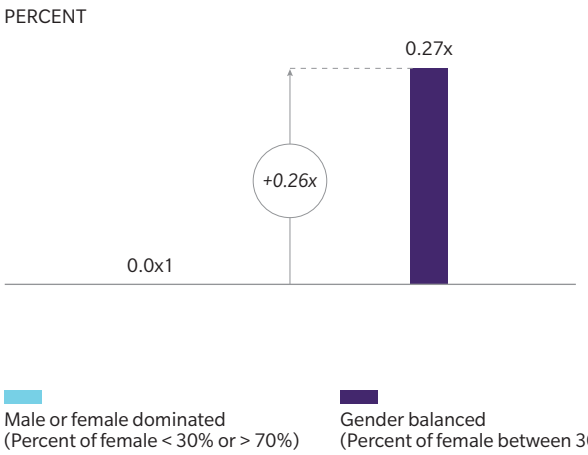
Source: Aggregated private equity and venture capital firms dataset (including International Finance Corporation, RockCreek, PitchBook, Preqin, and publicly available data).

Note: Median excess net TVPI is relative to vintage, strategy and geography benchmarks, by strategy. Total number of emerging market funds with performance and gender data analyzed was 591. Of the total, 85 funds were venture capital, of which 13 were gender balanced; 396 were growth equity or buyout, of which 23 were gender balanced; and 110 were real assets funds, of which 10 were gender balanced. EM = emerging market; TVPI = total value to paid-in.

Figure 18: Performance of Emerging Market Funds by Geography, Excess Net TVPI to Relative Benchmark given Vintage, Geography and Strategy

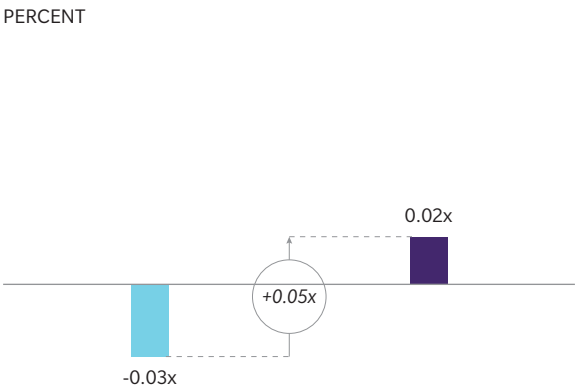
A. EAST ASIA FUNDS

Average18 Percent increase relative to median Emerging Markets East Asia returns (1.41)



B. REST OF EM FUNDS

Average 4 Percent increase relative to median Emerging Markets Rest of Emerging Markets returns (1.26x)



Male or female dominated
(Percent of female < 30% or > 70%)

Gender balanced
(Percent of female between 30%–70%)

Source: International Finance Corporation (IFC) Gender Diversity in Private Equity and Venture Capital Survey, 2018.
Note: Median excess net TVPI is relative to vintage, strategy, and geography benchmarks, by geography. Total number of emerging market funds with performance and gender data analyzed was 591. Of the total, 229 were East Asia, of which 22 were gender balanced; 362 funds were "rest of emerging markets," of which 24 were gender balanced. EM = emerging market; TVPI = total value to paid-in.

CASE STUDY

DPI Development Partners International

DEVELOPMENT PARTNERS INTERNATIONAL

The impact of gender balance on decision-making and performance

Development Partners International (DPI) is a leading pan-African PE/VC firm that focuses on buyout and growth equity investing. It was co-founded in 2007 by Miles Morland and Runa Alam. The firm currently manages approximately US$1.1 billion in assets, has more than 35 employees, and has invested in 20 companies. DPI is an example of how gender diversity can change the way firms make decisions and how performance benefits can be obtained through gender balanced investment teams.

Beginning with a gender balanced mix of partners and other investment professionals, the firm views everything through a diverse filter. DPI believes that its diversity changes how the firm—from top to bottom—perceives all decisions, from hiring to investments. For instance, as a firm builds from a diversity of experiences and backgrounds, its hiring decisions more greatly reflect the value that unique perspectives and experiences would bring to the firm. This collectively diverse perspective permeates throughout the firm's culture and affects how everyone—women and men—make decisions. This filter has enabled the DPI to naturally build a gender balanced firm as it has grown: now, 45 percent of the firm is female, including 50 percent of partners and 50 percent of the investment committee.

With its track record of success in investing in Africa, DPI is a gender balanced investment firm demonstrating performance. Its first fund, African Development Partners I, a vintage 2008 fund, closed at approximately US$400 million and is a Cambridge Associates top quartile fund. The fund invested in nine portfolio companies, of which two had initial public offerings (IPOs) on the Algiers and Johannesburg Stock Exchanges, one was acquired by a publicly traded company, and several were exited through private market transactions. With momentum from this success, DPI's second fund, African Development Partners II, closed in 2013 at US$725 million, more than an 80 percent increase from its original fund and oversubscribed by 45 percent. ADP II has invested in 13 companies, including two companies whose primary consumer base are emerging middle-class women.

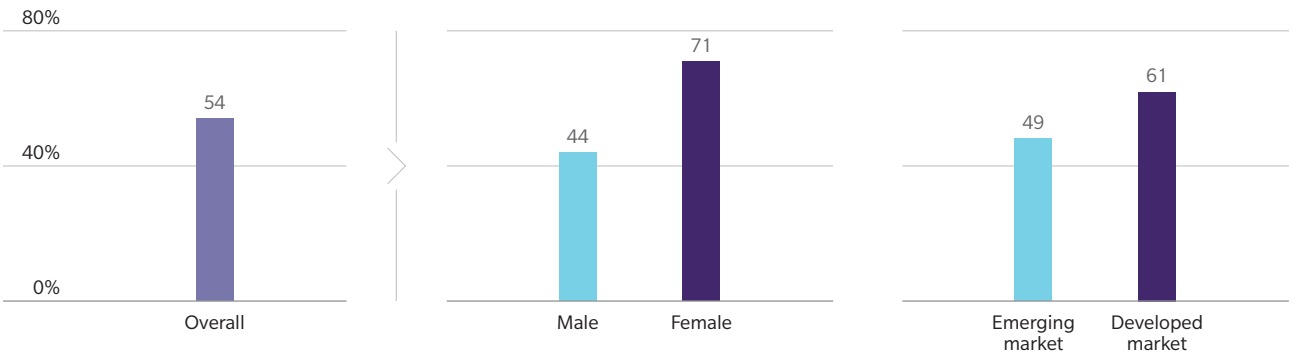
BENEFITS OF GENDER BALANCED GENERAL PARTNERS

Through interviews and surveys, we explored potential underlying drivers of the observed outperformance of the funds of gender balanced firms and practitioners' perception of the relationship between gender balance and performance. The view of the relationship between gender diversity and performance and its drivers varies across GPs by gender and their market. For instance, female respondents are about 60 percent more likely to believe in a positive relationship compared to male respondents, while developed market respondents are about 25 percent more likely to believe in the positive relationship compared to emerging market respondents. See Figure 19.

Though about half of emerging market survey respondents state they do not believe moving toward gender balance would improve returns, nearly 50 percent of these respondents still believe that increasing gender diversity would yield benefits in investment decision making, talent management, operations and investor relations, and deal sourcing.[1] Thus, about half of respondents who are skeptical of benefits to returns still believe there are benefits to increasing gender diversity in senior investment teams.

In addition, survey respondents and interviewees highlight several other benefits of moving toward gender balance, including enhanced investor relations and talent management. See Figure 20. Our research suggests that firms could become competitively disadvantaged if they do not have diverse investment teams. The emerging market GP survey respondents who believe in the positive relationship between gender diversity and performance expect increased diversity to have several benefits: 58 percent expect enhanced talent management, operations, and investor relations; 87 percent expect improved investment decision making; and 60 percent expect improved deal sourcing.

Figure 19: Percent of General Partners who Believe that Increased Gender Diversity would Improve Performance



Source: International Finance Corporation (IFC) Gender Diversity in Private Equity and Venture Capital Survey, 2018.

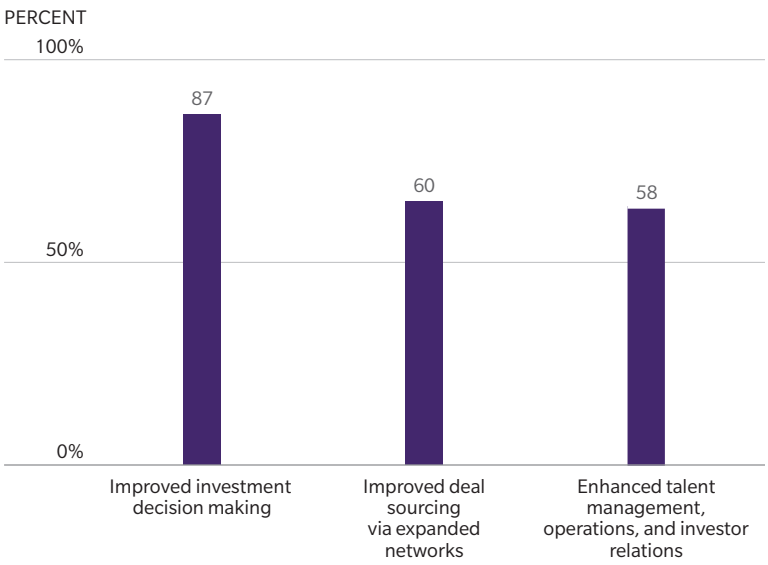
Note: Data reflect percentage of General Partners who believe in a positive relationship between greater gender diversity of senior investment professionals and investment returns. Includes 460 General Partner respondents.

Enhanced Talent Management, Operations, and Investor Relations

Surveyed industry practitioners believe that increased gender diversity could yield improved governance, better risk management, and greater retention of both male and female employees. The positive impact of gender balance on governance and risk management, as well as the potential impact this could have on financial performance, is supported by other research. This research includes studies that have found statistically significant correlations between higher shares of women on boards and greater stability within banks (Sahay, Čihák, and IMF Staff 2018). Additionally, other research has found that moving toward gender balance in board members and leadership teams would contribute to stronger environmental, social and governance (ESG) performance. This, in turn, would be expected to lead to better business performance (Di Miceli and Donaggio 2018).

65%
of Limited Partners view gender diversity in General Partners as important

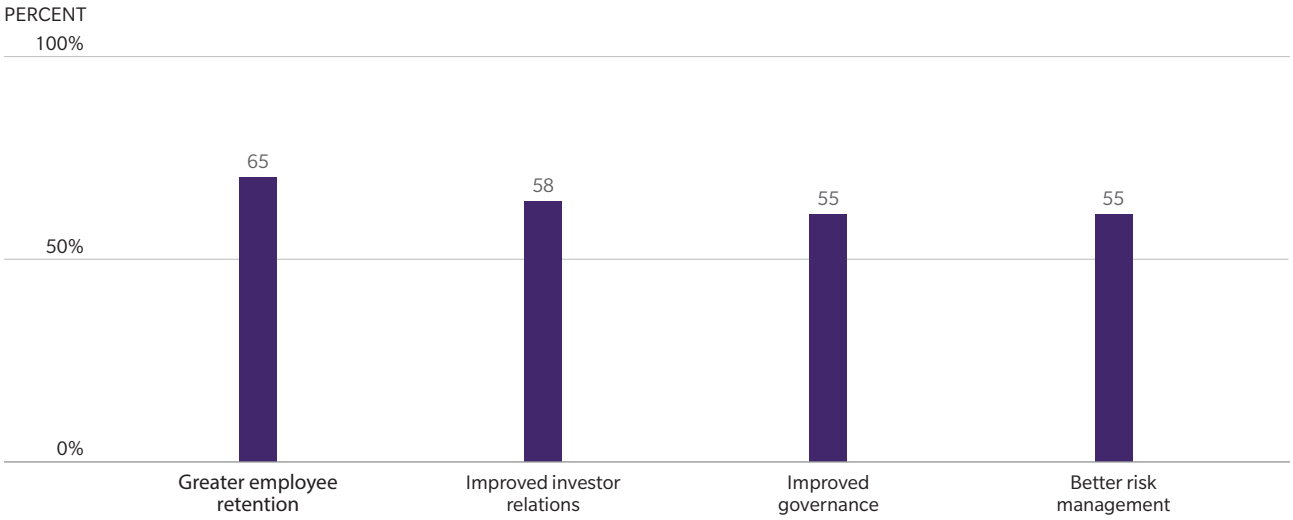
Figure 20: Emerging Markets General Partners' View on Benefits of Gender Diversity



Source: International Finance Corporation (IFC) Gender Diversity in Private Equity and Venture Capital Survey, 2018.

Note: Data reflect percentage of General Partners who believe in a positive relationship between gender diversity and performance and who believe in the following benefits (shown in bars). Includes responses from 83 emerging market partner level General Partner respondents who buy into the positive relationship between gender diversity and performance. Enhanced talent management, operations, and investor relations benefits include better risk management, improved governance, improved investor relations, and greater employee retention of both male and female candidates.

Figure 21: Emerging Markets General Partners' View on Additional Benefits of Gender Diversity



Source: International Finance Corporation (IFC) Gender Diversity in Private Equity and Venture Capital Survey, 2018. .
Note: Data reflect percentage of General Partners who believe in a positive relationship between gender diversity and performance.

Improved gender diversity could also be used as a means of differentiation for PE/VC firms seeking to raise funds in emerging markets. Surveyed LPs largely view gender diversity in a firm's investment team as important. About 65 percent of the LPs surveyed state they view gender diversity in GPs firms' investment team as important, very important, or a top priority when committing capital to funds. LPs in PE/VC increasingly are seeking to invest in companies with more gender diverse leadership see Figure 21, which is in part demonstrated by the Institutional Limited Partners Association's recent move to include questions on diversity in its due diligence questionnaire (DDQ).

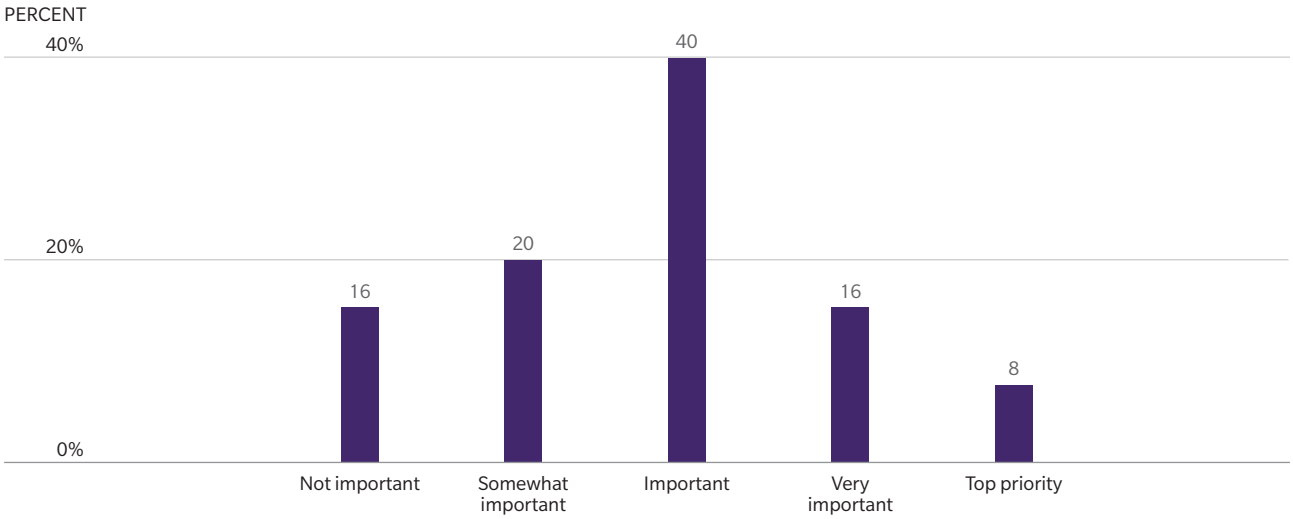
Improved Investment Decision Making, Deal Sourcing, and Closing

Our research suggests that gender diverse investment teams are more likely to have female entrepreneurs in their networks, will be better able to assess business models, and will be more competitive in attracting top female entrepreneurs. Thus, moving toward gender balance would give firms differentiated access to female-led and gender diverse teams. Gender diverse investments team would gain the following,

Expanded deal flow. Gender diverse investment teams are more likely to have access to female entrepreneurs through their existing networks, which about 60 percent of surveyed industry practitioners believe would be a benefit of greater gender diversity. Research suggests that networks naturally develop between people of similar genders, ethnicities, and backgrounds (McPherson, Smith-Lovin, and Cook 2001). As such, the proportion of women in female networks tends to be much higher than in male networks. Thus, increasing representation of dissimilar senior investment professionals, including of gender diverse backgrounds, likely would expand the scope of the investment firm's network.

Expanded networks will increase the scope of the deal funnel because emerging market deal sourcing is largely network based. Ninety-four percent of surveyed emerging market GPs state that professional networks are an important source for deal flow, which is nearly

Figure 22: Limited Partners' View on Importance of General Partners' Gender Diversity



Source: : International Finance Corporation (IFC) Gender Diversity in Private Equity and Venture Capital Survey, 2018.

Note: Data reflect percentage of Limited Partners by their view on how important gender diversity in General Partners investment teams is when committing capital to funds. Based on a sample of 25 Limited Partners survey respondents.

twice as high as the next most important source. Thus, gender diverse teams will likely have a wider set of prospective deals that enter the deal funnel because they would access both male and female driven sourcing networks.

Better ability to assess business models. Our findings suggest that gender balanced teams will be better at separating "good from great," particularly for businesses that are serving female consumers.

Greater gender diversity is expected to improve investment decision making. Though gender diversity is only one variable to be considered in diversity of thought, the relationship between increased diversity and improved decision making is well-documented in existing literature. Greater diversity would be expected to help investment teams avoid group think, reducing bias in investment decision-making processes. More diverse teams encourage team members to become more aware of their ways of thinking and question their assumptions, which in turn helps them better process information and avoid making errors in decision-making processes (Rock and Grant 2016).

Research suggests that investors may be less likely to connect to the sectors that female entrepreneurs serve and are reluctant to invest in businesses that serve consumers or address gaps in markets they don't understand (Morgan Stanley 2018). Interviews of industry practitioners support this view, identifying several examples in which business models that primarily cater to female consumers may have been undervalued or underappreciated by male senior investment professionals who do not fully understand the market appeal.

Male dominated teams thus may discount the upside of such companies that may present good business opportunities. Women drive 70 percent to 80 percent of all consumer purchasing, through a combination of buying power and influence, and promising businesses that are inclusive of or focused on the women's consumer market segment can be a growth opportunity for investors (Brennan 2018). Thus, gender balanced teams will likely be better able to assess the opportunity of businesses that appeal to female consumers.

Higher likelihood of appealing to top female or gender diverse businesses. Unconscious biases generally mean that people, all else being equal, are naturally inclined toward working with people from similar backgrounds. This natural pull toward homophily has been documented consistently in investment and noninvestment research. In investments, researchers from Harvard Business School, Harvard University, and the University of Illinois at Urbana-Champagne have found strong evidence of homophilic selection in collaboration across pairs who possess similar characteristics and backgrounds. For instance, they have found the probability of collaboration between two venture capitalists increases by 39.2 percent if they are of the same ethnicity (Gompers, Mukharlyamov, and Xuan 2014).

Existing analyses support the positive relationship between the diversity of GPs and portfolio companies. Analysis in developed markets suggests that female investors are more likely to invest in management teams that include women. A study of U.S. venture capital markets has found that VC firms with women partners are more than twice as likely to invest in gender diverse management teams and more than three times more likely to invest in companies with female CEOs (Brush et al. 2014). A separate study by Credit Suisse analyzed the average percentage of funding rounds that went to companies launched by female entrepreneurs. It has

"Venture capital requires assessing entirely new business models against underserved markets. You need to understand the market's consumers to successfully disrupt it, and you'll only partially understand consumers' perspective if you don't have diverse teams."

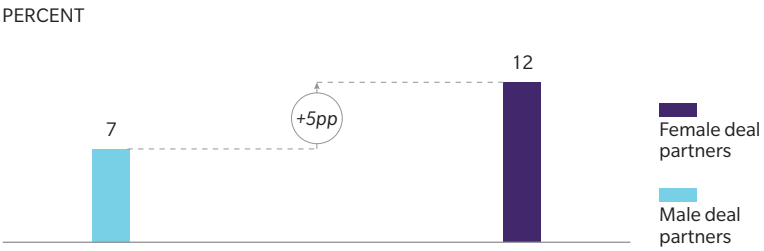
YEMI LALUDE
MANAGING PARTNER,
AFRICA AT TPG GROWTH

found that, out of 410 VC firms, partner teams with at least one female are one-and-a-half times more likely to invest in female-led businesses (Dawson, Kersley, and Natella 2016). Similar research from the Harvard Business School has found that "having a female partner is strongly correlated with the investment into companies with a female entrepreneur," which supports the idea of strong gender-based homophily between senior investment professionals and potential portfolio company founders (Gompers and Wang 2017).

Our analysis of emerging market GPs and portfolio companies yields a similarly positive relationship between diversity of investment partners and that of portfolio company CEOs. Though the sample of deals with a female partner and deals involving a female CEO are limited, our dataset shows that listed female deal partners have about 70 percent more investments in companies with female CEOs than male deal partners. This is shown in Figure 23.

The data suggest a positive relationship between women as allocators of capital and women as recipients of capital. For PE/VC firms, this could mean that improving the gender diversity of senior investment professionals could help arrive at a more diverse investment portfolio. For the industry, this could mean that the proportion of female-led businesses receiving capital could increase as the representation of women in leading investment roles improves.

Figure 23:Percent of Deals with Female CEO by Deal Partner Gender



Source: International Finance Corporation (IFC) Gender Diversity in Private Equity and Venture Capital Survey, 2018.

Note: Data reflect percentage of investments going to female-led businesses by gender of deal partner. Based on total sample of about 1,900 deals with CEO and lead partner gender data.

CASE STUDY

Lightspeed

LIGHTSPEED VENTURE PARTNERS

The virtuous cycle of diversity in investors yielding access to diverse investees

Lightspeed Venture Partners is a global venture capital firm based in Silicon Valley focused on consumer and enterprise investing. The firm manages over US$6 billion in capital and has made over 350 investments across the China, India, Israel and United States, including companies such as GIPHY, GOOP, Grab, The Honest Company, MuleSoft, Nest and Snap Inc. Lightspeed has exited over 125 companies through IPOs and acquisitions.

Lightspeed sees female founders as a differentiated opportunity in the consumer space. One of the firm's investment theses is that consumer technology is driven by popular culture. Popular culture is often led by women, who are early adopters. Consumer facing businesses are some of the most significant private equity and venture capital investments in emerging markets (~24%, second only to technology at ~30%), and as much as 70% of consumer purchasing is driven by women.

Since 2012, Lightspeed has invested more than US$178 million in female-founded companies, many of which are consumer facing. Its investments in female founded consumer companies include Stitch Fix, which exited through IPO on the NASDAQ, GOOP, The Honest Company and Girlboss. More than one-third of their consumer facing investments have a female founder, which is significantly higher than developed (7%) and emerging market (10%) averages of the proportion of B2C investments that are female-founded.

Furthermore, Lightspeed found that increasing gender diversity of its senior investment team led to greater diversity in its portfolio companies. The firm has added multiple diverse individuals to the team in recent years. In 2015, about 29% of Lightspeed's consumer portfolio was in female founded companies, which increased to 35% after the team added its first of five female investment partners. This step change was driven in part by the fact that the new partners disproportionately sourced and invested in female founded companies—as much as 65% of her investments were in female-led businesses—which increased the portfolio's aggregate diversity levels.

The firm's experience underscores that different networks may lead to skews in deal sourcing, and the benefit that moving toward balance could have on sourcing, understanding, and closing investment opportunities in a diverse set of businesses.

"The differentiating factor in the consumer space is pop culture insights, not technology. Women are early adopters and female entrepreneurs understand their needs. Having female investors means it is more likely that those entrepreneurs will already be in our networks, someone from our firm will be able to connect with them, and the entrepreneur will want to partner with us."

JEREMY LIEW, PARTNER, LIGHTSPEED VENTURE PARTNERS

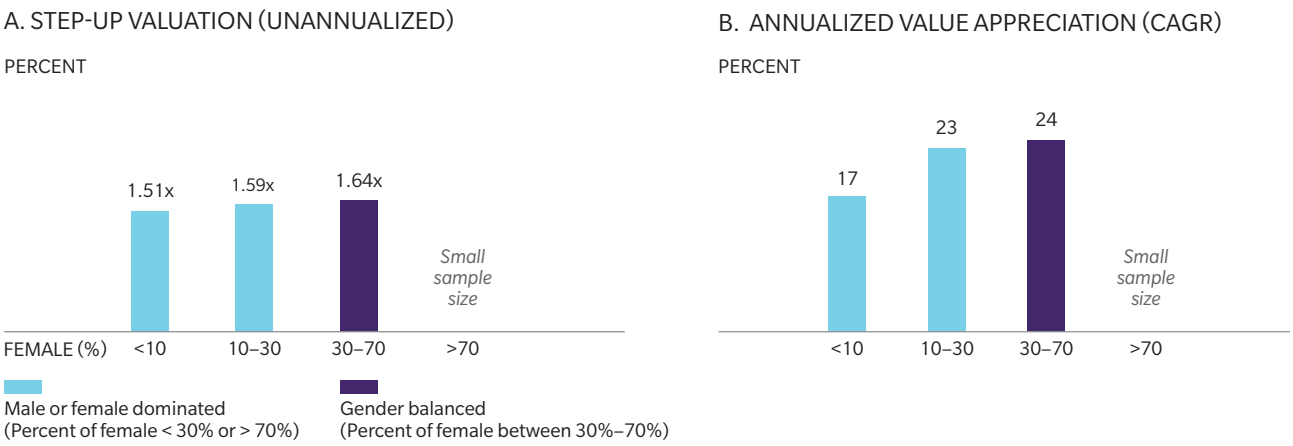
GENDER BALANCED PORTFOLIO COMPANY PERFORMANCE

Our analysis of the gender diversity of senior leaders and the performance of portfolio companies suggests that more diverse leadership in portfolio companies could be positively associated with higher returns. The analysis has focused on the increase in valuation, or the step-up valuation [2], of PE/VC invested companies between two rounds of liquidity in which the second round was either a follow-on round or an exit. Portfolio companies with gender balanced leadership teams had a 1.64 times increase in their step-up valuations, which is 5 percentage points higher than leadership teams with between 10 percent and 30 percent women, and 13 percentage points higher than leadership teams with less than 10 percent women.

We removed the impact of different holding periods of investments by looking at compound annual growth rates (CAGRs) between the two valuation points, because the time required to achieve valuation changes is a relevant consideration. For instance, a 50 percent valuation increase in one year would be a more desirable investment than a similar change over 10 years. When looking at CAGRs, portfolio companies with gender balanced leadership teams outperformed companies with leadership teams between 10 percent and 30 percent women by 1 percentage point and teams with less than 10 percent of women by 7 percentage points. These results are shown in Figure 24, panels A–B.

We also considered performance in the context of the geography and vintage of the deal, because performance is expected to be correlated with broader macroeconomic trends that might be time- and country-specific. The analysis shows that the outperformance of gender balanced leadership teams holds when annualizing the growth in valuations and benchmarking against peer portfolio companies based on investment year and geography. Gender balanced senior leadership teams outperform male or female dominated teams by 5.5 percentage points per year in valuation

Figure 24: Valuation Change of Portfolio Company by Gender Composition of Senior Leadership Team



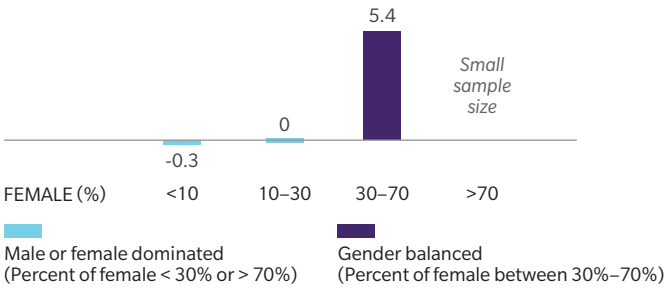
Source: Aggregated datasets from International Finance Corporation; PitchBook; and other publicly available datasets.

Note: Data reflect median valuation increase by firm diversity level. This analysis is based on a sample of 512 portfolio companies with at least two rounds of funding with valuations and gender data of leadership teams. CAGR = compounded annualized growth rates.

Figure 25: Annualized Valuation Change of Portfolio Companies Relative to Benchmarks given Year of Investment and Geography

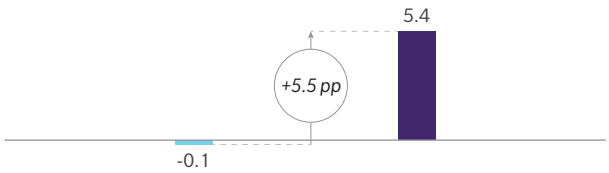
A. BY GENDER DIVERSITY GROUP

PERCENT



B. GENDER BALANCED VS. MALE/FEMALE DOMINATED

PERCENT



Sources: Aggregated datasets from International Finance Corporation; PitchBook; and other publicly available datasets.

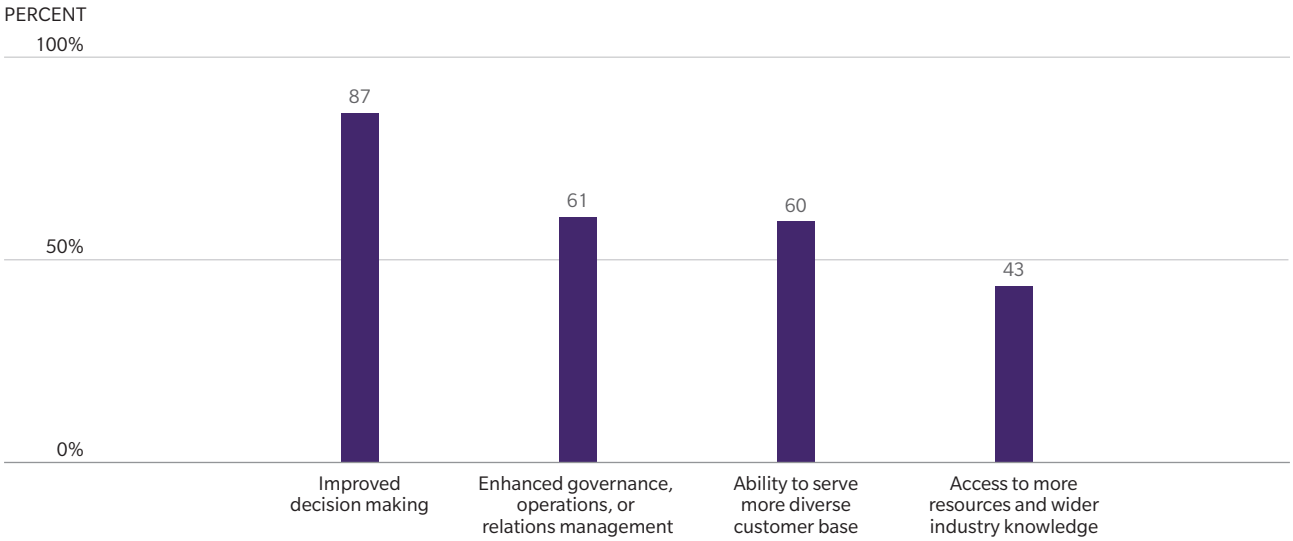
Note: Data reflect median excess annualized valuation increase relative to geography and investment year peers by gender diversity level. This is based on a sample of 414 portfolio companies with at least two rounds of funding with valuations, gender data of leadership teams, and a sufficient number of peers to define a performance benchmark.

increase when compared to benchmarks. When normalizing the 5.5 percentage point gain by the median CAGR of emerging market portfolio companies (approximately 22 percent), this represents approximately a 25 percent performance increase. These results are shown in Figure 25, panels A–B.

BENEFITS OF GENDER BALANCED PORTFOLIO COMPANIES

Fifty-six percent of emerging market GPs believe increasing gender balance in portfolio companies would increase investment returns. Of this majority, most surveyed senior investment professionals believe that increasing the gender diversity of portfolio companies' senior management teams would improve their decision making; allow them to serve a more diverse customer base; and enhance governance, operations, or relations management (including better risk management, improved governance, and greater employee retention). See Figure 26.

Figure 26: General Partners' View on Benefits of Gender Diversity in Portfolio Companies



Source: IFC Gender Diversity in Private Equity and Venture Capital Survey 2018.

Note: Governance, operations, or relations management benefits include better risk management, improved governance, improved investor relations, and greater employee retention of both male and female candidates. Based on responses from 91 emerging market GPs who believe that increasing gender diversity in the senior leadership teams of portfolio companies would improve returns.

Our findings suggest that there is a positive correlation between gender balance in leadership and performance for GPs and portfolio companies. For GPs, this correlation could be explained by enhanced investment decision making afforded by diversity of thought and expanded deal sourcing through broader entrepreneurial networks. For portfolio companies, this correlation could be explained by improved decision making, enhanced governance and operations, and a better ability to serve a diverse customer base. The next chapter outlines steps that both GPs and LPs can take to move GP investment teams and portfolio company leadership teams toward gender balance to potentially reap these benefits.

CHAPTER III NOTES

1 Net IRR is a measure of an investment's rate of return. In PE/VC investments, it is the discounted rate of return of cash flows to and from investors after accounting for management fees. Net total value to paid-in (TVPI) capital multiples are the summation of distributions from the fund and residual values (unrealized value of the fund's net assets) divided by the total capital commitment. It is not time adjusted.

2 For example, the average fund in "China–2011–Venture Capital" could have had a net IRR of 12 percent, while the average fund in "LAC–2011–Venture Capital" could have had a net IRR of 8 percent. All 2011 Chinese focused VC funds would have 12 percent subtracted from their net IRR to adjust for the average performance of similar funds while a similar LAC fund would be adjusted by subtracting 8 percent. Thus, a Chinese fund with a net IRR of 15 percent would have an excess net IRR of 3 percent, while a LAC fund with a net IRR of 15 percent would have an excess net IRR of 7 percent.

3 Excess internal rate of return is the difference between the IRR of an individual fund and the IRR of that fund's benchmark net IRR, which is based on vintage, geography, and investment strategy. The excess return of the full population is 0.

4 Twenty percent was calculated using 1.7 percentage point difference between gender balanced and male or female dominated teams divided by 8.1 percent, which is the median net IRR of all analyzed funds. This transformation was done to contextualize the performance uplift in terms of absolute returns, while still retaining the benefits of a benchmark methodology that controls for nondiversity variables.

5 We calculated 15 percent using 0.18 times difference between gender balanced and male or female dominated teams divided by 1.37 percent, which is the median TVPI of all of the funds analyzed. This transformation was done to contextualize the performance uplift in terms of absolute returns, while still retaining the benefits of a benchmark methodology that controls for nondiversity variables.

6 Forty-six percent of respondents who do not buy in to business case believe in improved decision making; 49 percent believe in enhanced talent management, operations, and investor relations; 46 percent believe in improved deal sourcing.

7 Step-up valuations are the company's change in valuation between two rounds of liquidity. Step-up valuations are used as our primary metric, because valuations at various rounds of funding are available for more companies than other performance metrics, including IRR, revenue growth, or earnings before interest, tax, depreciation, and amortization (EBITDA) growth.

IV. STEPS GENERAL AND LIMITED PARTNERS CAN TAKE TO MOVE TOWARD GENDER BALANCE

Chapter 4 explores the final question of our research: what can be done to move toward gender balance in leadership in GPs and portfolio companies? We use data from over 500 survey respondents and semistructured interviews of more than 50 industry practitioners and experts to identify the most significant barriers to gender balance and effective steps that can be taken to overcome them. To understand the lack of gender balance in senior leadership in GPs and portfolio companies, the research is structured along two funnels: (a) the talent pipeline, which focuses on how GPs hire, retain, and promote investment talent; and (b) the investment pipeline, which focuses on how GPs source, evaluate, and oversee investment opportunities and portfolio companies. See Figure 4 in Chapter I.

The following subsections explore what GPs and LPs can do to move toward gender balance through time. GPs, which have direct control over policies and initiatives undertaken in both pipelines, are the subject of the first two subsections. LPs, which can influence these policies and initiatives within GPs with which they have relationships, are the subjects of the third and final subsections.

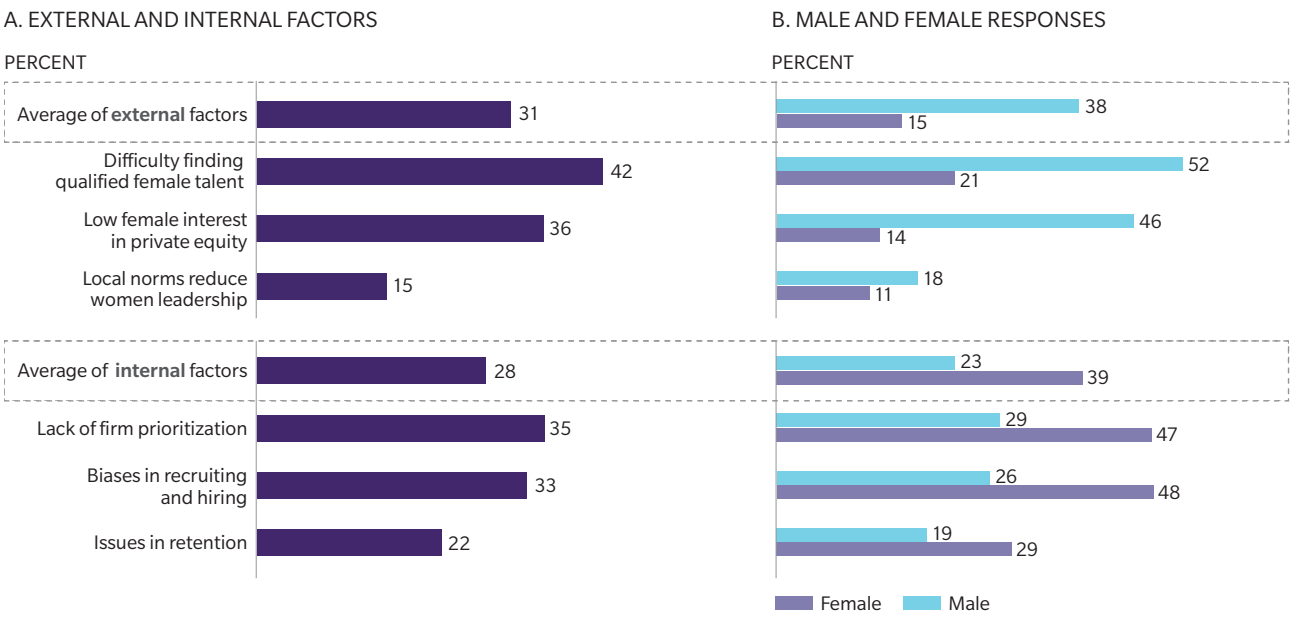
GENERAL PARTNERS—MANAGING THE TALENT PIPELINE

Surveyed men and women in emerging markets have significantly different views on the most important drivers of the low representation of female senior investment professionals. Men believe external factors, such as difficulty finding qualified female talent and a lack of female interest in private equity (PE), rather than internal factors, such as biased recruiting practices and a lack of firm prioritization, are nearly twice as significant of drivers. Women, however, ranked external factors as the least significant drivers and were over two times more likely to attribute responsibility to internal than external factors. See Figure 27, panels A and B.

Our research suggests that while external factors may contribute in part to the low representation of women in senior investment roles, significant internal factors are driving these outcomes. When diagnosing barriers of the industry's gender gap in investment leadership, findings from interviews and surveys pointed to four similar themes in GPs:

1. Improving gender diversity is not prioritized by GPs' senior leaders, resulting in organizational cultures that are not sufficiently inclusive or driven to make change
2. Recruiting practices, which heavily rely on networks and talent pools that are not gender diverse, reduce the amount of qualified female talent
3. Current approaches to flexible work policies create a forced choice between career and family, both when women are considering having children and returning from leave
4. The combined lack of senior female representation and formal sponsorship programs reduce sponsorship opportunities for junior female employees

Figure 27: General Partners' View on Drivers of Low Gender Diversity



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018.

Note: Data reflect survey respondents' view on most significant factors that explain the low proportion of female senior investment professionals, overall and by gender, in emerging markets. Based on 240 emerging market General Partner respondents.

BARRIER 1: LIMITED COMMITMENT AT THE TOP AND EXPLICIT GOALS BY GENERAL PARTNERS

Current State

Our survey results suggest that although 68 percent of surveyed firm leaders state they believe that achieving gender balance is important, only 39 percent of junior women in the pipeline believe their firms are making improved gender diversity a significant priority. About 75 percent of junior women believe that women are disadvantaged in their path to partner, which is a 38 percentage point difference relative to junior men. In addition, interviewees nearly universally suggest that firms are generally open to improving gender diversity within their investment teams, but they are not taking the required action to make significant change. See Figure 28.

The lack of concrete action to add credibility to this priority may contribute to the disconnect between partners and junior employees. Overall, only 45 percent of emerging market firms have a strategy or targets related to improving gender diversity. Even if

"Senior leaders positioning diversity as a priority to improve firm performance can set the tone for the rest of the organization, but it has to be backed up with concrete action. For example, by publicly setting targets and goals."

HENRIETTE KOLB
MANAGER, IFC GENDER SECRETARIAT

Figure 28: Percent of General Partner Employees who Believe Increasing Gender Diversity is a Firm Priority

Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018.

Note: Data reflect share of firm leaders and junior employees who believe improving gender diversity is firm priority, by gender. Based on responses from 157 General Partner firm leaders in emerging markets and 71 employees that are not partners in emerging markets.

"Senior leaders need to believe in improving gender diversity wholeheartedly, or else it's just being 'politically correct.' If it's not coming from the top, then it will fizzle out."

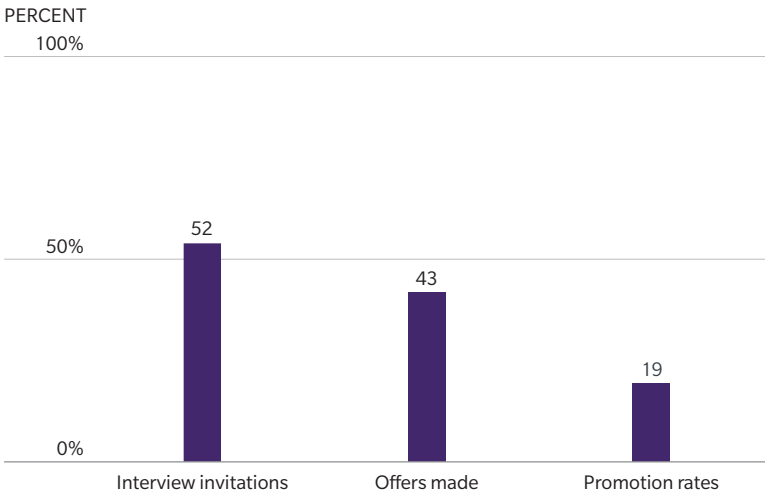
CATHERINE LEUNG
CO-FOUNDER AND GENERAL PARTNER,
MIZMAA VENTURES

the firm leaders believe improving gender diversity were important, about 55 percent have such a strategy or targets related to gender diversity. It is unlikely that firms will make significant progress in improving gender diversity without the plans, goals, or metrics to drive and measure progress. Of firms that have an existing strategy or targets, the targets typically apply only to interview invitations and do not flow through to offers made or promotion rates. Fifty-two percent of surveyed emerging market firms have established gender diversity targets for interview invitations, compared to only 43 percent for offers made and 19 percent for promotion rates. See Figure 29.

Implications on Talent Management

Culture is an essential component to any organization. Organizational culture encompasses the assumptions, beliefs and values that underlie nearly all actions within an organization. Given the male dominant status quo, firms whose culture is not explicitly gender inclusive are unlikely to see significant change and may deter women from being interested in joining private equity firms.

Figure 29: Types of Gender Diversity Targets



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018.

Note: Based on responses of 57 emerging market General Partners with a strategy or targets for improving gender diversity at each stage

"Tone at the top to affect change is a truism. Gender diversity will not improve unless there is tangible commitment from the most senior leaders. They have to ensure that this permeates through decisions in hiring, promotion, mentorship and sponsorship."

RUNA ALAM
CO-FOUNDER AND CEO, DPI

The right tone at the top is a prerequisite to establishing a supportive culture, as it permeates throughout organizations and greatly affects the way people engage with one another. Tone at the top is how firm leaders can demonstrate organizational values. These priorities can be articulated through policies, organizational goals, and the development of reward systems that incentivize certain behavior. This prioritization flows through to everyday actions. For instance, hiring managers may only feel comfortable waiting two weeks to interview for a vacant leadership (e.g., Vice President) role until the pool of candidates is sufficiently diverse if they know the firm views achieving gender balance as a priority.

Finally, creating a culture that values gender diversity could be a prerequisite to seeing its benefits. Recent findings from a research team including a Harvard Business School professor suggest that the impact of gender diversity on organizations may be context dependent and could create "a self-fulfilling cycle." Organizations, industries, and governments that view gender diversity as important tend to capture its benefits, while those that do not view it with importance do not (Turban, Wu, and Zhang 2019).

Actions Firms Can Take

Be transparent and conduct candid assessments of firms' gender diversity. Firms that do not have a significant—or any—female partner presence are often worried about the "chicken and the egg" dilemma: if gender balance is a prerequisite for driving change, then they cannot make significant improvement in diversity levels from junior to senior levels. However, our interviews with senior leaders suggest the premise does not hold. The right tone at the top—a combination of candid assessment and committing to concrete action—will significantly enable change. However, the change will be credible only if leaders are honest about the gaps that their firms currently face and commit to change the status quo through concrete action.

Set and communicate ambitious, long-term goals to demonstrate commitment. Explicit long-term goals are needed to demonstrate the firm's prioritization and commitment to this issue through time, because changing the gender makeup of senior investment decision makers will not happen overnight. In addition, transparently sharing these goals will have a strong signaling effect to show stakeholders that the firm is committed to making progress. The goal should be rooted and communicated in the impact this would have on firm performance as opposed to a "check-the-box" compliance activity. The goal needs to be specific and timebound, with clear definitions of what the firm is seeking to achieve and by when. Sample goals that have been used by firms in the industry over periods of 5 to 10 years include these:

- Improving the gender mix of new hires to 50%
- Equalizing retention rates of women in investment roles
- Equalizing promotion rates across genders throughout the pyramid
- Increasing the proportion of employees that take and return from parental leave
- Having women represent 20% of senior leaders in private equity (e.g., Level 20)[1]

Create short-term targets across the pipeline and collect the data needed to measure progress against these goals. Goals help firms identify and remove biases embedded in current processes that preclude the company from interviewing, hiring, and promoting qualified female talent. Targets help articulate longer-term goals in more tangible, assessable objectives, but these are helpful only if the requisite data are available to understand changes. Most interviewees have stated that simply collecting the data would be an eye opener for firms aiming to make meaningful change,

"Men should preempt the 'chicken and the egg' issue with more active sponsorship. If you don't have women in senior positions, then men can and should play that role."

ATUL MEHTA
SENIOR DIRECTOR, TELECOM MEDIA AND TECHNOLOGY, VENTURE CAPITAL & FUNDS, IFC

because the data would help shine light on the true extent of the issue. Sample gender-based targets that have been implemented by practitioners include these:

- Interview invitations per position
- Offers made per position
- Gender wage gap

Learn from successes and failures in achieving targets. The principal value of targets is to provide a mechanism for understanding internal processes that may yield low representation of women in leadership roles. If firms do not meet these targets, they should critically assess the root cause of the gap, including whether company culture is leading to gender unconscious biases in hiring decisions, promotion decisions, or sponsorship gaps. Progress against these targets should be transparently shared to create urgency for change and continuously emphasize the firm's commitment to gender diversity.

Make senior leadership accountable to move firm toward gender balance. Interviewees consistently believe that establishing accountability for outcomes is essential to driving change, or else the initiative would "slip through the cracks." Clear accountability is the most important factor, and it could take the form of a formal diversity manager or task force. In any case, the person (or people) appointed should be senior within the organization (e.g., male and female senior investment professionals), have visibility of internal data (e.g., gender of candidates interviewed), have the authority to ask questions (e.g., understand why targets have not been achieved), and be empowered to develop and implement solutions (e.g., changing interview evaluations or case studies used). Further, compensation should be tied to progress against these goals. In general, research suggests that such accountability and ownership have tremendous long-term success. Companies that put in diversity task forces, for instance, have experienced increases of 9 percent to 30 percent in the representation of women and other minorities groups over five years (Dobbin and Kalev 2016).

"The first step is establishing the right tone from the top. Managers need to establish improving gender diverse outcomes as a priority. Set targets, track progress, and hold yourself accountable—comply or explain."

ANA CARLA ABRÃO COSTA
PARTNER, OLIVER WYMAN

CASE STUDY

CPP INVESTMENT BOARD

CANADA PENSION PLAN INVESTMENT BOARD

How tone from the top can drive change throughout an organization

Canada Pension Plan Investment Board (CPPIB) is a professional investment management organization responsible for managing more than US$278 billion (Can$368.5 billion) in investable assets for the Canada Pension Plan (CPP) on behalf of 20 million CPP contributors and beneficiaries.[1] CPPIB is among the world's largest private market investors, with investments across PE, real assets, and private credit.

Increasing inclusion, diversity, and employment equity is a cornerstone of CPPIB's business strategy and a consistent contributor to the organization's success. CPPIB has publicly stated its goal of having an employee talent pool that reflects the communities in which it operates, because it believes diversity of insights, backgrounds, and experiences is critical to delivering exceptional long-term performance. The organization recognizes that there is an acute gap in the representation of women in the industry and hopes to drive change by leading by example. Recognizing that such leadership requires credibility through action, CPPIB is taking important steps to improve diversity in its own team as well as its portfolio companies.

Goal 1: Gender balanced hiring by 2020. In 2012, less than half of CPPIB's new hires were women, which senior leaders believed was a skewed gender mix of the available talent and was likely harming the organization's long-term performance. Thus, the organization publicly put in place a long-term recruitment target that 50 percent of newly hired talent be women by 2020. To help achieve this goal, the organization invested resources to attract, hire, and retain women by providing coaching, mentoring, and sponsorship programs.

1 Amounts as of December 31, 2018. See the CPPIB website, http://www.cppib.com/en/.

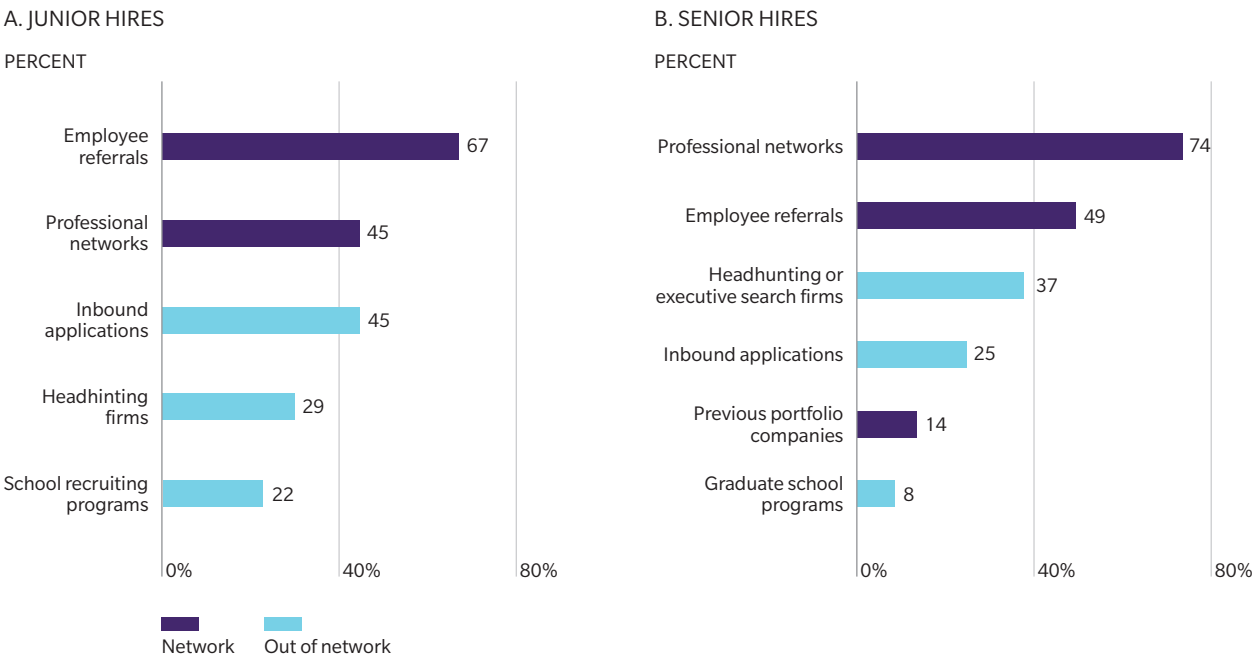
These efforts, driven by an explicit prioritization from the top, created an environment for CPPIB to move toward gender balance over time. Establishing diverse hiring targets has had several benefits. First, it has codified the organization's stance on diversity, which permeates through the organization and ensures everyone is working toward a common goal. Further, explicit goals have allowed the organization to track and critically assess its progress, working to identify and remove any biases in its hiring processes that would reduce women hiring rates. Finally, such prioritization has had a strong signaling effect, demonstrating a culture that is overtly inclusive of diverse talent. Though it is still working toward its goal, in 2018, 47 percent of CPPIB's new hires were women.

Goal 2: Increase investee diversity through governance and oversight. CPPIB believes that gender balance can increase the performance of its investments and therefore seeks to influence its portfolio companies' diversity levels through its voting rights. CPPIB primarily achieves this by focusing on board effectiveness, voting against the chair of board committees who nominate members if the boards do not have any female directors. In 2017 alone, CPPIB voted against shareholder proposals at 45 Canadian companies with no women on their boards of directors and made efforts to speak to these organizations and to clarify why CPPIB was committed to influencing their investees to improve gender diversity. Of these 45 companies, 21 had appointed at least one female board member by the following year. CPPIB felt so strongly about the success of this policy that, in December 2018, it expanded this practice to its investments in global markets through its Global Gender Diversity Voting Practice (CPPIB 2018).

"We believe that companies with gender-diverse boards are more likely to achieve superior financial performance over the long-term."

MARK MACHIN
PRESIDENT AND CEO, CPPIB

Figure 30: Most common recruiting channels for junior and senior hiresets



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018.
Note: Based on responses from 219 emerging market General Partners.

BARRIER2: BIASES ARE PRESENT IN RECRUITMENT AND HIRING PRACTICES

Current State

There are two general steps to hiring talent—sourcing candidates and then determining if they are the right fit for the role and firm. Biases in either step will yield gaps in hiring, and this research suggests that there are likely biases in each of these steps that are reducing female representation in hiring in emerging markets.

Firms can hire only the talent they source, and they can source only the talent they see. Because of the heavy reliance on network-based hiring, firms likely are not seeing the full talent pool. Overwhelmingly, the most common recruiting channels for both junior and senior hires are professional networks and employee referrals. See Figure 30, panels A and B.

"Firms following traditional recruitment models in PE are tapping into their own networks and not expanding much outside of this. This means the organization is more likely to perpetuate itself. Firms looking to change should assess how and where they recruit, including working with recruitment agents and human capital specialists that present them with a balanced group of diverse candidates, enabling companies to select from the best talent pools."

SARA TAYLOR
HEAD OF IMPACT FUNDS, CDC GROUP

Network and referral-based hiring does not cut across genders particularly well (McPherson, Smith-Lovin, and Cook 2001). Male investment professionals' networks tend to be male-heavy and female professionals' networks tend to be female-heavy. Given the low gender diversity of existing investment teams, the lack of diversity in talent is likely to continue unless emerging market GPs become less reliant on network-based hiring.

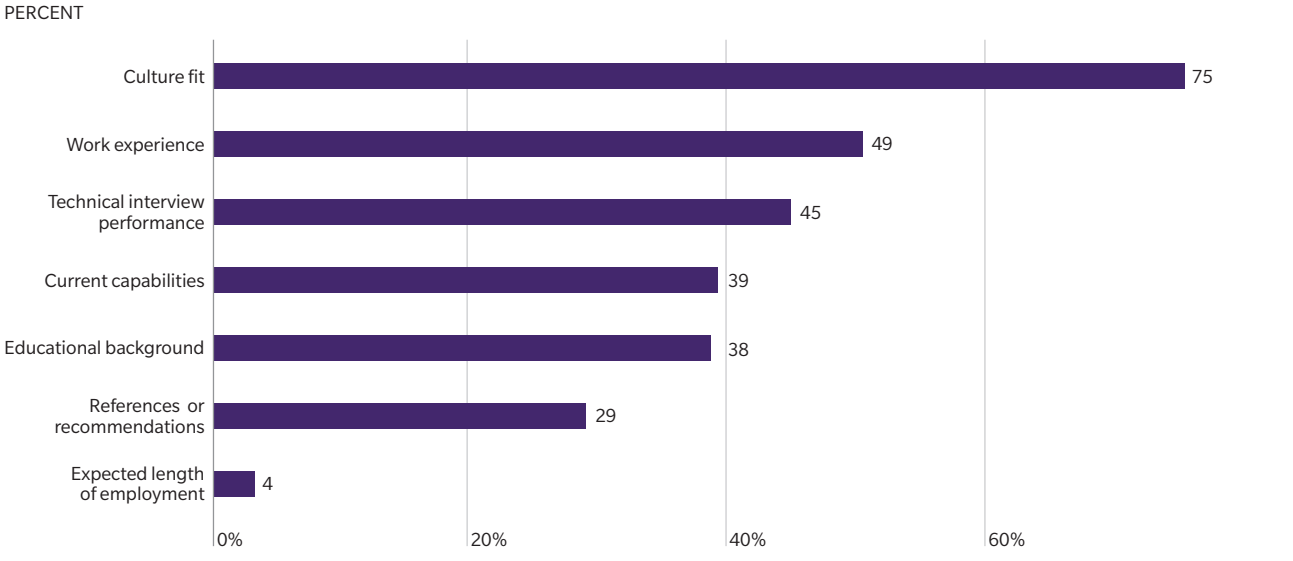
Furthermore, the most important qualities emerging market firms look for when evaluating junior talent are "culture fit" and "work experience." Given the current male-dominated culture that pervades the PE/VC industry, such a significant emphasis in hiring on subjective considerations such as "culture fit" risks perpetuating gender biases and further limiting the hiring of female talent. See Figure 31.

Finally, the experiences and talent pools from which firms are sourcing are not diverse. Emerging market firms are hiring from feeders that typically have low female representation. Most junior and senior employees are hired from investment banking or other PE/VC firms. Thus, increasingly diverse graduating classes at top schools or in more technical roles at technology companies will take a long time to flow through to PE/VC firms. See Figure 32, panels A and B.

"We get a relatively higher share of qualified female applicants because they see that our environment is receptive to women and that women can successfully grow to senior position. It permeates through the culture and organization."

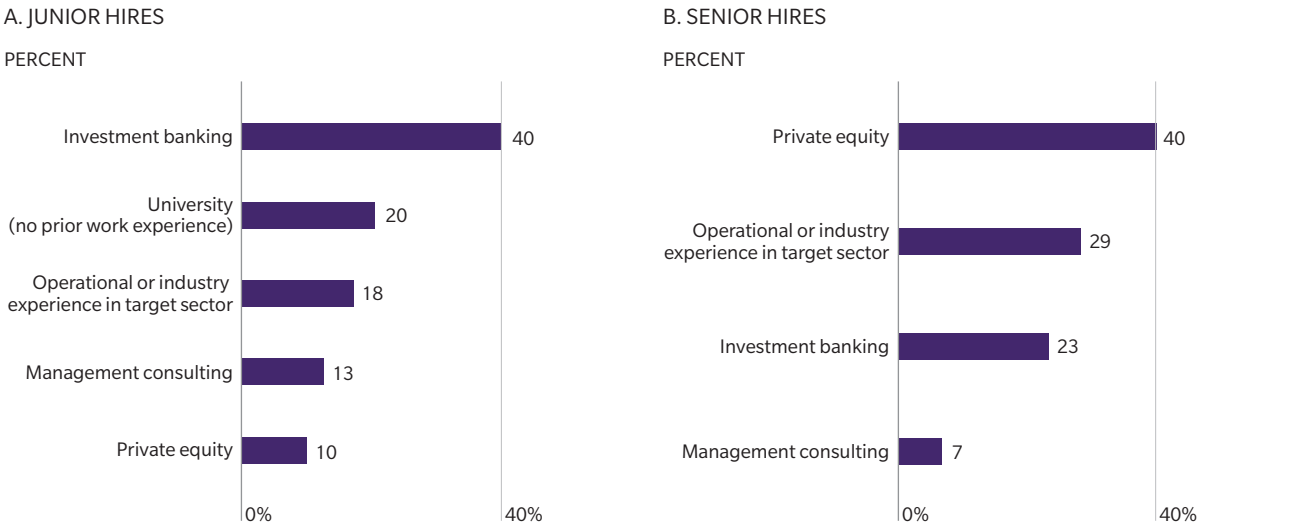
MAGDALENA MAGNUSZEWSKA
PARTNER, INNOVA CAPITAL

Figure 31: Most Important Qualities when Hiring Junior Talent



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018.
Note: Based on responses from 220 emerging market General Partners.

Figure 32: Most Common Prior Industry Experience of Junior and Senior Hires



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018.
Note: Based on responses from 205 emerging market General Partvers who identify the following industry experiences as most common of junior and senior hires in their markets.

Implications on Talent Management

GPs hoping to move toward gender balance will have to source, retain, and promote diverse junior talent. This underscores the importance of increasing the proportion of women in the firm's pipeline. Conventional thinking, however, suggests it is difficult to find qualified female talent at junior and senior levels, which contributes significantly to the gender gap. This thinking comes largely from a male lens. When asked to identify the most significant factors explaining the low representation of female investors, men identified difficulty finding qualified talent and low female interest in private equity as the top two (of nine) factors. Women identified these as two of the least important.

"This is a people business. If you are not trying to attract and retain the best candidates, then you're disadvantaging yourself. You can double your talent pool and diversify your skillset by actively reaching out to women. Why deny yourself alpha-generating diversification by ignoring half the work-force?"

CLAUDIA ZEISBERGER
PROFESSOR OF ENTREPRENEURSHIP & FAMILY, INSEAD,
ACADEMIC DIRECTOR OF GPEI

Actions Firms Can Take

Actively look outside of existing networks to source candidates. One of the most common themes in interviews was that GPs greatly underestimate the amount of qualified female talent because these candidates are not within their networks. Firms are blinded to the available talent by overreliance on network-based sourcing. Firms can increase the number of diverse candidates interviewed by asking for connections from female investors, tapping into preexisting PE/VC networks (e.g., Private Equity

CASE STUDY

RockCreek

ROCKCREEK GROUP

Impact of gender diverse leadership on talent management and investment decision making

RockCreek, founded in 2001, is a leading global investment firm that applies cutting-edge technology and innovation to investments, managing approximately US$14 billion in assets. The firm provides various services to institutional investors, including investments in PE funds, public equities, fixed income, and hedging markets across the globe. The firm is female founded and majority owned by women and other diverse team members. From the beginning, RockCreek has set out to build a dynamic, diverse investment team with a global perspective that could best serve institutional investors. This foundation has created a culture that naturally values diversity and inclusion, creating a virtuous cycle in its focus on hiring and retaining diverse staff.

RockCreek emphasizes achieving gender balance in its talent and investments. This focus is driven, in part, because senior leadership and the firm's advisory board explicitly buys into the benefits of increased gender diversity. The firm views its gender balance in talent and firms it invests in as a natural consequence: the firm is already diverse and therefore views good talent and investments through a lens that values diverse backgrounds and thought.

RockCreek is deliberate in its recruitment approaches to ensure that candidates represent a diverse mix of talent. RockCreek ensures its hiring process is inclusive and has balanced candidates from which to choose. Further, RockCreek knows that the traditional pools from which PE talent is sourced, including investment banking, can tend to not be great sources of gender diverse talent. Therefore, the firm widens its scope and actively seeks out diverse candidates from other backgrounds, including science, technology, engineering, and mathematics (STEM) and analytics. The firm hires junior employees based on capabilities, including analytical problem solving and quantitative analysis, instead of solely finance sector experience. This allows it to look at candidates with backgrounds outside of finance. Finally, RockCreek asks headhunters and its school recruiting partners to source diverse candidates for their hiring processes. The firm has a robust internship program for high school and college students to increase the supply of new talent.

RockCreek demonstrates the impact that culture and tone from the top can have on diversity outcomes throughout the organization. Today, about 90 percent of its senior management team and over 60 percent of the full team comes from diverse backgrounds. The diverse lens through which RockCreek's team views the world flows through to its investment decisions as well. As of January 2019, more than 55 percent of its underlying portfolio companies are female-led businesses, and more than 60 percent of its private investments have at least one minority partner.

Women Investor Network [PEWIN],[2] Level 20), proactively seeking out diverse candidates on campus, and requiring headhunting firms to provide them a balanced mix of candidates.

Recruit capabilities not experiences. Interviews with GPs have suggested that the most predictive indicators for success in investment roles are analytical aptitude, networking, and negotiating, which are skills found through a variety of backgrounds and experiences. Many GPs include experiences (e.g., 10 years in PE/VC or investment banking) in job descriptions as proxies for these capabilities, which may have the unintended consequence of causing candidates from more diverse backgrounds to not apply. GPs can rewrite job descriptions to be more specific about the types of capabilities expected in the role. In some cases, biases toward certain experiences and backgrounds also flow through to the interview process, in which PE/VC case studies and interviews tend to be related to finance. GPs can expand the types of questions used in interviews to other sectors so that certain experiences are not presupposed.

Be consistent with interview questions and candidate evaluations. Structured recruitment and evaluation processes ensure all candidates are evaluated according to predetermined criteria relevant to work experience, which is "crucial to minimize the impact of unconscious gender bias on hiring decisions." (Levashina et al. 2014) Adding structure to the interview process will allow GPs to reduce the effect of potential biases in subjective evaluations of candidates. We suggest GPs do the following:

- Standardize behavioral questions to ensure they are tied to specific capabilities needed for the job (e.g., quantitative analysis).
- Use predefined case interviews instead of allowing interviewers to use their own.
- For both behavioral and case interviews, have interviewers fill out, in real time, anchored rating scales that provide descriptive or evaluative examples to illustrate points on the rating scale. Research suggests that anchored rating scales increase reliability of interviews as predictors for success, increase job relatedness of the evaluations, and reduce biases (Levashina et al. 2014).

"There is a myth that there is a lack of qualified women for senior investment roles in GPs. Firms need only look outside of their existing networks to realize this, including connecting with the growing number of networks of qualified female senior talent. Firms can also invest in building the pipeline of a diverse pool of future senior talent by recruiting equal numbers of male and female employees."

SUZANNE BIEGEL,
FOUNDER OF CATALYST, LARGE

BARRIER 3: ENVIRONMENT THAT FORCES A CHOICE BETWEEN FAMILY AND CAREER

Current State

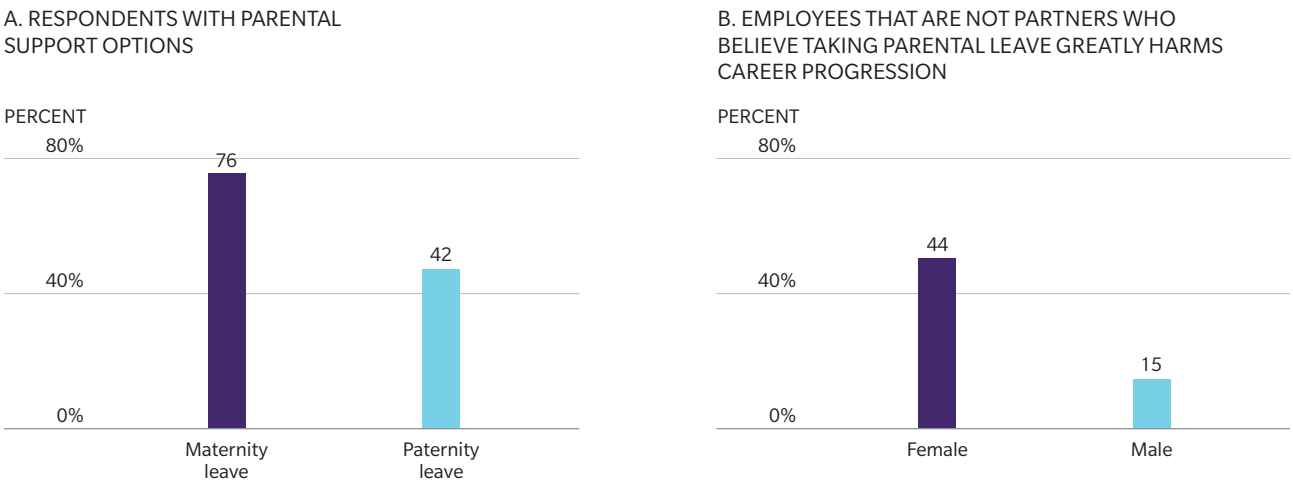
Many firms simply are not meeting the bare minimum. Twenty-four percent of surveyed emerging market GPs do not provide maternity leave policies, while even more do not provide paternity leave. When offered, men take parental leave much less often than women in 64 percent of firms, which is consistent with broader research that suggests men's use of paid parental leave is generally lower than that of women's (OECD 2016). The current disparity in what policies are offered and what are actually used risks stigmatizing parental leave as a "female benefit," introducing biases and negative perceptions about employees who use it.

When asked, almost no senior GP leader believe taking advantage of maternity leave—which lasts only months—should significantly inhibit female's careers. This message is not reaching junior PE/VC women, who are three times as likely to believe that taking parental leave will greatly inhibit their career progression. Interviews have shown that this perception frequently causes women to consider or eventually opt out before having children or otherwise assuming greater responsibilities at home. See Figure 33, panels A and B.

"Women do not leave private equity because they have to work too hard, travel too much, or because they're too tired. It's because they believe it will be impossible to juggle between work and family responsibilities. There is very little proactive effort by the industry to change that impression."

HALE BIYIKLI
DIRECTOR, TURKVEN

Figure 33: Parental Leave and Junior Employee Perceptions



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018.
Note: Based on responses from 244 emerging market General Partners and 71 employees that are not partners in emerging markets.

Further, many women who did take parental leave said they faced career setbacks upon their return. Interviewees spoke about situations in which they felt colleagues saw their absence as an opportunity to "get ahead." In some cases, colleagues usurped the lead role on deals and in client relationships that the interviewees had previously been in control of and did not cede responsibility upon their return. This experience is not unique to PE/VC. Extensive research has been done on the return of top performing women who had recently taken maternity leave, indicating that many careers had been "derailed" through loss of clients, deteriorated professional relationships, and unconscious biases held against employees who took leave upon their returns (Collings, Freeney, and van der Werff 2018).

24%
of General Partners don't have maternity leave policies

Implications on Talent Management

It is no secret that the responsibility of family obligations disproportionately falls on women, particularly childcare and, inevitably, childbirth. Firms that are serious about retaining high performing talent should think about whether their policies or culture are intentionally or unintentionally leading employees to unnecessarily opt out of PE/VC as a career.

This is not about simply having adequate parental leave and flexible policies or lowering the performance bar. Instead, it is about creating a culture that encourages employees regardless of gender to take advantage of these policies, refocusing performance assessments on outputs, and proactively addressing notions that performing employees must choose between personal and professional obligations.

"Junior women in particular drop out early because they think they are going to be forced to choose between having kids and a career. Firms need to empower them to do both. Then have the conversations with them so they know you support them."

PRISCILA RODRIGUES
PARTNER,
BOZANO INVESTIMENTOS

Actions Firms Can Take

Offer maternity leave benefits, at a minimum. Firms interested in improving gender diversity must, at a minimum, offer maternity leave. Interviewees have suggested that women would be turned off by firms that do not offer maternity leave policies, because the absence of such a policy likely would be symptomatic of broader cultural issues. This chilling effect is consistent with other research findings: a 2016 Harvard Business Review survey has found that 77 percent of respondents state that prospective employers' parental leave policies have had at least some effect on where they chose to work (Deloitte 2016).[3]

Create an accepting culture around equal parental leave benefits. Firms that do not offer equal paternity and maternity leave benefits reinforce the idea that parental leave is only a female benefit and a disturbance to the firm. Interviewees have stated this would exacerbate the stigmas and biases against women who return from leave. Men and women should be encouraged to take equal advantage of parental leave benefits, and this is often best demonstrated by example of senior male leaders (Collings, Freeney, and van der Werff 2018).

The firm's tone on parental leave should clearly emphasize that a break of months does not impact a career of decades. This can often be demonstrated effectively through changes to company policies as well as a clear tone from senior leaders. For instance, Google decreased its attrition of female employees by 50 percent after extending paid leave benefits from 12 to 18 weeks. Google has found that the costs of having employees out of the office for two extra months were far less than the value of retaining their expertise and the cost that would be incurred finding a new hire (Bock 2015). Though PE/VC firms often do not have the data to analyze this themselves, interviewees expect that this break-even calculation would be similar or potentially even stronger in PE/VC—a "people business" that is heavily reliant on relationships, intuition, and experience.

Enable synchronous work/family management, rewarding output instead of facetime. This shift in perspective is not about lowering the bar, but instead about making performance metrics more outcome-oriented and inclusive of various personal obligations. Without this shift, employees are often deterred from taking advantage of programs, such as flexible working hours and location, which may be required to adequately balance work and personal obligations upon return from parental leave.

"It is all about communication and whether someone is willing to talk about making family leave successful because the firm wants to keep their talent. We've retained women contemplating leaving 90% of the time because we spoke about our commitment to retain them. It may be 'taboo' for some men to do this, but they just need to start the conversation."

CHRISTINA GAW
MANAGING PRINCIPAL, GAW CAPITAL

"The biggest change is that we have become more flexible as a company. We don't care only about hours spent in the office – we care about output. If employees want to leave the office at 4:30PM to pick-up their kids and work afterwards, they know it is okay. This has made employees more motivated and willing to go the extra mile."

ANDREA HEINZER
CHIEF INVESTMENT OFFICER,
OBVIAM

CASE STUDY

MULTIPLES

MULTIPLES ALTERNATE ASSET MANAGEMENT

"It's our investment in people that guarantees success"

Multiples Alternate Asset Management (Multiples) is an India-dedicated PE buyout firm that manages over US$1 billion in assets. Founded by Renuka Ramnath in 2009, the firm invests in companies in consumer, finance, health care, technology, and logistics companies in India.

As a female-founded firm, Multiples believes it has a natural advantage in attracting and retaining female talent. The firm is deliberate in nurturing a deep respect for the diverse strengths that male and female professionals bring. When firm leaders speak about PE/VC careers, the narrative focuses on the high work intensity being a continuum between work and home as opposed to it simply being a "demanding job," thereby framing the discussion in a family inclusive manner.

Multiples actively supports this continuum in several ways. Through personal examples of senior women leaders in the team, younger professionals are motivated and mentored to further their drive and fulfill their ambitions. The firm sets up opportunities for families of team members to interact and get to know each other and the firm, such as in annual offsites and Diwali celebrations. Employees find it easy to discuss personal conflicts and seek solutions as a team. Investment professionals at Multiples even find it natural to talk about investing from a parenting lens—one saying that "nurturing and influencing portfolio companies is like influencing your teenager."

Multiples is an example of how building the right culture—high performance with sense of ownership and family-like bonding—can help attract and retain top talent. Multiples' culture embodies principles of trust, win-win, and fulfilling potential. This has resulted in a highly collaborative workplace in which team members are genuinely interested in each other's success. Such a work environment naturally has no glass ceilings.

Multiples provides holistic opportunities for professionals to grow as leaders. Younger team members participate shoulder to shoulder along with founding team members in developing strategies that will shape the firm's future. The firm encourages self-discovery using tools such as Hogan and Gallup's StrengthsFinder. Multiples' investment in its people and culture provides a competitive advantage in attracting and retaining top talent of all genders. It can differentiate itself in its representation of female talent: four out of the top nine investment professionals are female.

"Showing women that it's a continuum between work and home makes the choice of a career in private equity easier. Work goes home with you and home with you to work."

NITHYA EASWARAN
MANAGING DIRECTOR, MULTIPLES

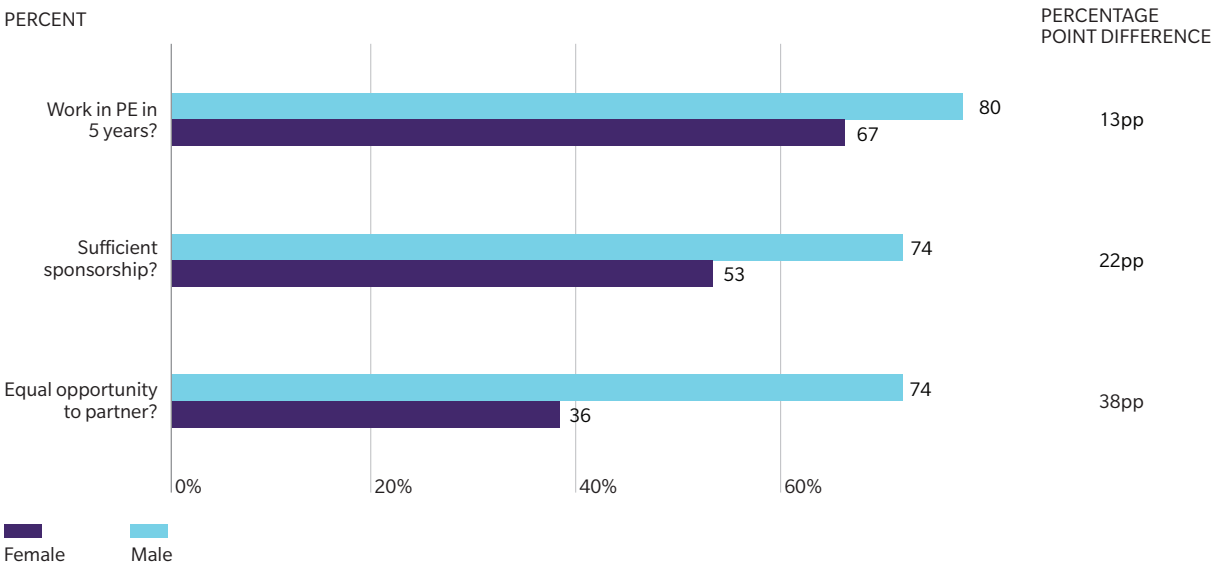
BARRIER 4: SPONSORSHIP GAPS AND FEW FEMALE ROLE MODELS ARE LIKELY REDUCING RETENTION AND PROMOTION OF JUNIOR FEMALE TALENT

Current State

Our survey of midlevel and junior investment professionals[4] in emerging markets suggests that junior women believe they are disadvantaged in their career paths. Female respondents are 13 percentage points less likely than men to consider themselves working in PE/VC five years from now, 22 percentage points less likely than men to believe they have sufficient senior sponsorship to continue progressing; and 38 percentage points less likely than men to believe men and women have equal opportunity to be promoted to partner. See Figure 34.

Our interviews and survey suggest that the perceptual gaps across genders are in part driven by limited female senior representation in PE/VC, which lags other industries and can create sponsorship gaps and non-inclusive cultures. In our survey, female respondents have

Figure 34: Junior Employees' Career Perceptions by Gender



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018.

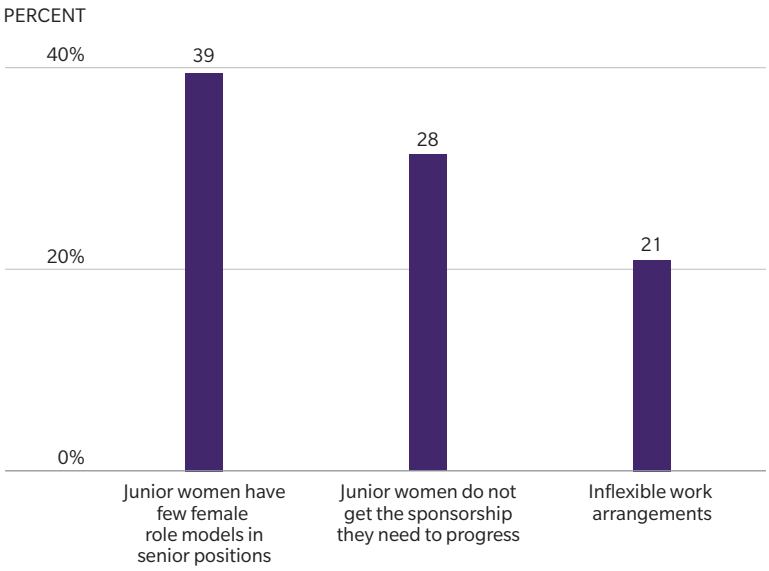
Note: Percentage points difference for whether respondents would recommend their firms to male compared to female friend use perceptions of female respondents only, compared to male or female perceptions in other statements. Based on responses from 71 employees that are not partners of emerging market General Partners.
PE = private equity.

described the lack of female role models and senior sponsorship as more significant hurdles than inflexible work arrangements. See Figure 35. The combination of these factors could be reinforcing and limiting female progression. Though both are important to success, sponsorship and mentorship are distinct concepts. While mentorship is often a prerequisite to sponsorship, mentors focus on giving feedback and advice. Sponsors go beyond mentors, often advocating on behalf of their mentees to help them get the visibility they deserve and get them in the right roles so they can perform (Ibarra, Carter, and Silva 2010). Research by Catalyst, a global nonprofit helping to build workplaces that work for women, has identified adequate sponsorship as an essential component of professional success, because it helps top performers develop new skills and achieve greater visibility, enabling them to progress (Foust-Cummings, Dinolfo, and Kohler 2011). These researchers suggest that gaps in promotion rates between men and women can exist because women are not actively sponsored in the way and to the extent that men are (Ibarra, Carter, and Silva 2010).

"Significant improvement in senior female representation will take time as the pipeline of new candidates move up the ranks. It is easier to get gender diverse junior teams, but this means firms have to put significant focus on enabling them to move up the ladder."

CYRIL COLLON
GENERAL PARTNER, PARTECH

Figure 35: Female Respondents' View on Drivers for Low Gender Diversity



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018.

Note: Based on responses from 76 women at emerging market General Partners. The factors are a subset of the nine total options available to respondents, which included difficulty finding qualified female talent, low female interest in private equity, recruiting biases favoring men, traditional gender stereotypes reduce hiring, and improving gender diversity is not a priority of firms.

Only 31 percent of emerging market firms have formal sponsorship programs , and the omission of formal sponsorship programs, particularly in male-dominated PE firms, may be allowing women to fall through the cracks. Research suggests that mentor and sponsor relationships are less likely to materialize organically across dissimilar groups. Research by David Thomas, an emeritus professor of Business Administration at Harvard Business School, has found that "white male executives don't feel comfortable reaching out informally to young women and minority men. Yet they are eager to mentor assigned protégés, and women and minorities are often first to sign up for mentors." (Dobbin and Kalev 2016) In addition, a research study of VC investors by Harvard Business School professors suggests that "gender bias in informal mentoring systems," including limited participation among male mentors, has hindered female employees' investment performance (Gompers et al. 2014).

31%
of General Partners have formal sponsorship programs

Implications on Talent Management

The data on midlevel employees[5] show that the pipeline of midlevel talent is relatively more diverse than at senior levels, which could be reason for optimism. Analyzing the pipeline across emerging markets underscores the importance of developing and retaining female talent, particularly for the Middle East and North Africa (MENA), Latin America and the Caribbean (LAC), and South Asia, which currently lag emerging market peers. These regions would gain the most from seeing midlevel female talent move to senior roles, because the proportion of midlevel investment professionals is nearly twice as large as a group compared to senior roles. See Figure 36.

"Women don't always have the same opportunities and access to sponsorship as men do, for a number of reasons. Finding ways to narrow that gap will benefit women, men and the businesses where they work."

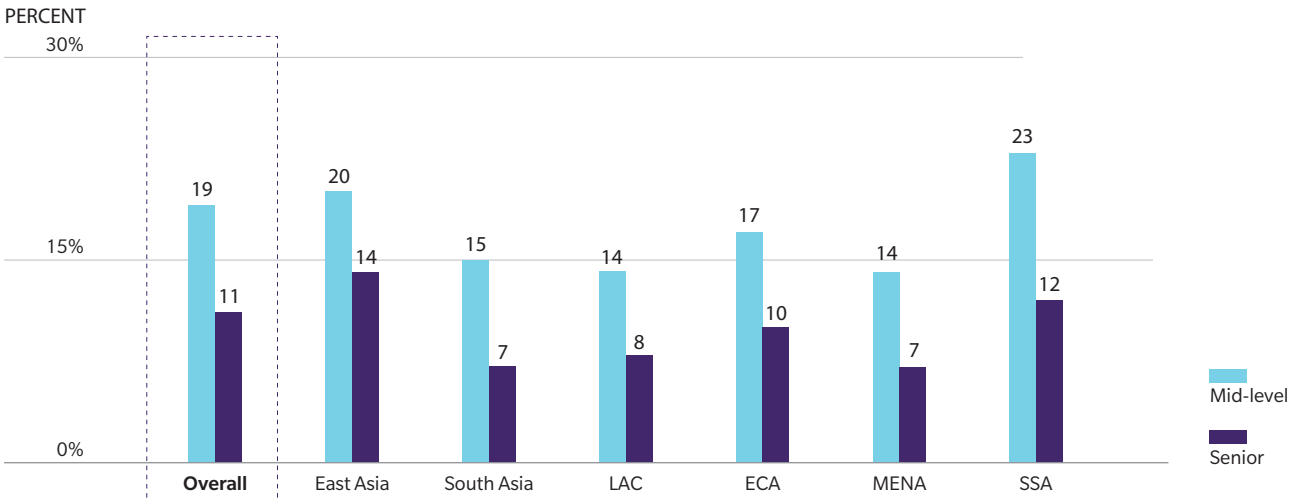
ANNIE PAYDAR

GLOBAL HEAD OF HUMAN CAPITAL, GENERAL ATLANTIC

Actions firms can take

Ensure mentorship programs are formalized in the organization. The idea of organic relationships is attractive, but it depends on natural connections being developed that often do not materialize, particularly for women in otherwise male-dominated firms. Firms can address this by introducing formal mentorship programs that match senior and junior employees from day one. Separate research on larger organizations have found that mentoring programs increase the representation of black, Hispanic, and Asian American women in management by 18 percent to 24 percent over five years (Dobbin and Kalev 2016). These programs help junior

Figure 36: Percent of General Partner Investment Employees who are Female



Sources: Aggregated Private Equity/Venture Capital datasets from International Finance Corporation; PitchBook; Preqin; RockCreek; and other publicly available datasets.

Note: Based on a sample of more than 10,000 senior investment professionals and 5,000 midlevel professionals. ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa.

employees feel more included, become more effective at their job, and increase the chances they eventually develop sponsorship relationships. They also help show the mentors that "their protégés deserve the training and opportunities they've received." (Dobbin and Kalev 2016)

These "reverse benefits" of mentorship underscore that mentorship relationships need not be gender-based. When asked about mentorship, female interviewees have consistently identified a desire for these relationships to be with the people in the firm who have the strongest capabilities and investment in the relationship, regardless of gender. Mixed-gender relationships provide an opportunity for reverse mentorship, which enables senior male leaders to learn about the experiences of women in their firms and receive feedback on how to create a more inclusive culture.

Collect data on sponsorship gaps with network maps. Network maps—which can be used to see organizational connections by asking employees to name other employees they could sponsor—are an effective tool for firms to test if there are specific employees or groups of employees that have less access to sponsorship within the firm than others. When answers are aggregated, firms can identify matches in which both the sponsoring and sponsored employees mutually identify one another, as well as situations in which junior employees do not have matching sponsors. This data will allow firms

"Mentorship does not need to be solely woman-to-woman. I want to be treated as a professional. I welcome guidance and input from whomever is best positioned to provide it, regardless of gender."

MARIA KOZLOSKI
GLOBAL HEAD & SENIOR MANAGER,
PRIVATE EQUITY FUNDS, IFC

to not only identify gaps for junior employees but also identify senior employees who are not actively or effectively sponsoring any junior employees (e.g., "mismatches" in which the junior employees they believe they are sponsoring have not identified them as a sponsor). In any case, network maps will provide the fact base to understand any sponsorship gaps, which should then be remedied.

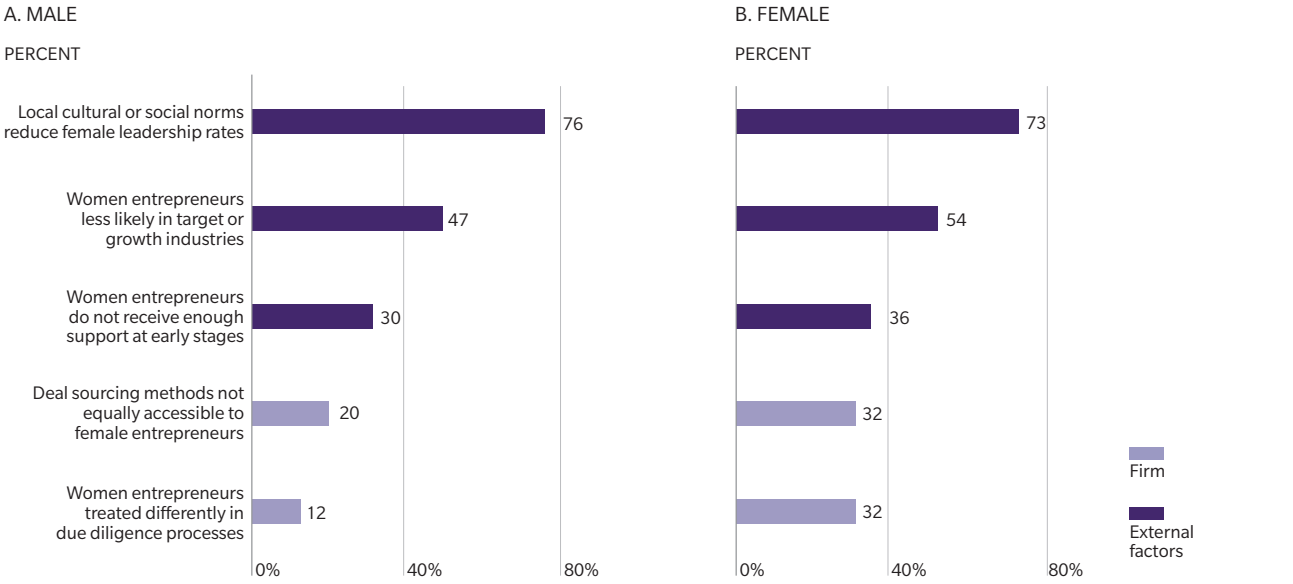
Make senior employees formally responsible for sponsorship. Formalizing sponsorship relationships will help reduce the risk of people simply codifying existing relationships. Organic sponsorship is most attractive, but it hinges on natural connections being developed that often do not materialize, particularly for women in otherwise male-dominated firms. Ensuring that every employee has at least one sponsor within the firm who is at least in part responsible for the success of the junior employee will help mitigate this risk. These responsibilities can be in the annual goals of—and embedded within—performance reviews for senior employees.

GENERAL PARTNERS—MANAGING THE INVESTMENT FUNNEL

Ninety-four percent of surveyed GPs in emerging markets believe that women are underrepresented in leadership teams that receive PE/VC investment capital. This is consistent with our findings, in which female-led businesses receive only 8 percent of deals. Unlike in the talent management gap, male and female industry leaders often agree that the most significant drivers of the low levels of investments in female entrepreneurs are due to external factors, including social norms and low entrepreneurship rates. However, the extent to which gender biases are present varies by the gender of respondents. Female practitioners are roughly twice as likely to believe that biases in sourcing, and due diligence of potential investments contribute to the gap between female entrepreneurial rates and capital allocations. See Figure 37, panels A and B.

Our research suggests that there is likely a combination of external and internal factors that contribute to low female representation as leaders in portfolio companies. Externally, some factors, such as relatively lower representation of women in leading entrepreneurial roles in target industries, are at least in part contributing to the low representation of female business leaders who may otherwise enter PE/VC pipelines. However, our research also suggests that there are

Figure 37: General Partners' View on Drivers for Low Female Representation in Portfolio Companies



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018.

Note: Based on responses from 190 emerging market General Partners. Data reflect results from respondents who believe the following are most important factors for why there is low gender diversity in senior management teams of portfolio companies.

likely biases in the current sourcing, investment decision making, and investment oversight processes that are limiting the amount of capital being allocated to female-led and gender diverse businesses.

BARRIER 1: PERCEPTION THAT FEMALE ENTREPRENEURSHIP IS LOW, PARTICULARLY IN TARGET INDUSTRIES AND BUSINESS SIZES

Current State

Practitioners most often explain the gap in capital received by female entrepreneurs in terms of the following external factors: (a) market or social conditions limit female leadership or entrepreneurship rates; (b) low representation of women entrepreneurs in target or growth industries; and (c) a lack of female-led businesses requiring capital at the levels at which firms are interested in deploying.

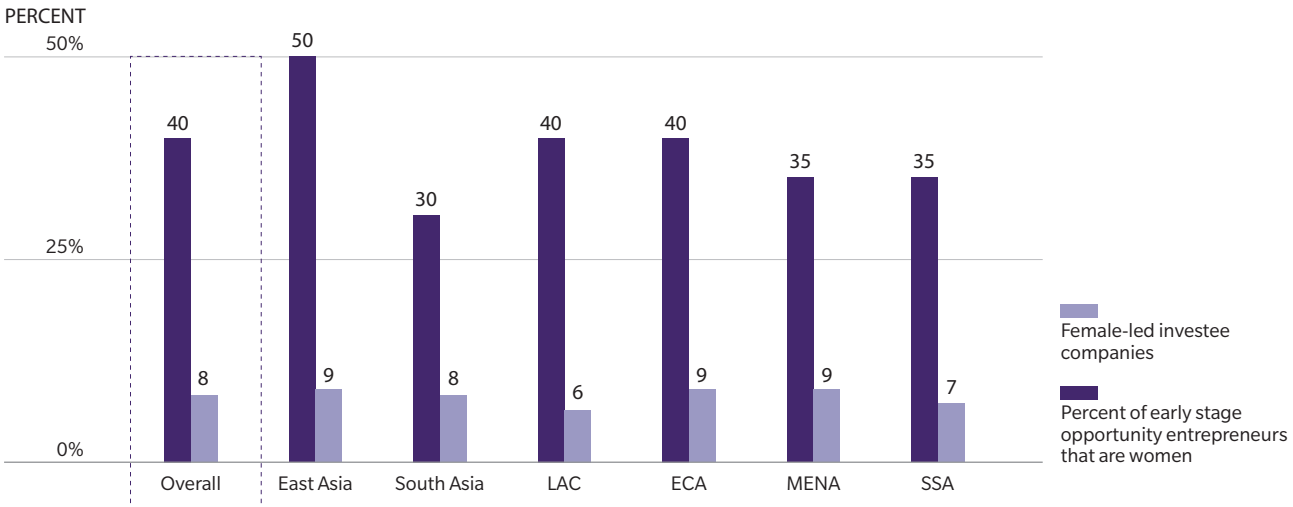
Industry practitioners often cite market or social conditions that reduce the number of female entrepreneurs. However, analysis of the proportion of women exploring entrepreneurial endeavors at

early stages show that the percentages are significantly higher than the proportion of women receiving PE/VC capital in emerging markets.[6] Approximately 40 percent of early stage entrepreneurs are women, compared to 8 percent of portfolio companies that are female-led. (Global Entrepreneurship Monitor 2018). Though the entrepreneurship rates are not directly analogous to the number of businesses that would be targets of PE/VC investments (e.g., operating at the right scale), they do suggest that the low levels of capital being allocated to women are not entirely explained by low female entrepreneurship rates. See Figure 38.

When analyzing the proportion of investments in female-led businesses by industry in emerging markets, the data suggest that the shift toward high growth technology and business to consumer industries does not explain the low proportion of funding being received by female-led businesses. Most PE deals in emerging markets have focused on information technology or consumer products and services (B2C) industries in the last five years. If a shift to these industries has reduced the proportion of female-led businesses that receive investments, the proportion of female-led businesses would be below the market rate in these sectors. However, the distribution of female-led businesses by industry is comparable to the distribution in the overall market. As such, the preconception that women are underrepresented in high growth industries is likely not accurate. See Figure 39, panels A and B.

Deal-level analysis of portfolio companies supports the trend that female-led businesses are much more common at lower investment levels. Female-led businesses account for 12 percent of deals smaller than

Figure 38: Total Female Entrepreneurship Rates Compared to Percent of Female-Led Companies Receiving Private Equity or Venture Capital Investments by Market



Sources: Aggregated datasets from International Finance Corporation; PitchBook; and other publicly available datasets. Global Entrepreneurship Monitor (2018)^6

Note: Data reflect percentage of portfolio company deals that are female-led by deal size. Based on a sample of over 5,400 Private Equity/Venture Capital investments in emerging markets.

US$100,000, compared to 6 percent of deals larger than US$100 million. However, these data do not speak to the opportunities that may have been foregone at these levels and the potential barriers female entrepreneurs face to receiving larger funding.

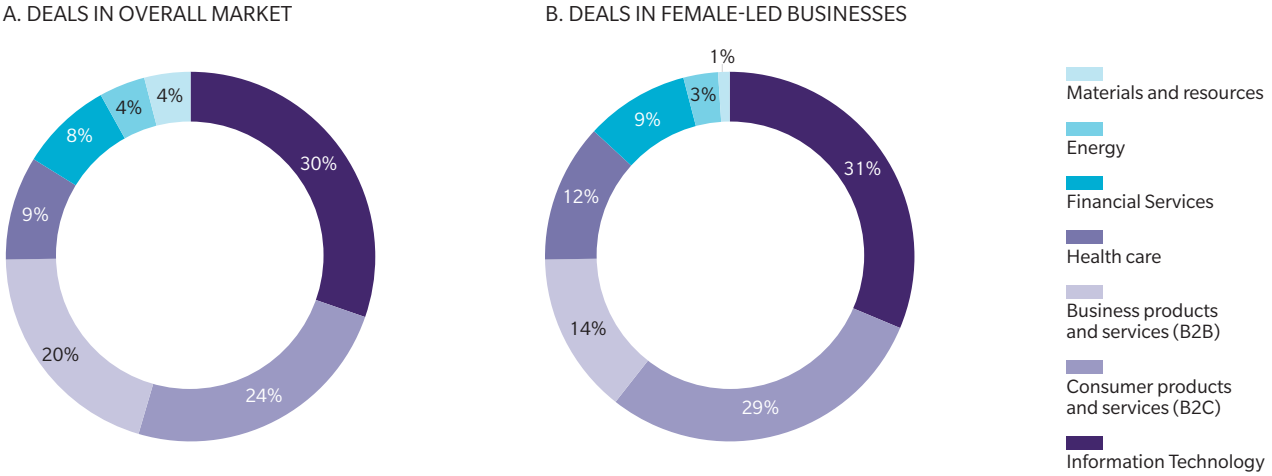
Implication on Investment Management

Though the relatively low levels of capital being invested in female-led businesses may be driven in part by external factors, our findings suggest that internal factors, such as unconscious biases and narrow sourcing funnels, are likely contributing as well. If untested, the perception that the gender gap in capital recipients is explained by external factors outside of the control of GPs risks becoming a self-fulfilling prophecy perpetuating today's gaps. As such, GPs should develop the fact base to test this perception and understand if biases are potentially precluding them from promising investment opportunities.

Actions Firms Can Take

Collect data to assess whether there are underlying biases in the investment process. GPs are divided on the extent to which low representation of women as investees is driven by unconscious biases or external market factors; however, there is reason to believe both are at least playing a role. All firms, however, would benefit from collecting the data necessary to test whether there may be return-reducing biases embedded in their investment process. This will require firms to collect and then analyze gender data at different points in the investment funnel to understand whether female-led businesses or gender diverse teams are disproportionately falling out at different stages. PE/VC firms can track diversity metrics of (a) deals sourced; (b) deals undergoing due diligence; (c) investments made; and (d) hiring of senior managers and board members. Collecting and then analyzing these data will allow firms to understand whether biases exist and then diagnose the root causes of biases.

Figure 39: Percent of Deals by Industry in Overall Market and Female-Led Businesses



DEALS THAT GO TO FEMALE-LED BUSINESSES

PERCENT

Information Technology	Consumer products and services (B2C)	Business products and services (B2B)	Health care	Financial Services	Energy	Materials and resources
8%	10%	6%	11%	9%	7%	3%

Sources: Aggregated datasets from International Finance Corporation; PitchBook; and other publicly available datasets.

Note: Based on a sample of more than 4,800 Private Equity/Venture Capital investments in emerging markets that have sector classifications and gender data of Chief Executive Officers.

Create gender diversity targets across the investment funnel. Several of the interviewed PE/VC firms have established rough targets for the diversity of their potential deal flow, including at entry points into seed or accelerator programs. When these firms miss the targets, they critically assess their processes, asking whether they are inadvertently establishing preclusive barriers, are doing enough outreach to tap into new networks, or are doing too few interviews. Unsurprisingly, these firms tend to have significantly higher proportions of their investments in diverse businesses. However, these firms are the minority: only about 25 percent of emerging market PE/VC firms have gender diversity targets for deals sourced and opportunities that undergo due diligence.

25%

of emerging market Private Equity and Venture Capital firms have gender diversity targets for deals sourced and opportunities that undergo due diligence

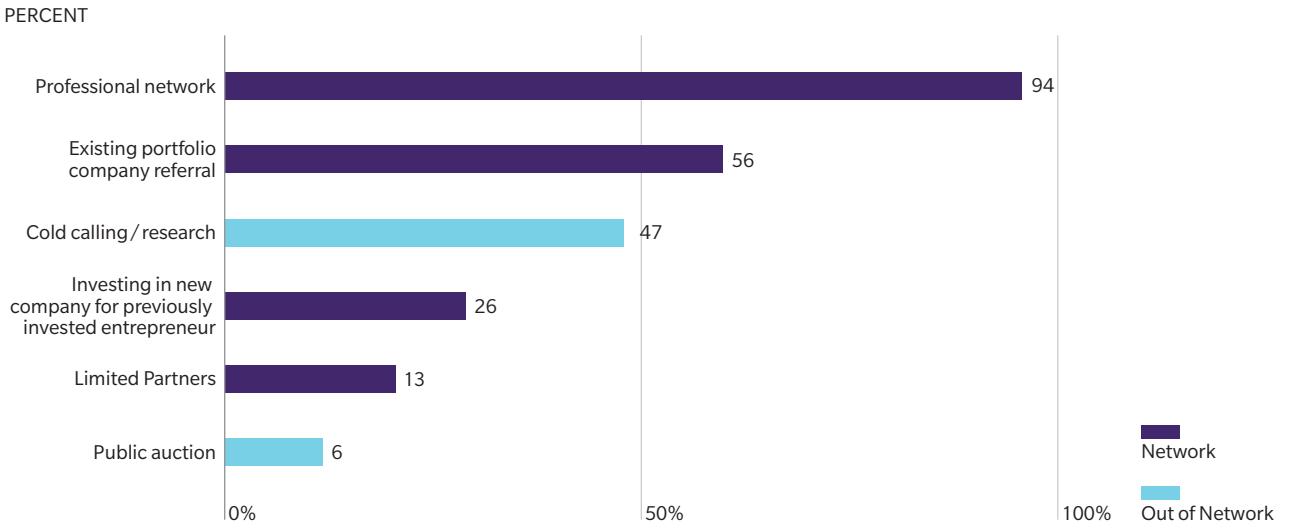
BARRIER 2: NETWORK-BASED SOURCING MAY BLIND MALE OR FEMALE DOMINATED FIRMS TO POTENTIAL DEALS

Current State

Surveyed practitioners in emerging market PE/VC have stated that most of their deals are through network-based channels, including their professional networks (94 percent) and referrals from existing portfolio companies (56 percent). Though there could be reason to believe that proprietary sourcing channels may be overstated in self-reported data, the reliance on proprietary deal flow in emerging markets has been reaffirmed in interviews.

The reliance on network-based sourcing is likely reducing the number of female-led businesses that enter the deal funnel and thus ultimately receive capital. Research suggests that networks naturally develop between people of similar genders, ethnicities, and backgrounds (McPherson, Smith-Lovin, and Cook 2001). As such, there tend to be fewer female-led businesses that enter the deal funnel from a male dominated network. See Figure 40.

Figure 40: Most Common Channels for Deal Sourcing



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018.

Note: Data reflect percentage of emerging market respondents who identify the following channels through which deals are mostly generated. Based on responses from 131 emerging market General Partners.

Implication on Investment Management

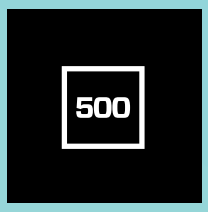
Though many GPs believe that external factors significantly explain the current low representation of women as recipients of capital, these perceptions are based on the investment opportunities that they see in the deal sourcing process. Our research suggests that emerging market GPs are extremely reliant on networks for sourcing their deals. This reality could mean that male dominated firms, whose networks are likely to have a lower proportion of female entrepreneurs in them, are not seeing or connecting with the female-led opportunities that do exist.

Actions Firms Can Take

Establish new networks by building a diverse investment team. Our interviews and survey of emerging market GPs indicate that firms are extremely dependent on networks to source their deals, but these networks are dominated by people that look similar to themselves. One of the most effective ways to overcome these barriers is to have investment teams whose makeup is more representative of the entrepreneurial landscape than the status quo. Gender diverse investment teams will incrementally add more diverse investment opportunities to firms' deal flow and help firms identify and "sell" top diverse entrepreneurial talent, as is established earlier in this report and demonstrated by several GPs.

Proactively seek out female entrepreneurs. GPs interested in expanding their deal flow can work with female entrepreneurial networks and organizations to expand their visibility of female-led opportunities. Several female angel investor networks, which cater to early stage companies, and entrepreneurship networks, which support entrepreneurialism more broadly, operate in various regions, including in Africa and the Middle East. Such initiatives would help firms connect with current and future entrepreneurs, as well as better understand the market needs they are trying to serve. Active participation in these organizations would help them overcome network barriers and enhance firms' understanding of markets otherwise overlooked. This would also have a strong signaling effect to other gender diverse entrepreneurs, potential diverse new hires, and LPs interested in moving toward gender balance in their direct and indirect investments.

CASE STUDY



500 STARTUPS

Gender diverse sourcing through diverse investment teams

500 Startups is an active global VC firm that has invested in more than 2,000 companies and 4,500 founders in more than 70 countries around the world. The mission of the organization is to discover and back the world's most talented entrepreneurs, help them create successful companies at scale, and build thriving global ecosystems.

Diversity permeates throughout 500 Startups' organization, and inclusion has become one of their core values. Understanding the importance of a gender inclusive culture, the firm believes that PE/VC firms of the future do not look like firms from the past, and that moving toward greater diversity will differentiate the firm. The team of more than 100 professionals consists of 51 percent women. The firm uses targets to establish diversity goals and aims for gender balance in the company, without committing to specific quotas. The firm also runs investor training courses often hosted (in partnership with top universities such as the Stanford Center for Professional Development and UC-Berkeley) for up-and-coming investors around the world. They always ensure that at least one-third of each group of the course participants are women, offering scholarships for female investors when needed. 500 Startups also sends new hires on its investment team to the training programs to ensure everyone has the skills and mindset they need to succeed.

500 Startups is focused on increasing its pipeline of female entrepreneurs, which it achieves by supporting diverse entrepreneurs through networking and educational programs. 500 Startups contributes to the development of thriving innovation ecosystems around the world to better equip startups with tools to succeed by running educational programs, events and conferences, and partnerships with global corporations and governments. The firm's Seed Accelerator Programs, for instance, emphasize digital marketing, customer acquisition, and fundraising for early stage companies. These programs enhance the broader emerging market entrepreneurial ecosystem, and help 500 Startups' investment team broaden its network across genders, geographies, and industries. This access to new networks allows the firm to overcome network barriers and generate unique deal flow that other investors may not see.

500 Startups' efforts to develop diverse investment talent and expand its entrepreneurial networks has allowed it to successfully attract more diverse companies to its portfolio. The firm has a distinguished track record, having raised more than US$475 million throughout 19 funds. Moreover, 525 companies in their portfolio of more than 2,000 startups have at least one female founding team member. In the two most recent batches of its seed accelerator program in San Francisco, more than one-third of the companies have had at least one female founder. Additionally, four of the 10 unicorns 500 Startups has invested in (Canva, CreditKarma, Grab, and Talkdesk) include a female co-founder.

CASE STUDY

FLAT 6 LABS

FLAT6LABS

Finding and supporting the growth of women entrepreneurs in Middle East and Northern Africa

Flat6Labs is a regional startup accelerator program that provides seed funding, strategic mentorship, and entrepreneurship-focused business training to its investments in six countries in the Middle East. Through its programs, Flat6Labs has supported more than 1,000 entrepreneurs leading more than 200 companies, of which about 50 percent have received follow-on funding. The organization prides itself on creating an environment in which passionate entrepreneurs can rapidly thrive, in part due to an expansive network of more than 500 mentors, investors, and partner entities.[1]

Flat6Labs has partnered with the British Embassy in Cairo and IFC to implement a startup initiative that inspires and support thousands of current and aspiring Egyptian entrepreneurs. The initiative, StartEgypt, was announced at the end of 2017. It provides entrepreneurial supports services, awareness activities, and a unique incubation program along the themes of ideate, build, and accelerate. The program began with several activities and workshops, including startup competitions, hackathons, and ideation sessions, followed by a six-month incubation program.

There is a large female entrepreneurial gap in MENA, and a significant component of StartEgypt has been improving female engagement and gender diversity of entrepreneurs in the region. Only 5 percent of formal firms are led by a woman and, for every female entrepreneur in MENA, there are six women who want to start a business but do not pursue the opportunity.[2]

Through this initiative, Flat6Labs has begun to focus on the existing pool of potential female entrepreneurs and converting them to seriously pursue an entrepreneurial path. In many cases, this requires "eliminating myths and beliefs that women can't be entrepreneurs," according to Dina el-Shenoufy from Flat6Labs. The program helps demystify a lot of issues, talks through the risks, and goes through success stories of aspiring entrepreneurs. Recognizing that female entrepreneurs often lack the right mentorship from the outset, StartEgypt brings in female speakers to help make the necessary connections and build the support networks to help female entrepreneurs go from ideation to execution.

Though the program is still in its first cohort, StartEgypt has already sparked tremendous interest and action in female entrepreneurs who may not have otherwise pursued the path. In its first cohort, StartEgypt had 27 percent of its startups led by female entrepreneurs. Three of the five female-led startups were nominated as the top 10 startups of the cycle.

"People are discussing solutions to improve gender diversity at stages that are too late in the funnel. In many markets, it may be more about supporting and enabling potential female entrepreneurs at the earliest stages instead of finding the ones that are ready now."

DINA EL-SHENOUFY
CHIEF INVESTMENT OFFICER, FLAT6LABS

1 See the Flat6Labs website, https://www.flat6labs.com/.

2 See the World Bank Enterprise Surveys website, http://www.enterprisesurveys.org.

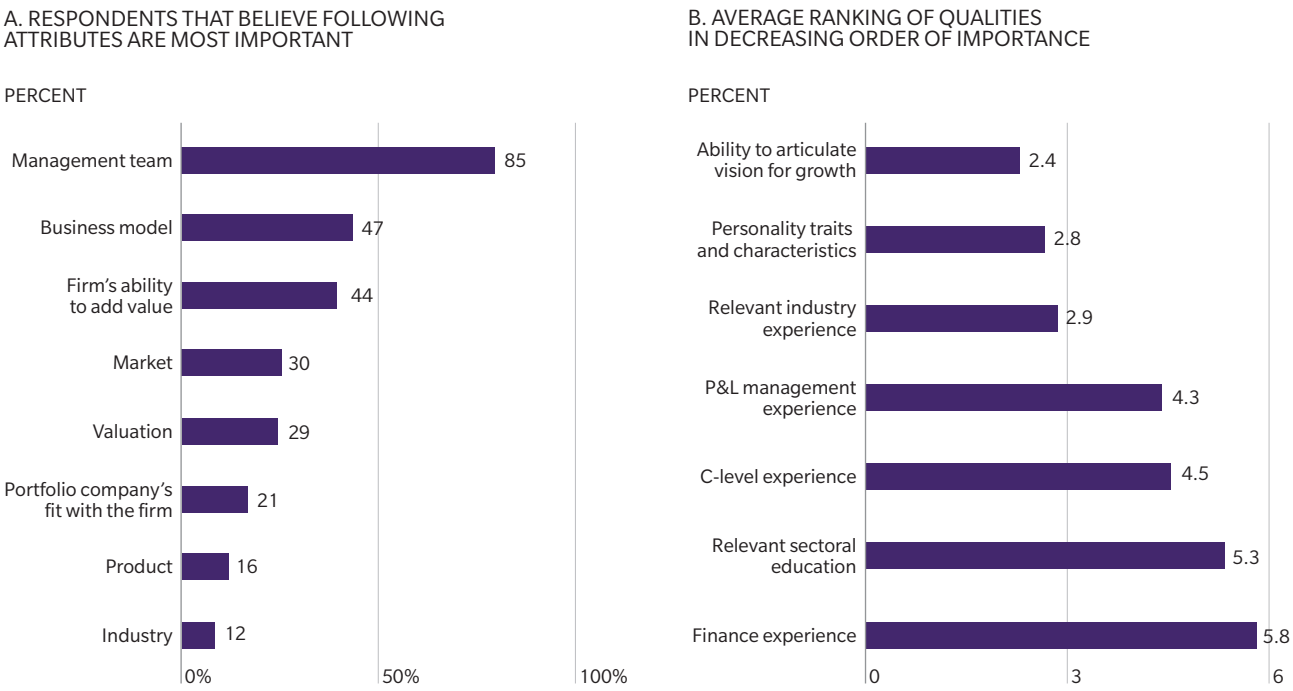
BARRIER 3: UNCONSCIOUS BIASES IN DUE DILIGENCE MAY CAUSE FIRMS TO UNDERVALUE GENDER DIVERSE ENTREPRENEURS

Current State

When potential opportunities are sourced and eventually evaluated, the most significant consideration in whether to invest in a company is the management team. Eighty-five percent of emerging market senior investment professionals have identified this as a top consideration, roughly 38 percentage points higher than the second most important consideration. When evaluating management teams, surveyed GPs most strongly value an ability to articulate a vision for growth, personality traits, and characteristics, and relevant industry experience. See Figure 41, panels A and B.

Outside of industry experience, these considerations tend to be subjective and therefore are potentially at risk of being affected by unconscious biases. For instance, several studies have found biases in the way that female entrepreneurs are asked questions in the due diligence process, including the tendency for women to be asked defensive, nongrowth questions relative to male entrepreneurs, who are asked growth questions about scaling their businesses, reducing funding outcomes for women (Kanze 2017). Furthermore, when analyzing the way female entrepreneurs were asked questions during due diligence process, researchers identified trends that women were often questioned about their technical knowledge and capabilities whereas men were not, or women were simply assumed that they did not know the technology (Abouzahr et al. 2018). These issues are compounded by the fact that investors tend to be drawn toward entrepreneurs that were or feel like previous "winners," which can create an unconscious bias against

Figure 41: Most Important Attributes of Portfolio Companies for Investment Decision Making by General Partners



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018.

Note: Data reflect percentage of emerging market respondents who believe these attributes are most important when evaluating investments. Average ranking of most important qualities when evaluating management team. Based on responses from 135 emerging market General Partners. P&L = Profit and Loss

female entrepreneurs who have been traditionally underrepresented as capital recipients.

Implications on Investment Management

Several unconscious biases may affect the way investment teams evaluate female-led or gender diverse management teams, ultimately reducing the amount of capital these businesses receive. As such, even if GPs are seeing many gender diverse opportunities, they may not be evaluating them fairly. The biases are at risk of being particularly acute in situations in which decision making is based on heuristics or "gut instincts," a situation often found in early stage companies.

Actions Firms Can Take

Reduce the potential for unconscious biases to influence investment decisions. GPs can reduce potential unconscious biases by increasing the diversity of the investment team that is involved in the evaluation process, even at junior levels, and ensuring the decision-making process is sufficiently inclusive so all people's considerations can be heard. In some instances, this could require formalizing a consensus driven decision-making process, in which all decision makers need to agree on and be comfortable with the outcome.

Firms can create more structure around due diligences to maximize consistency. Firms can standardize the questions to ensure that male and female entrepreneurs are pressed on similar issues. Similar to the work that was done in other research, investment team members or third parties can be asked to observe key portions of the diligence process to assess whether biases may have affected the outcome. Finally, firms can protect against group think by using two investment teams tasked with developing competing investment cases in favor of and against the opportunity.

Positively screen for gender diverse management teams. Firms that believe that gender balance in the leadership of portfolio companies would improve returns should explicitly include gender diversity as a positive investment consideration. However, only 29 percent of surveyed emerging market GPs actively consider the gender diversity of potential portfolio companies' senior management teams when conducting due diligences. The diversity of the management team and the broader employee base should be viewed as a differentiating factor when evaluating prospective investment opportunities. This will require asking for sex-disaggregated data in the due diligence process and systematically including that information in the evaluation process.

CASE STUDY

VillageCapital

VILLAGE CAPITAL

Disrupting how capital is allocated to women entrepreneurs

Village Capital is an early stage VC firm that uses a unique, award-winning investment process to allocate capital to companies solving the world's largest problems in agriculture, education, energy, financial services, health, and other sectors that relate to underserved communities and resource sustainability. Village Capital recruits and trains cohorts of 10 to 12 entrepreneurs in multiday workshops that cover topics such as team management, customer discovery, financial planning, and how to use capital to most effectively scale their businesses. The multiple month program culminates in an investment process in which entrepreneurs openly assess one another's businesses, and the two highest-ranked ventures receive seed capital investments of US$50,000 to US$100,000 from investors that have pre-committed capital. Historically this is from Village Capital's affiliated fund, VilCap Investments, but also other co-investors. Village Capital has managed more than 60 programs in more than a dozen countries, working with more than 1,000 entrepreneurs and facilitating over 100 investments.

Village Capital uses the peer selection process to disrupt how investments are made in early stage companies and transform the way capital builds companies. The peer selection model addresses a problem that its founders, including Ross Baird and Victoria Fram, have identified in their early experiences as entrepreneurs and investors: investors' reliance on pattern recognition was causing them to miss opportunities at the "top of the funnel." Enterprises' need for investment and mentoring far exceeded the capacity of VC firms required to provide it at the level that promising entrepreneurs deserved. In the end, entrepreneurs not receiving capital often gained little by going through the time-consuming process. Further, there was a skewed power dynamic between entrepreneurs and investors. Entrepreneurs who could not self-finance were required to force their business models to fit investors' visions as opposed to their consumers' needs.

Village Capital's program enables a diverse group of entrepreneurs to candidly coach and teach one another, and then peer select the businesses most ready for seed capital. The ranking processes are structured through comprehensive evaluation matrices that promotes collaborative learning and growth. The process ensures the due diligence process adds value by becoming relational instead

of transactional and shifts the focus to customers instead of investors, allowing entrepreneurs to use their collective experiences to accelerate business growth in an educational, village-like community. This model is based on the concept of communal lending that has been common in emerging markets.

Village Capital believes that flipping the power dynamics of the investment process eliminates decision-making biases and blind spots that cause male-dominated investment teams to overlook promising opportunities and disproportionately invest in male-led businesses. The program managers believe that diverse backgrounds and experiences greatly enhance the process for all involved, so make efforts to ensure that interviewed applicants for the programs' cohorts are diverse. On average, 40 percent of the cohort comprises female-led ventures (female-founded or co-founded).

Village Capital's innovative approach to capital allocation has helped build successful entrepreneurs and mitigate investment biases that may preclude capital being allocated to a diverse group of entrepreneurs. The firm's program and approach to investment has yielded the following:

- **Diverse set of capital recipients.** Delegating investment decision making to a diverse group of entrepreneurs has equalized capital allocation, in which 44 percent of the capital invested is going to women, which is more than twice the industry average.
- **Successful coaching and building of business leaders.** The program has a track record for establishing viable business leaders. Although only two businesses in each cohort receive investments, alumni in the cohort overall raise 2.9 times as much funding as a control group, and generate 2.3 times as much revenue.
- **Highest performing businesses receiving investments.** Village Capital's process mitigates much of the biases from the process and allows the best companies from each cohort to surface. A recent analysis of the peer-selected investment process has found that the gender bias that commonly occurs within traditional venture capital is mitigated during the peer review process: rather than women getting crowded out, they are evaluated by their peers based on the merits of their company. Initial internal analysis of Village Capital's portfolio suggests that selected businesses are the strongest performers in terms of capital raised and revenue growth through time.

"We launched Village Capital on a radical idea: if we change the power dynamics of venture capital, we might be able to empower a more diverse set of entrepreneurs solving a more meaningful set of problems. Peer-selected investment is, at its core, about changing the culture of venture capital — creating an environment where the best ideas get funded, regardless of who or where they come from."

ALLIE BURNS
CEO, VILLAGE CAPITAL

BARRIER 4: GENERAL PARTNERS DO NOT USE OVERSIGHT TO IMPROVE DIVERSITY

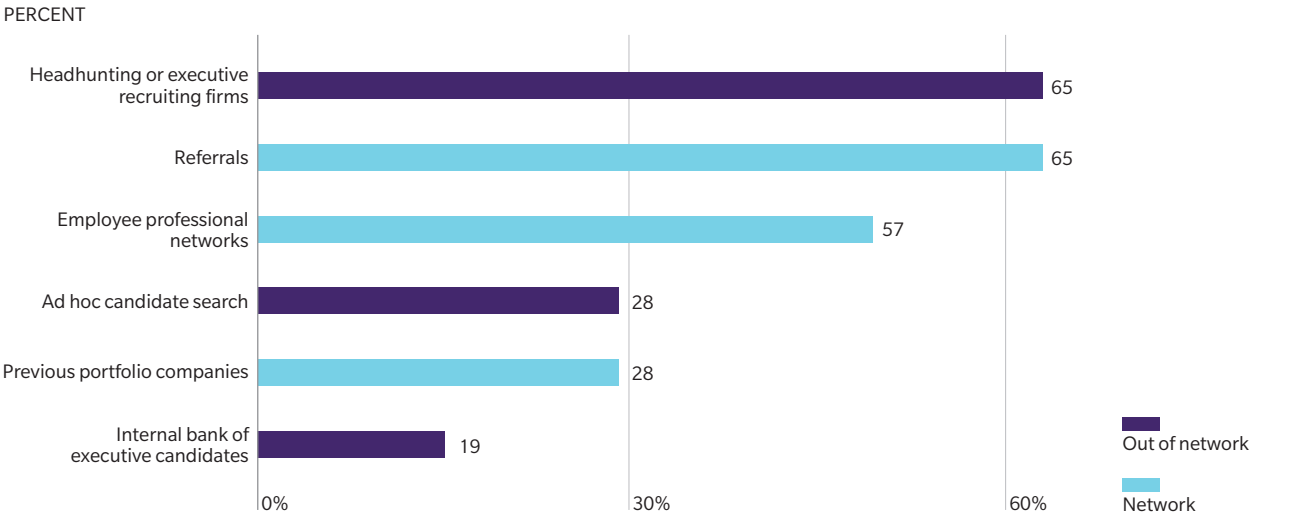
One of the most impactful changes GPs can make is in how they manage the interface with their portfolio companies. PE/VC firms, for instance, could have indirect oversight of 10 times or 100 times more employees through the investments they make in their portfolio companies than through their direct employees. GPs looking to move their portfolio companies toward gender balance can ask questions about gender diversity, help source gender diverse candidates for senior management roles, and share best practices with their portfolio companies.

Current State

PE/VC firms are not taking advantage of their influence over portfolio companies to move them toward gender balance even though over half of firms believe this would improve returns. This manifests both in the data that GPs acquire of portfolio companies and how GPs help their companies source senior talent. For instance, more than 60 percent of emerging market GPs do not track sex-disaggregated employment data of portfolio companies post-investment.

Interviewees consistently express one of the most impactful means of oversight that GPs have on investees is on human resources and talent of the portfolio companies. This influence often takes form in the sourcing of senior leaders as well as potential board members. However, only 34 percent of surveyed firms in emerging markets screen for or pursue gender diverse candidates when making senior management changes in portfolio companies. Further, the channels in which these candidates are sourced are largely network-based, so the talent pool being considered is unlikely to be gender balanced, particularly in firms that are male or female dominated. See Figure 42. A lack of deliberate

Figure 42: Most Common Channels for Sourcing Portfolio Companies' Senior Leadership



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018.

Note: Data reflect percentage of emerging market respondents who identify the following channels through which senior leaders for portfolio companies are generally sourced. Based on a sample of 99 emerging market General Partners

CASE STUDY

Kapor
CAPITAL

KAPOR CAPITAL

The Founders' Commitment to Diversity

Kapor Capital is an early stage VC firm that believes in the power of transformative ideas and diverse teams. Kapor Capital believes that startups can leverage information technology to address urgent social needs in education, finance, health, justice and more. Key to this philosophy is the firm's deep commitment to intersectional diversity. Their entrepreneurs come from underrepresented backgrounds, including race, gender, and socioeconomic status, and the firm believes that these lived experiences provide their portfolio companies a competitive advantage.

Kapor Capital's investment team consists of majority underrepresented people of color and half women. The team's diversity is a strategic advantage in increasing deal flow. Entrepreneurs with gap-closing businesses often want Kapor Capital as an investor, even when deals are oversubscribed; they count on the firm to be a strategic partner. Project Diane reports that Kapor Capital has invested in more black women entrepreneurs than any other firm.

Kapor Capital believes that investing in underrepresented entrepreneurs can yield new ideas, markets, and revenue streams that others have overlooked. The firm puts this philosophy into action in its investment decisions, with these results:

- Over 50 percent of its investments have a founder who is a woman or a person of color from an underrepresented background.
- More than 40 percent of its first-time investments have a female founder.
- Over 25 percent of its first-time investments have a founder of a racially underrepresented background.

Kapor Capital applies this philosophy to its portfolio companies through the Founders' Commitment, which asks CEOs to commit to build a company with

an inclusive culture that is explicitly looking for talent from diverse backgrounds. The commitment, which launched in January 2016, is embodied in four actions ("G.I.V.E.") that all portfolio companies agree to carry out:

- **Goals.** Establish diversity and inclusion goals tailored to the company's funding stage, size, customer base, and core business, and provide transparency against those goals in quarterly investor updates.
- **Invest.** Invest in technology, training, or resources that mitigate bias in employment life cycle.
- **Volunteer.** Organize opportunities for employees to engage with underrepresented communities, particularly groups that reflect the company's customer base.
- **Educate.** Participate in diversity and inclusion sessions, which are hosted by Kapor Capital, to learn effective strategies and tools.

The Founders' Commitment embeds diversity and inclusion in the DNA of companies before the organizations become too large to turn around. Kapor Capital does not prescribe broad outcomes or goals. The firm works with its companies to establish goals that make sense for their specific business, often helping the companies move toward businesses that look like their customer base from the earliest stages of the company.

Kapor Capital's experience with the Founders' Commitment demonstrates several lessons. First, diversity and inclusion initiatives are good for business. Ensuring that companies emulate their customers allows them to better understand and target consumers' needs. Second, investors looking to drive change in portfolio companies should not be overly prescriptive or rigid in setting diversity goals. The most significant impact is embedding the value of diversity and inclusion in the company's DNA, which can be achieved through various goals or targets. GPs can work with their portfolio companies to tailor goals to the needs of the business at hand (e.g., the diversity of its customer base).

Investors have tremendous opportunity to give guidance and best practices on diversity and inclusion initiatives, but only if they have built an inclusive culture and a team from diverse backgrounds. Firms interested in reaping the benefits of greater diversity in their portfolio companies should make efforts to educate and share their experiences across their portfolio companies.

"We long ago came to the conclusion that retrofitting a culture of diversity into a big, established company is far more difficult than baking these values in at the startup phase. We'll know we've been successful when one of these companies takes off to become the next tech giant, and the faces of its leadership and workforce reflect the diversity of our country."

FREADA KAPOR KLEIN
PARTNER, KAPOR CAPITAL

consideration of gender not only risks preventing GPs from reaping the benefits of improved diversity in portfolio companies but may also perpetuate gender gaps of senior leadership in later stage companies.

Actions General Partners can take

Affirm portfolio companies' commitment to diversity and inclusion at time of investment. As capital allocators, GPs can gain commitments to gender diversity outcomes from their portfolio companies from the outset, and this commitment can take many forms. In a light touch fashion, GPs can simply ask its portfolio company CEOs to establish goals and work toward hiring women and other underrepresented minorities at rates higher than peers or industry averages. Lightspeed Venture Partners, for instance, asked its companies' CEOs to sign a letter confirming that the company expects "at least one candidate from an underrepresented background be considered for every open leadership and independent board member position in the company." When introduced in early 2018, Lightspeed asked current and new portfolio companies to sign the letter, but it was not mandatory. Other firms, such as Kapor Capital, ask portfolio companies to make commitments to practical outcomes on diversity initiatives before investing in the company. In many cases, this is driven by the fact that the GP believes that increased diversity will enable portfolio companies to make better decisions and better understand their consumers.

Request and monitor sex-disaggregated data from portfolio companies. Surveyed emerging market GPs showed that most GPs do not ask for sex-disaggregated data postinvestment even though most firms believe that improving diversity would improve performance. By not requesting this data, GPs are ceding their ability to monitor gender diversity levels in their portfolio companies, track progress, and accumulate the fact base to apply pressure for further improvement. Further, this omission likely sends a signal to portfolio companies that improving gender diversity outcomes is not a large concern for the GPs.

Actively pursue gender diverse talent for portfolio companies. In many cases, GPs have significant input into the candidates sourced for senior management roles and board member appointments, but few emerging market firms pursue gender diverse candidates when

"I've never encountered a company that wanted our investment but wouldn't comply with our environmental requirements. That's not going to happen. Include 'policies conducive to gender diverse employment' in the list of requirements of potential targets upfront and there will be significant change."

NASHAT MASRI
PARTNER, FOURSAN CAPITAL PARTNERS

identifying talent for their companies. GPs who rely on headhunting or executive search firms can hold these firms accountable for providing them a diverse slate of candidates to choose from. Several interviews of GPs revealed cases in which the PE firm rejected groups of candidates provided by headhunters because they were not sufficiently diverse. In some cases, GPs interested in helping their investees move toward gender balance will have to actively pursue gender diverse candidates, because simply relying on networks will likely be insufficient to create a diverse pipeline. The reality that it may take additional time to look outside of existing networks to find the right talent underscores the importance of GPs to look ahead and preemptively build out a pipeline of diverse candidates for potential openings. Firms waiting to source candidates once openings arose often find it difficult to find the right talent in a timely fashion.

Provide guidance and feedback to portfolio companies on best practices in diversity and inclusion initiatives. GPs have visibility into different organizations, including their own, which gives these firms a unique perspective on the types of diversity and inclusion initiatives that work for companies in various industries, geographies and sizes. GPs that have established credibility on gender diversity through demonstrated action and outcomes can take these lessons to their portfolio companies to help them reach better gender balance. Interviewees suggested that GPs could drive significant change by working with portfolio companies in establishing the right goals, collecting the right data, and incorporating the necessary policies (e.g., parental leave) to build toward a more inclusive work environment. Requiring updates on progress against these goals in reports and board meetings has been helpful in ensuring the benefits persist through time. Additionally, GPs can encourage portfolio companies to provide an inclusive and safe workplace culture, by requesting portfolio companies to establish and implement anti-harassment and code of conduct policies. Organizations like the National Venture Capital Association have developed sample policies and best practices for addressing harassment and discrimination.[7] Other GPs, such as General Atlantic, organize workshops with leaders from several portfolio companies from similar regions to work through common issues the company's leaders are facing.

CASE STUDY

GENERAL ATLANTIC

Embedding gender diversity in the investment and oversight process

General Atlantic is a global growth equity firm that manages over $28 billion in assets. The firm focuses on investments in four global sectors: Technology, Financial Services, Healthcare and Consumer, with a team of more than 150 investment professionals, including in offices in the United States, Latin America, EMEA, China, Southeast Asia and India/APAC.

The General Atlantic leadership team believes that increasing diversity would improve performance. It also views its engagement with portfolio companies as the area where the firm can have the greatest impact on closing gender gaps. The firm believes that building gender balanced leadership teams in its portfolio companies and boards will strengthen the companies' management, decision-making, and overall performance. Furthermore, General Atlantic has found that the best leadership teams care about gender diversity and seek to partner with like-minded investors. As such, the firm believes that becoming a leader in gender diversity initiatives would help further differentiate itself to the leaders of promising investment opportunities.

Given that, General Atlantic actively considers and acts to improve gender diversity throughout the investment process, from due diligence to oversight. These initiatives include:

1. Including diversity factors in the due diligence process. General Atlantic seeks to understand the diversity of executive leadership teams and board of directors at the time General Atlantic evaluates potential investment opportunities. As part of its diligence process, the firm works closely with senior management teams to share best practices on diversity and inclusion, and in some cases will make recommendations on how to better achieve diversity and inclusion outcomes as the company scales.
2. Sourcing gender diverse talent for C-Suite executives and board members. It is critical to get the right leaders in the right roles as early as possible when supporting our portfolio companies for scale. General Atlantic recognizes that building a meaningfully diverse candidate pool may require additional time and resources (e.g., to tap into new networks), and therefore proactively identifies potential executives and board members at the early stage of the investment process. This ensures General Atlantic has access to a

meaningfully diverse pool of talent, and can move with accuracy and speed when key executive vacancies need to be filled. In an effort to maintain diverse and inclusive talent in General Atlantic's existing portfolio, General Atlantic actively tracks existing board and executive leadership composition to ensure diversity and inclusion outcomes are being achieved.

3. Hosting workshops with portfolio companies on gender diversity. Post-investment, General Atlantic is committed to gender diversity. At the end of 2018, for instance, the firm held a pilot workshop with the CEOs of its portfolio companies in Brazil to discuss diversity and inclusion, and invited leaders from a company in the region that has been successful in its own diversity efforts to share best practices. That company expressed why increasing diversity within their organization was important, what have they learned from their own process, and the impact diversity efforts have had had on their company. This sparked conversation amongst the portfolio companies about various obstacles they've faced trying to increase gender diversity and approaches they can use to overcome them. Following the success of this pilot program, General Atlantic plans to continue hosting similar workshops in other regions.

"As industry leaders, we want to drive meaningful change in the communities in which we operate. Fostering open conversations about diversity and inclusion in the workplace is the first step to doing that. More inclusive and diverse workplaces empower employees to deliver their best, leading to better business outcomes."

BILL FORD
CEO, GENERAL ATLANTIC

LIMITED PARTNERS—CATALYZING CHANGE IN GENERAL PARTNERS

Current State

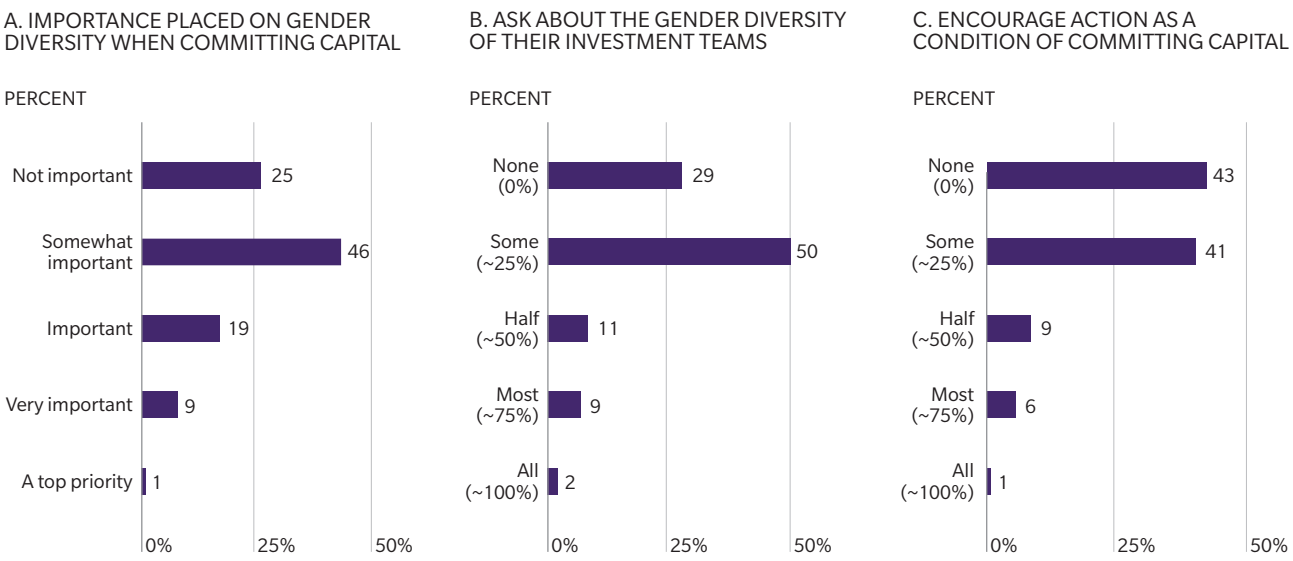
LPs interviewed who have been aiming to improve gender diversity have faced several obstacles. First, the mandate of LPs is primarily focused on maximizing returns for and protecting the capital of stakeholders. Thus, LPs may find it difficult to proactively effect change if the business case is not clearly accepted by key decision makers, including external stakeholders. Further, LPs who have been asking GPs about gender diversity issues have encountered limits to their influence when they are not part of a unified front with other LPs. Interviewed LPs believe they can find significant strength in numbers when engaging with GPs, but many do not feel LPs have taken significant collective action on this issue.

The survey results of this research support this view, suggesting that LPs are not collectively taking sufficient action to influence the behavior of emerging market GPs. Less than 30 percent of surveyed emerging market GPs believe their LPs view gender diversity as an important issue. This discrepancy is likely driven by a lack of collective action. Surveyed GPs report being asked about gender diversity by about 25 percent of their LPs. GPs report that less than 20 percent of their LPs encourage them to improve gender diversity outcomes as a condition of committing capital. However, about 65 percent of surveyed LPs report that they view gender diversity as an important consideration when committing capital to funds. See Figure 43, panels A–C

Implications on Limited Partners' Interface with General Partners

LPs can have tremendous influence and ability to move their GPs toward gender balance and drive change in the industry. As the ultimate suppliers of investment

Figure 43: General Partners' Perception of Limited Partners



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018.

Note: Data reflect the perception of General Partners of the collective views and actions of Limited Partners. Based on responses from 151 emerging market General Partners.

capital for PE funds, LPs can choose the types of firms in which they would like to invest. In many cases, LPs can wield significant influence simply through the questions asked when conducting due diligence of funds raising capital. After initial investments, LPs can influence the funds' managers through the Limited Partner Advisory Committee (LPAC), quarterly or annual general meetings, and more ad hoc or informal meetings. However, LPs do not appear to be sufficiently managing their interface with GPs if they are hoping to incentivize moving their GPs toward gender balance in both investment decision makers and portfolio company leadership.

25%
of Limited Partners ask General Partners about gender diversity in due diligence questionnaires

Actions Limited Partners can take

Interviews of LPs, GPs, and academics suggest that LPs interested in improving diversity outcomes in GPs should not take an overly prescriptive role. Instead, interviewees suggested that LPs would be most effective when "walking softly with a big stick." In other words, LPs can establish goals and targets within the institution, clearly demonstrate that improving gender diversity is important to the organization through the due diligence process, and continue conversations with GPs postinvestment.

Establish investment goals or targets related to the diversity of one's investments. Nearly 60 percent of surveyed LPs do not have investment goals related to gender diversity of GPs or their portfolio companies. Of the surveyed LPs who view improving gender diversity in their investments as an important priority, 47 percent do not have any goals. Goals are often a prerequisite to solving problems that require long-term solutions, because they give an explicit objective for organizations to work toward and a metric for progress to be assessed against. Further, they often have strong signaling effects—both internally and externally—that demonstrate commitment to the issue. Interviews of LPs reveal several goals that could be established, such as:

- Having conversations with a certain proportion of GPs on the importance of and recommendations for achieving gender balance
- Increasing the number of GPs that provide sex-disaggregated data of their teams and portfolio companies
- Improving the proportion of capital that is allocated to gender balanced partner teams
- Increasing the percent of capital that is invested in female entrepreneurs or gender balanced teams by GPs
- Only investing in GPs with gender diverse investment teams

"In fundraising, our firms' gender diversity hasn't been a question. There has been more media attention to this in developed markets, but the top questions from LPs are around strategy, performance, and the capabilities of the team. It's not about diversity."

JENNY LEE
MANAGING PARTNER, GGV CAPITAL

CASE STUDY

AP2 | Andra AP-fonden

ANDRA AP-FONDEN

Establishing goals for gender diversity

Andra AP-fonden (AP2) is one of northern Europe's largest pension funds and a leader in sustainable investing. AP2 manages about 335 billion Swedish krona (US$36 billion) and is invested in virtually every asset class and market. Its average annual real returns for the last 10 years (2009–18) have averaged 8.8 percent. The Second AP Fund is convinced that it can only achieve its mandate of high long-term returns at low risk if considerations on sustainability are integrated into its activities, both within the organization and its investment processes. To this end, AP2 focuses on sustainability issues related to climate, corporate governance, diversity, and transparency and reporting procedures.

AP2 invests significant effort in defining, measuring, and transparently reporting its progress on sustainable investment goals. Through its annual reports, AP2 publishes quantifiable goals in priority areas (e.g., diversity) and asset classes (e.g., PE), defines follow-up methods and key performance indicators, and shares annual progress against those goals. When the goals aren't achieved, AP2 publicly acknowledges missed targets, diagnoses the root cause, and moves to improve. For instance, AP2 has established targets in the following areas:

Diversity: Increasing the share of women on company boards where the fund is sitting on the nomination committee.

Reporting: Increasing the proportion of PE funds that submit environmental, social, and governance reports to 75 percent.

AP2 maintains the annual Female Representation Index that measures the percentage of women represented on the boards and executive management positions of publicly traded Swedish companies. The fund uses this index to provide a fact base that can promote informed debate on the representation of women in corporate leadership positions, which can then be used to drive broader change.

AP2 makes significant effort to have conversations with its portfolio companies and PE funds, with an emphasis on sustainability and reporting procedures. Particularly with PE funds, AP2 aims to share best practices and lessons learned in sustainability to ensure that its partners are approaching the issues as well. The fund has found these discussions attract increased attention to AP2's priority issues and are effective means of driving change. Through these conversations, for instance, AP2 has increased the percentage of PE firms that provide sustainability reports by about 10 percent in a single year (AP2 2016).

"The purpose of our goals is to bring attention and structure to the issue of gender diversity. Establishing goals highlights that the issue is important, and we're committed to doing something. If it is easier to measure, it is also easier to have a dialogue."

CAMILLA AXVI
HEAD OF PRIVATE EQUITY, AP2

Defining these goals is a first step, but they are only truly effective when progress against them is measured and deviations from them are candidly assessed and diagnosed.

Ask about gender diversity in the due diligence questionnaires (DDQs). Asking questions of GPs about the current state and plans for improving gender diversity in DDQs is a simple first step in influencing GPs, but nearly 75 percent of LPs do not appear to be asking these questions. The types of questions that can be asked include data requests (e.g., "what is the percentage of investment employees who are female at various levels?") and broader strategic questions (e.g., "what is your firm doing to help attract and retain women?"). Nearly all interviewees suggest that asking questions would be a strong indicator to GPs that improving gender diversity is an important issue for LPs, particularly when LPs probe on inadequate or subpar answers. Most powerfully, acquiring the data of the answers to these questions will give LPs the fact base needed to identify firms that significantly lag peers in key gender diversity metrics, which can be used as a basis to incentive additional pressure or inform future capital commitments.

Use the post-investment oversight role to continue conversations on gender diversity. LPs' engagement on issues of gender diversity can continue after capital is committed and be reflected in the agendas of formal engagements, such as LPAC meetings, recurring general reports and meetings, and ad hoc discussions. The scope of these conversations and reports should at least be similar in nature to questions included in DDQs to track progress against certain outcomes and put continuous pressure on GPs for improvement. LPs can help their GPs achieve better outcomes by sharing best practices and lessons learned from their experiences as well as what other GPs are doing.

"The first step for Limited Partners that care about improving gender diversity in General Partners is to raise awareness and bring the conversation to the table. Ask questions. Collect data. Simply shining light on the issue can begin to help drive change."

SHELBY WANSTRATH
SENIOR INVESTMENT MANAGER,
PRIVATE EQUITY, TRS OF TEXAS

CASE STUDY

INSTITUTIONAL LIMITED PARTNERS ASSOCIATION

Asking about Diversity and Inclusion in the Due Diligence Questionnaire

The Institutional Limited Partners Association (ILPA) is the premier trade association for LPs in the PE asset class, representing more than 475 institutions and US$2 trillion of PE assets under management. ILPA works to maximize the performance and influence of LPs on an individual and collective basis. The organization advances the interests of LPs and their beneficiaries through research, education, advocacy, and best practices and tools that enable institutional investors to better achieve their investment goals. One resource is a standardized DDQ that includes the most frequent and important questions posed by investors, which is intended to ease the administration burden incurred by LPs and GPs in the due diligence process.

In September 2018, ILPA expanded its standardized DDQ to include important issues related to diversity and inclusion.a The revised DDQ now includes metrics of ethnic and gender diversity and questions on policies in procedures in hiring, promotions, family leave, mentoring, and harassment and discrimination. The DDQ includes a template for GPs to report the gender and ethnic diversity of their employees by seniority and role. The questionnaire also covers initiatives in both GPs and their funds' portfolio companies, including:

- Does the Firm have a formal Diversity and Inclusion policy or initiative?
- Does the Firm have a Code of Conduct that covers harassment, discrimination, and/or workplace violence?
- Does the Firm require such a Code of Conduct at its portfolio companies?
- Does the Firm have a Family Leave policy?
- Does the Firm have a formal mentorship program for minorities and/or women?
- Does the Firm work with organizations that promote the attraction and retention of women and minorities within private equity?

- What percentage of the Firm's female employees were promoted in the last year?
- What percentage of the Firm's female employees departed in the last year?
- For investments made by the Firm during the last five years, what is the average percentage of female board members per company?

In cases where firms answer 'Yes', the questionnaire asks for additional details on the policy or initiative. In cases where the firm answers 'No', the questionnaire generally asks whether the firm would be willing to willing to change that outcome (e.g., develop and implement a Diversity and Inclusion policy or initiative) within one year.

Incorporating elements of ILPA's diversity and inclusion templates and questions into the due diligence process is an essential step for LPs that are interested in collectively influencing the direction of the private equity industry. The standardized nature reduces administrative burden on both General and LPs, while raising awareness and beginning the conversation on the critical issue of diversity. ILPA and its members believe that collecting data will yield improvement, simply by shining light on the issue and accumulating the fact base needed to have meaningful discussions.

ILPA's most recent Due Diligence Questionnaire can be found on its website, www.ILPA.org.

"ILPA believes that diversity and inclusion is a strength that all stakeholders within the private equity ecosystem should embrace and promote in meaningful ways. The DDQ expansion and Code of Conduct guidance represent an opportunity for LPs and GPs to have conversations about these important issues, in the spirit of a stronger and ever-improving workplace for everyone."

STEVE NELSON
CEO, ILPA

CHAPTER IV NOTES

1 Level 20 is a nonprofit organization working toward the goal of improving gender diversity in the private equity industry. More information can be found at the Level 20 website, https://www.level20.org/

2. PEWIN is an organization for senior PE leaders whose members represent institutions with more than US$2.5 trillion in assets under management (AUM). More information can be found at the PEWIN website, https://pewin.org/.

3 Sample based on 1,000 Americans.

4 Sample includes analysts, associates, managers, vice presidents, and principals.

5 Midlevel investment professionals include managers, vice presidents, and principals.

6 Early stage opportunity entrepreneurship rates are developed from GEM (2018). Early stage opportunity entrepreneurs are defined as people that own or started a business running less than 42 months ('early stage') and moved into entrepreneurial activities because they saw an opportunity in its pursuit as opposed to by necessity of the existing labor conditions.

7 The National Venture Capital Association is trade association for the venture community in the United States providing venture capital data, practical education, peer-led initiatives, and networking. For more information on resources to address sexual harassment, please see: https://nvca.org/pressreleases/nvca-unveils-resources-help-address-sexual-harassment-venture-ecosystem/

V. CONCLUSION

Women are significantly underrepresented as leaders in PE/VC firms, and their lack of representation means that the decision-making teams allocating capital in emerging markets are acutely imbalanced. Our research suggests that this imbalance may not only be reducing the returns of PE/VC firms but could also be reducing female entrepreneurs' equal access to capital.

Moving the PE/VC industry toward gender balance will require action from both GPs and LPs, and steps can be taken today by individual organizations interested in changing the male-dominated status quo. For both GPs and LPs, PE/VC investors can commit to long-term goals related to gender diversity outcomes, collect the data required to track progress, and ensure that the conversation continues until gender gaps are closed.

LPs, for instance, can establish long-term commitments to increase the proportion of PE/VC capital invested in gender balanced fund management teams. GPs can aim to increase the proportion of women at all levels on the investment team as well as the proportion of gender balanced senior management teams in its portfolio. Senior leaders within the organizations can directly be made accountable for achieving gender diversity outcomes and seeing necessary changes. LPs can make sure that gender diversity is an important topic with GPs in due diligence questionnaires (DDQs), recurring reporting requirements, and standing Limited Partner Advisory Committee (LPAC) meetings. GPs can begin creating an increasingly inclusive culture through a clear tone at the top, which can permeate through to conversations with prospective and current female employees and portfolio companies.

The reality of today's gender imbalance is worrying, yet organizations that have prioritized increasing gender diversity have made tremendous progress. Through our research, we have showcased the benefits of making gender balance an organizational priority and the approaches that LPs and GPs have successfully used to drive change, both internally and externally. More balanced gender representation will not be achieved overnight, but small changes by LPs and GPs can be adopted to expedite the industry's journey to gender balance. Actions taken today can help LPs, GPs, women-owned and -led businesses, and the PE/VC industry as a whole reap the benefits of gender diversity.

BIBLIOGRAPHY

Abouzahr, K., F. B. Taplett, M. Krentz, and J. Harthorne. 2018. "Why Women-Owned Startups Are a Better Bet." Boston Consulting Group (blog), June 6. https://www.bcg.com/en-us/publications/2018/why-women-owned-startups-are-better-bet.aspx.

Ahern, K. R., and A. K. Dittmar. 2012. "The Changing of the Boards: The Impact on Firm Valuation of Mandated Female Board Representation." Quarterly Journal of Economics 127 (1): 137–97. doi:10.1093/qje/qjr049.

AP2 (Andra AP-fonden). 2016. AP2 Sustainability and Corporate Governance Report 2016. Göteborg, Sweden: Andra AP-fonden. https://www.ap2.se/globalassets/nyheter-och-rapporter/hallbarhetsrapporter/corporate-governance-report-2016.pdf.

Bock, L. 2015. Work Rules! Insights from Inside Google that Will Transform How You Live and Lead. New York: Twelve.

Brennan, B. 2018. "Top 10 Things Everyone Should Know about Women Consumers." Bloomberg (blog), January 11. https://www.bloomberg.com/diversity-inclusion/blog/top-10-things-everyone-know-women-consumers.

Brush, C. G., P. G. Greene, L. Balachandra, and A. E. Davis. 2014. "Diana Report—Women Entrepreneurs 2014: Bridging the Gender Gap in Venture Capital." Arthur M. Blank Center for Entrepreneurship, Babson College, Wellesley, MA.

Cabrera, M. A. M., and N. T. Nguyen. 2001. "Situational Judgment Tests: A Review of Practice and Constructs Assessed." International Journal of Selection and Assessment 9 (1–2): 103–13.

Carpenter, J., and J. Bitchell. 1999. "Bootstrap Confidence Intervals: When, Which, What? A Practical Guide for Medical Statisticians." Statistics in Medicine 19: 1141–64.

Clark, K. 2018. "How Many Billion-Dollar Companies Have Female Founders?" PitchBook (blog), May 25. https://pitchbook.com/news/articles/how-many-billion-dollar-companies-have-female-founders.

Collings, D., Y. Freeney, and L. van der Werff. 2018. "How Companies Can Ensure Maternity Leave Doesn't Hurt Women's Careers." Harvard Business Review, September 11. https://hbr.org/2018/09/how-companies-can-ensure-maternity-leave-doesnt-hurt-womens-careers.

CPPIB (Canada Pension Plan Investment Board). 2018. "Canada Pension Plan Investment Board to Increase Board Diversity Advocacy." CPPIB (news release), December 21. http://www.cppib.com/en/public-media/headlines/2018/cppib-increase-board-diversity-advocacy/.

Davis, K. 2014. "The One Word Men Never See in Their Performance Reviews." Fast Company (blog), August 27. https://www.fastcompany.com/3034895/the-one-word-men-never-see-in-their-performance-reviews.

Dawson, J., R. Kersley, and S. Natella. 2016. "The CS Gender 3000: The Reward for Change." Credit Suisse, Zürich, Switzerland. https://evolveetfs.com/wp-content/uploads/2017/08/Credit-Suisse-Reward-for-Change_1495660293279_2.pdf.

Deloitte. 2016. "Parental Leave Survey." Deloitte, New York.

Di Miceli, A., and A. Donaggio. 2018. "Women in Business Leadership Boost ESG Performance: Existing Body of Evidence Makes Compelling Case." Private Sector Opinion 42, IFC, Washington, DC. https://www.ifc.org/wps/wcm/connect/0c46a0b8-cc3b-4da0-8dcf-bde5af9ac166/PSO42.pdf?MOD=AJPERES.

Dobbin, F., and A. Kalev. 2016. "Why Diversity Programs Fail." Harvard Business Review, 94 (7–8): 52–60.

Eastman, M. T., D. Rallis, and G. Mazzucchelli. 2016. "The Tipping Point: Women on Boards and Financial Performance." MSCI, New York. https://www.msci.com/documents/10199/fd1f8228-cc07-4789-acee-3f9ed97ee8bb.

Efron, B., and R. Tibshirani. 1986. "Bootstrap Methods for Standard Errors, Confidence Intervals, and Other Measures of Statistical Accuracy." Statistical Science 1 (1): 54–75.

Elvira, M., and R. Town. 2002. "The Effects of Race and Worker Productivity on Performance Evaluations." Industrial Relations: A Journal of Economy and Society 40 (4): 571–90.

Foust-Cummings, H., S. Dinolfo, and J. Kohler. 2011. "Sponsoring Women to Success." Catalyst, New York.

Frank, L. 2018. "How to Use Employee Referrals without Giving Up Workplace Diversity." Harvard Business Review, March 15. https://hbr.org/2018/03/how-to-use-employee-referrals-without-giving-up-workplace-diversity.

GEM (Global Entrepreneurship Monitor). 2018. GEM 2017 / 2018 Global Report. London: GEM. https://www.gemconsortium.org/report/50012.

Gompers, P., W. Gornall, S. N. Kaplan, and I. A. Strebulaev. 2016. "How Do Venture Capitalists Make Decisions?" Working Paper 3492, Stanford Graduate School of Business, Stanford,

CA. http://faculty.chicagobooth.edu/workshops/finance/pdf/GompGornKapStreb%20Aug%2016.pdf.

Gompers, P., S. N. Kaplan, and V. Mukharlyamov. "What Do Private Equity Firms Say They Do?" Working Paper 15-081, Harvard Business School, Boston, MA. https://www.hbs.edu/faculty/Publication%20Files/15-081_9baffe73-8ec2-404f-9d62-ee0d825ca5b5.pdf.

Gompers, P., and S. Kovvali. 2018. "The Other Diversity Dividend." Harvard Business Review, July–August. https://hbr.org/2018/07/the-other-diversity-dividend.

Gompers, P., V. Mukharlyamov, E. Weisburst, and Y. Xuan. 2014. Gender Effects in Venture Capital. Boston, MA: Harvard Business School. http://dx.doi.org/10.2139/ssrn.2445497.

Gompers, P., V. Mukharlyamov, and Y. Xuan. 2014. "The Cost of Friendship." Journal of Financial Economics 119 (3): 626–44. doi:dx.doi.org/10.1016/j.jfineco.2016.01.013.

Gompers, P., and S. Q. Wang. 2017. "And the Children Shall Lead: Gender Diversity and Performance in Venture Capital." Working Paper 17-103, Harvard Business School, Boston, MA.

GEO (Government Equalities Office). 2018. "Reducing the Gender Pay Gap and Improving Gender Equality in Organizations: Evidence-Based Actions for Employers." Report, GEO, London, U.K. https://gender-pay-gap.service.gov.uk/public/assets/pdf/Evidence-based_actions_for_employers.pdf.

Grant Thornton. 2017. "Women in Business: New Perspectives on Risk and Reward." Grant Thornton, Chicago, IL. https://www.grantthornton.co.uk/globalassets/1.-member-firms/united-kingdom/pdf/publication/women-in-business-new-perspectives-on-risk-and-reward.pdf.

Ibarra, H., N. Carter, and C. Silva. 2010. "Why Men Still Get More Promotions than Women." Harvard Business Review 88 (9): 80–5.

IPE (Investment & Pensions Europe). 2018. "Total Global AUM Table 2018." IPE International Publishers Ltd. https://www.ipe.com/top-400/total-global-aum-table-2018/10007066.article.

JMG Consulting, and Wyckoff Consulting. 2013. "Venture Capital, Social Capital and the Funding of Women-Led Businesses." U.S. Small Business Administration, Washington, DC.

Johnson, S. K., D. R. Hekman, and E. T. Chan. 2016. "If There's Only One Woman in Your Candidate Pool, There's Statistically No Chance She'll Be Hired." Harvard Business Review, April 26. https://hbr.org/2016/04/if-theres-only-one-woman-in-your-candidate-pool-theres-statistically-no-chance-shell-be-hired.

Kanze, D., L. Huang, M. A. Conley, and E. T. Higgins. 2017. "Male and Female Entrepreneurs Get Asked Different Questions by VCs—And It Affects How Much Funding They Get." Harvard Business Review, June 27. https://hbr.org/2017/06/male-and-female-entrepreneurs-get-asked-different-questions-by-vcs-and-it-affects-how-much-funding-they-get.

———. 2018. "We Ask Men to Win and Women Not to Lose: Closing the Gender Gap in Startup Funding." Academy of Management Journal 61 (2): 586–614.

Lerner, J., A. Leamon, R. Sessa, R. Dewan, and S. Holt. 2019. "2018 Diverse Asset Management Enhanced Performance Analysis." Final report, Bella Private Markets, Boston, MA. https://knight.app.box.com/s/pe1f8bzfscp6gatecd1vnpsdbhw9fk7o.

Levashina, J., C. J. Hartwell, F. P. Morgeson, and M. A. Campion. 2014. "The Structured Employment Interview: Narrative and Quantitative Review of the Research Literature." Personnel Psychology 67 (1): 241–93.

McPherson, M., L. Smith-Lovin, and J. Cook. 2001. "Birds of a Feather: Homophily in Social Networks." Annual Review of Sociology 27: 415–44.

Moodley, L., T. Holt, A. Leke, and G. Desvaux. 2016. Women Matter Africa. New York: McKinsey & Company.

Moran, L. 2018. "Just Good Investing: Why Gender Matters to Your Portfolio and What You Can Do about It." Calvert Impact Capital (blog), December 5. https://www.calvertimpactcapital.org/blog/856.

Morgan Stanley. 2017. "An Investor's Guide to Gender Diversity." Morgan Stanley (blog), January 17. https://www.morganstanley.com/ideas/gender-diversity-investor-guide.

———. 2018. "The Growing Market Investors Are Missing: The Trillion-Dollar Case for Investing in Female and Multicultural Entrepreneurs." Morgan Stanley, New York. https://www.morganstanley.com/pub/content/dam/msdotcom/mcil/growing-market-investors-are-missing.pdf.

Morningstar. 2018. "Fund Managers by Gender: Through the Performance Lens." Morningstar, Chicago, IL.

Morse, G. 2016. "Designing a Bias-Free Organization: It's Easier to Change Your Processes than Your People." Harvard Business Review, July–August. https://hbr.org/2016/07/designing-a-bias-free-organization.

Nathan, T. M. 2013. "Gender Diversity and Economic Performance of Firms: Evidences from Emerging Market." Journal of Economic Development, Management, IT, Finance and Marketing 5: 100–10.

Newton-Small, J. 2016. Broad Influence: How Women Are Changing the Way America Works. New York: Time Inc.

OECD (Organisation for Economic Co-operation and Development). 2016. "Background Brief on Fathers' Leave and Its Use." Social Policy Division, OECD, Paris.

Oh, I., Postlethwaite, B. E., and F. L. Schmidt. 2013. "Rethinking the Validity of Interviews for Employment Decision Making: Implications of Recent Developments in Meta-Analysis." In Received Wisdom, Kernels of Truth, and Boundary Conditions in Organizational Studies, edited by D. J. Svyantek and K. Mahoney, 297–329. Charlotte, NC: Information Age Publishing.

Pletzer, J. L., R. Nikolova, K. K. Kedzior, S. C. Voelpel. 2015. "Does Gender Matter? Female Representation on Corporate Boards and Firm Financial Performance—A Meta-Analysis." PLoS ONE 10 (6): e0130005. doi:10.1371/journal.pone.0130005.

Preqin. 2017. Preqin Special Report: Women in Alternative Assets. London, U.K.: Preqin. http://docs.preqin.com/reports/Preqin-Special-Report-Women-in-Alternative-Assets-October-2017.pdf.

———. 2018a. Preqin Quarterly Update: Private Equity & Venture Capital (Q2 2018). London, U.K.: Preqin. http://docs.preqin.com/quarterly/pe/Preqin-Quarterly-Private-Equity-Update-Q2-2018.pdf.

———. 2018b. Preqin Special Report: Private Equity in Emerging Markets. London, U.K.: Preqin. http://docs.preqin.com/reports/Preqin-Special-Report-Private-Equity-in-Emerging-Markets-May-2018.pdf.

Richmond, R. 2017. "Meet the Men Who Invest in Women Entrepreneurs." Forbes (blog), August 9. https://www.forbes.com/sites/thestoryexchange/2017/08/09/meet-the-men-who-invest-in-women-entrepreneurs/#210582323f6f.

Rock, D., and H. Grant. 2016. "Why Diverse Teams Are Smarter." Harvard Business Review, November 4. https://hbr.org/2016/11/why-diverse-teams-are-smarter.

Sahay, R., M. Čihák, and IMF Staff. 2018. "Women in Finance: A Case for Closing Gaps." IMF Staff Discussion Note SDN/18/5, International Monetary Fund. https://www.imf.org/~/media/Files/Publications/SDN/2018/SDN1805.ashx.

Sahil, R. 2018. VC Financing and the Entrepreneurship Gender Gap. Edmonton, Alberta, Canada: University of Alberta, Alberta School of Business. http://dx.doi.org/10.2139/ssrn.2846047.

Schleifer, T. 2018. “The Venture Capital Firm Lightspeed Is Trying to Hold Its Portfolio Companies Accountable by Asking Them to Sign a New Diversity Letter.” Recode (blog), February 5. https://www.recode.net/2018/2/5/16967084/lightspeed-venture-capital-diversity-side-letter.

Sherf, E. N., and S. Tangirala. 2017. “How to Get Men Involved with Gender Parity Initiatives.” Harvard Business Review, September 13. https://hbr.org/2017/09/how-to-get-men-involved-with-gender-parity-initiatives.

Sherif, M. 2015. “Board Structure, Gender Diversity and Bank Performance in Emerging Markets: Evidence from the MENA Region.” Paper presented at the ISBE Conference, Glasgow, November 11–12.

Stiehler, A., and S. Freedman. 2016. “Sustainable Investing: Gender Diversity Matters.” Chief Investment Office WM, UBS Group, Basel, Switzerland.

Teare, G. "Q1 2018 Global Diversity Investment Report: Investing Trends in Female Founders." TechCrunch, April 17. https://techcrunch.com/2018/04/17/q1-2018-global-diversity-investment-report-investing-trends-in-female-founders.

Thomas, D. A. 1989. “Mentoring and Irrationality: The Role of Racial Taboos.” Human Resource Management 28 (2): 279–90. https://onlinelibrary.wiley.com/doi/abs/10.1002/hrm.3930280213.

Turban, S., D. Wu, and L. Zhang. 2019. “Research: When Gender Diversity Makes Firms More Productive.” Harvard Business Review, February 11. https://hbr.org/2019/02/research-when-gender-diversity-makes-firms-more-productive.

UKCES (U.K. Commission for Employment and Skills). 2015. Sector Insights: Skills and Performance Challenges in the Digital and Creative Sector. Wath-upon-Dearne, U.K.: UKCES.

WEF (World Economic Forum). 2015. “Ensuring a Level Playing Field: Women in Private Equity.” WEF, Cologny, Switzerland. http://www3.weforum.org/docs/WEF_Private%20Equity_Women.pdf.

Zarya, V. 2018. “Female Founders Got 2% of Venture Capital Dollars in 2017.” Fortune (blog), January 31. http://fortune.com/2018/01/31/female-founders-venture-capital-2017.

.

.

APPENDIX A: DETAILED METHOLODOGY

The methodology for this research was an iterative, hypothesis driven approach that utilized four key inputs: (a) quantitative analysis; (b) interviews; (c) Advisory Panel; (d) qualitative survey responses. A description of each input and the relative sample sizes are shown in Figure 44. The following sections provide details on the quantitative methodologies, both for funds and portfolio companies, and qualitative survey responses, and explanation on results validation.Quantitative Analysis of Fund and General Partner Data

ANALYSIS OVERVIEW

Our quantitative analysis of PE/VC firms focused on answering two questions:

- How wide are the gender gaps within senior investment teams of GPs?
- What is the relationship between financial performance of funds and gender diversity in senior investment teams of GPs?

Answering these questions required the following data:

- Basic GP information: fund name, firm name, vintage year, geography, investment strategy
- Gender diversity of the GP: name, gender, and position of employees
- Performance of the fund: net internal rate of return (IRR), net total value to paid-in (TVPI) ratio

Details on the quantitative methodologies and survey responses are provided in the following sections.

DATA OVERVIEW

We maximized our sample of available data by aggregating information across several sources to create a comprehensive view of diversity in emerging market firms. We combined-third party databases (including Preqin and PitchBook), internal databases (including IFC and RockCreek investments), and a manual scraping of publicly available information to source gender diversity and fund performance data. Through this

Figure 44: Overview of Iterative Research Method

Quantitative analysis

- Used to assess gaps, test hypotheses and study the business case
- Unique PE/VC emergin market gender and performance dataset from IFC, RockCreek and other 3rd parties
  - >6,000 emerging markets GPs with gender data
  - >700 funds with performance and gender data
  - >5,000 PE/VC deals with CEO gender data
  - >500 portfolio companies with performance and leadership team gender
- Data quality checked via several methods

Interviews

- Primary objectives included
  - Practitioner view of business case
  - Hypotheses for drivers of low representation
  - Recommendations for overcoming barriers
  - Case studies to showcase best practices
- Interviewed >50 General Partners, Limited Partners, and gender experts across developed and emerging markets
- Hypotheses then tested at scale in qualitative survey

Advisory panel

- Provided diverse perspective and support
  - Guidance of research through interview
  - Review of key findings
- Members are senior leaders from premier institutions
  - Bill Ford, General Atlantic
  - Caren Grown, World Bank
  - Claudia Zeisberger, INSEAD
  - Jenny Lee, GGV Capital
  - Runa Alam, DPI
  - Shelby Wanstrath, TRS Texas

Qualitative survey responses

- Primary objectives included
  - Test hypotheses on drivers of business case and gender gaps at scale
  - Understand perceptions and how they differ across gender, market, and seniority
- >500 respondents from emerging and developed market PE/VC

aggregation process, we accumulated one of the largest unique data sets on emerging market firms and fund performance. Data availability guided design choices in our key modeling decisions. Gender information was taken directly from data sources, employee salutations, name to gender mapping tables, and manual scraping.

Our gender gap analysis focused on senior investment professionals, which included partners, managing directors, investment directors, CEOs, and founders. Noninvestment professionals, namely any positions that were not investment roles, including finance, legal, accounting, human resources, investor relations, operations and marketing, were excluded from analysis.

Our aggregated dataset for GP data included senior investment professional gender data for more than 2,000 firms in emerging markets, for which we identified more than 10,000 senior and 6,000 midlevel investment professionals with gender. Of the firms for which we had gender data, we had performance data for more than 700 PE/VC funds focused on emerging markets, which corresponded to more than 350 firms.

MODELING GENDER DIVERSITY

Choice of Team Composition.In modeling gender diversity, our first decision was on the level of the team to consider for the analysis. We had three differentiated options: (a) gender composition of the entire employee base of the GP; (b) gender composition of firm leadership and investment decision makers combined, i.e., partners, and (c) gender composition of just the core investment decision makers, i.e., investment committee members. We explored all three options, but opted to use option B.

Looking at the composition of entire employee base (option A) would capture higher levels of diversity of more junior staff and the recent trend toward increasing gender diversity in the industry. However, this would

not adequately model diversity in decision making, which is needed to assess diversity's impact on financial performance. The coverage of datasets decreased at lower levels of seniority in investment firms. Midlevel positions, such as principals and vice presidents, are more consistently identified than junior positions, such as analysts and associates. As such, looking at entire firms would not be viable from a data perspective and would not meaningfully reflect key decision makers in the organization.

Focusing on investment committees (option C) would best attribute financial performance to individuals who chose the investments but would not take into account value accretion through portfolio supervision and exits. In addition, investment committee membership is difficult to acquire data on in a consistent and scalable manner and therefore not a viable option.

Option B was the optimal choice, since deal sourcing, portfolio management, and exit orchestration are largely driven by partners, and data were available at this level. Also, this level is a strong proxy for investment decision making and by and large, names (and therefore gender) of senior investment professionals are generally available.

DEFINITION OF TEAM DIVERSITY

Our second decision focused on how to model gender diversity and differentiate between gender balanced and male or female dominated teams. Here we had a few different options with respect to categorizing teams:

- **Option A:** all-male teams, all-female teams, and mixed teams (defined by at least one woman)
- **Option B**: Teams with women and without women
- **Option C**: grouping based on absolute number of women in the team (e.g., teams with 0 female partners; teams with one to two female partners; teams with three to four female partners; etc.)
- **Option D:** grouping based on percentage of women represented in the team (e.g., 10 percent of senior investment professionals who are female)

We chose option D, the use of normalized ratios (i.e., the percentage of senior investment professionals who are female). Options A and B suggested that even adding just one woman to the senior team was enough from a diversity perspective and was significant enough a change to influence decision-making dynamics within firms, which is not in line with existing research.[1]

Option C was impractical because sizes of firms' senior investor teams vary significantly and therefore absolute numbers would not be representative of the actual gender diversity and decision-making dynamics of the teams. Further, absolute numbers would not allow us to identify female dominated teams, which would be a part of the male or female dominated group to be compared against gender balanced teams.

Using option D, or normalized ratios of female senior investment professionals, raised a second modeling decision, namely, the decision on what percentage of the opposite gender would be meaningful enough to suggest that decision-making teams are "sufficiently diverse" or gender balanced. Such a concept has not yet been concretely established by research and was outside the scope of our research. We were not seeking to define a tipping point but, rather, assess the relationship between performance and increasing gender diversity. The Thirty Percent Coalition initiative and existing literature by Calvert Impact Capital (Moran 2018) show that 30 percent is a reasonable proxy for categorizing gender diversity.

After the normalized ratio at the firm level was calculated, we categorized firms into the following gender diversity categories:

- Male dominated, including "all male": Percentage of senior investment professionals who are female is smaller than 30 percent.
- Gender balanced: Percentage of senior investment professionals who are female is between 30 percent and 70 percent.
- Female dominated, including "all female": Percentage of senior investment professionals who are female is larger than 70 percent.

We also explored the impact of using other tipping points of male dominated, gender balanced, and female dominated firms. This analysis is included in the Results Validation section.

MODELING FUND PERFORMANCE

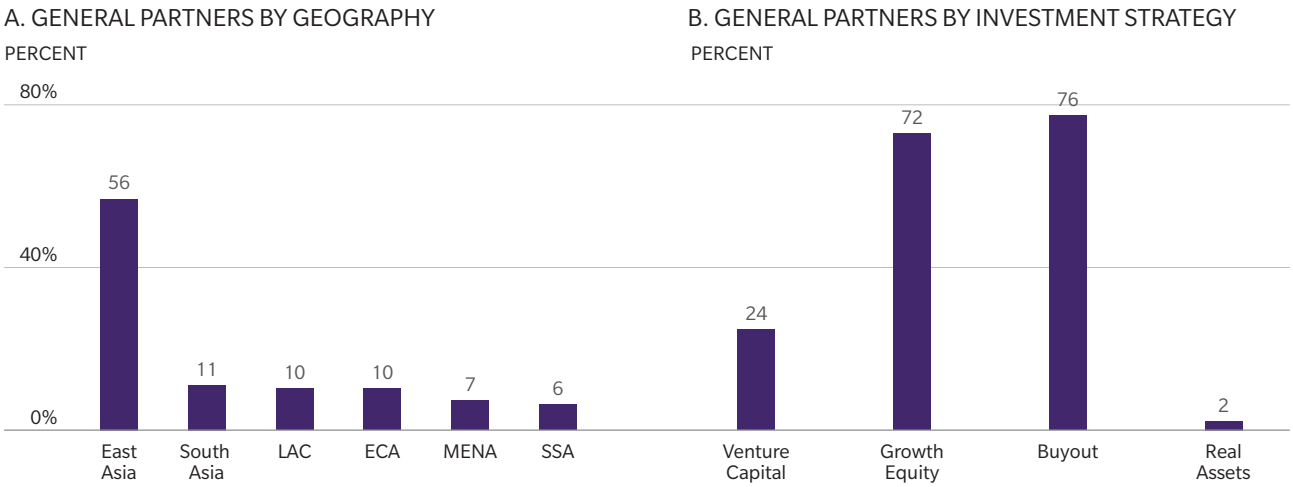
There are several different metrics to measure fund performance. In general, the PE/VC industry uses the following: (a) IRR, which measures the return of cash flows over time; and (b) multiples, including TVPI, distributions to paid-in (DPI) and residual value to paid-in (RVPI), which do not adjust for the time value of money. We chose to use IRR and TVPI to measure fund performance, because these metrics are in line with industry standards.

There is an option for using gross or net returns for both IRR and TVPI. We chose to use net returns, which deduct management fees, fund expenses and carried interest, because accounting for fees represents a more realistic view of what is realized by LPs.

DATA CLEANING AND VALIDATION

As we aggregated the sources of data, we performed several steps to clean and validate the data. This included duplicate removal,

Figure 45: Percent of General Partners with Gender Data by Geography and Investment Strategy



Source: Aggregated Private Equity and Venture Capital datasets from International Finance Corporation; PitchBook; Preqin; RockCreek; and other publicly available datasets.
Note: Large proportion of firms are multistrategy; therefore, total percentages exceed 100 percent. ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa

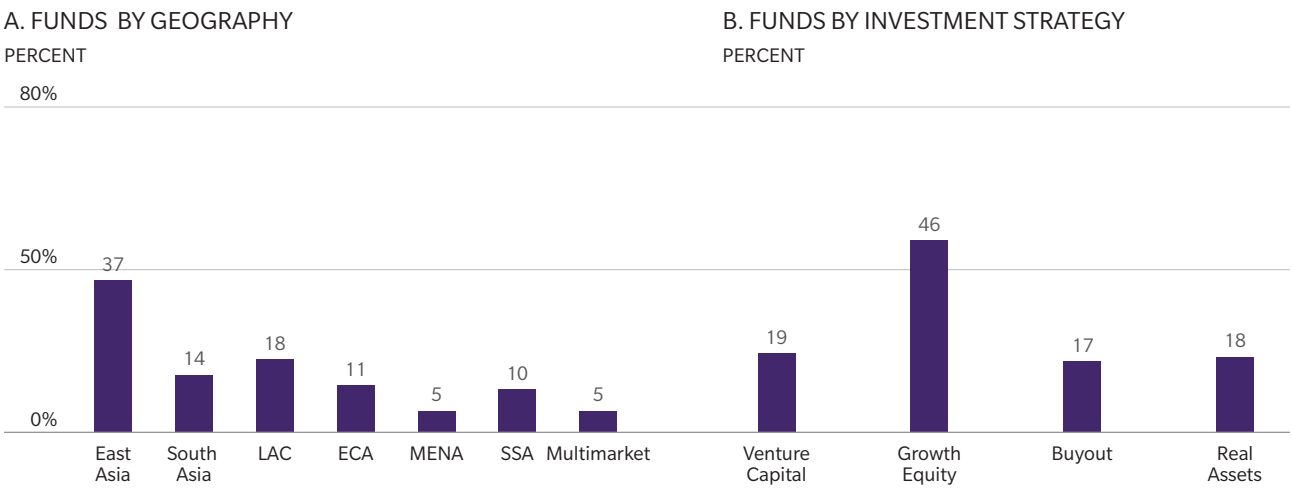
standardization of fund and firm classifications in geography and strategy, and third party triangulation.

We validated our dataset by assessing whether it triangulates with the market and existing field literature. For instance, we validated our findings on the lack of representation of female senior investment professionals at the aggregate emerging market level against industry reports. Our dataset is equal to or within 1–2 percentage points of external research (Preqin 2017). Additionally, we validated our findings of the representation of women as senior investment professionals within specific emerging markets by testing the relative representations with industry practitioners and experts through interviews. In all cases, our results largely triangulate with existing research and expert views.

For assessing the gender gap among senior investment professionals, we analyzed gender data of more than 2,000 emerging market GPs. In general, the percentage of emerging market GPs is skewed toward East Asia, predominantly China, and growth equity and buyout strategies. Note that many analyzed firms invest in multiple strategies (e.g., growth equity and buyout), which explains why the investment strategies exceed 100 percent. See Figure 45

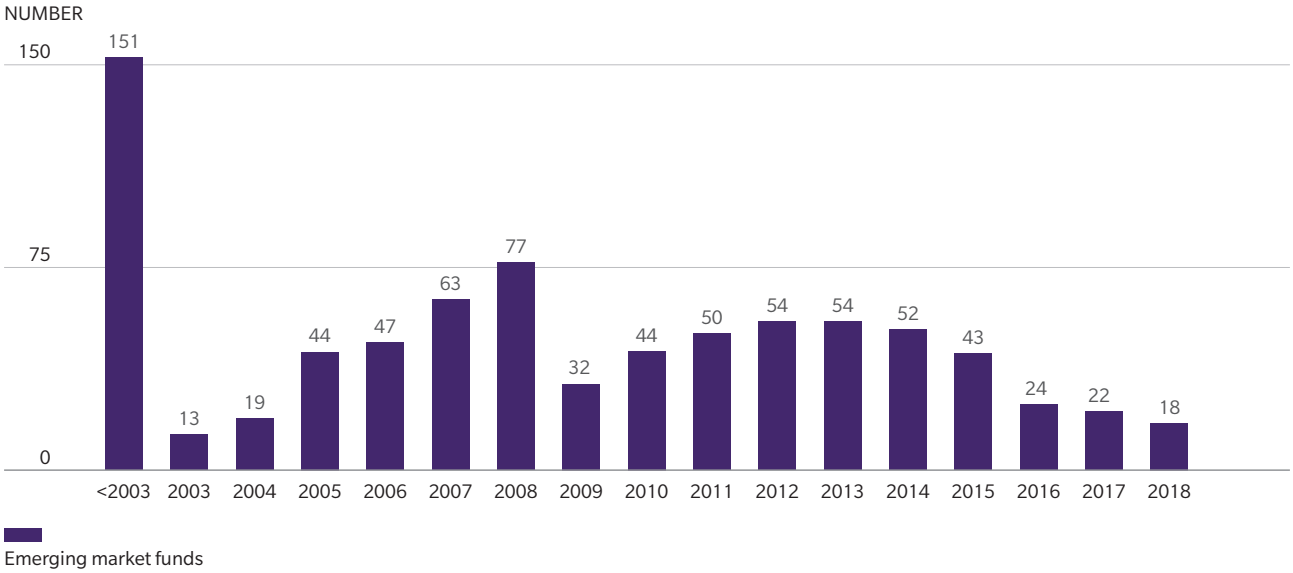
For assessing the correlation between gender balance and financial performance, we analyzed performance data of more than 800 funds to develop our peer benchmarks and more than 730 funds with both performance and gender data to assess the correlation. A breakdown of the more than 800 funds shows that East Asia accounts for the largest percentage of funds see Figure 46, which is consistent with the broader industry trend of Chinese driven growth of PE/VC in emerging markets. Relative to other third-party datasets, however, our data reflect a more thorough coverage of non–East Asian markets (e.g., Africa and Latin America) and real assets given the investment portfolios of IFC. The breakdown of these funds by vintage is provided in Figure 47.

Figure 46: Percent of Funds with Performance Data by Geography and Investment Strategy



Source: Aggregated Private Equity and Venture Capital datasets from International Finance Corporation; PitchBook; Preqin; RockCreek; and other publicly available datasets.
Note: Large proportion of firms are multistrategy; therefore, total percentages exceed 100 percent. ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa.

Figure 47: Funds with Performance Data by Vintage, 2003–2018



Source: Aggregated Private Equity and Venture Capital datasets from International Finance Corporation; PitchBook; Preqin; RockCreek; and other publicly available datasets.
Note: ECA = Europe and Central Asia; IRR = internal rate of return; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa

BENCHMARKING APPROACH AND RESULTS

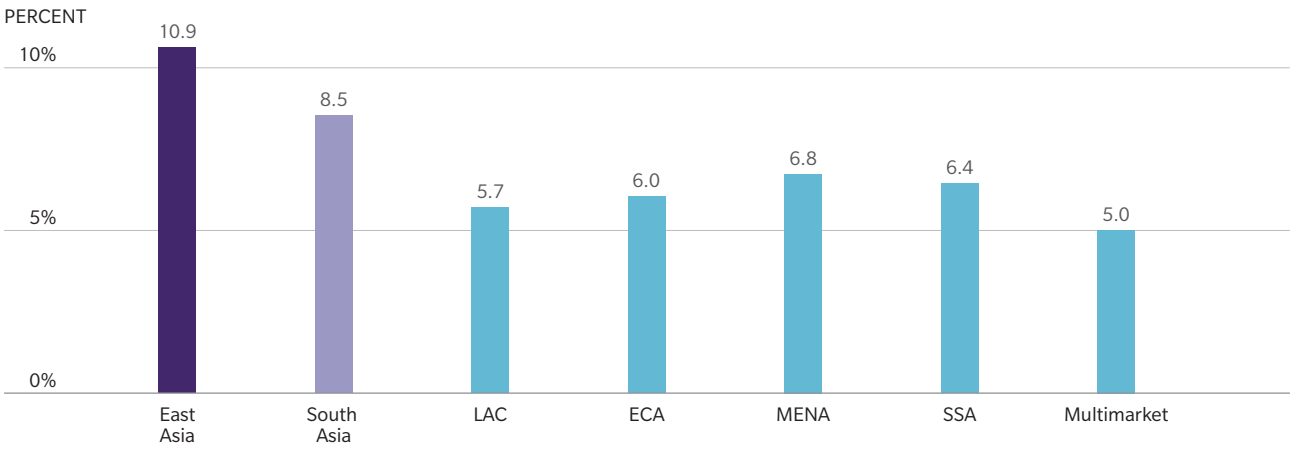
In PE/VC, fund performance is rarely viewed in absolute terms, since macroeconomic cycles, geographies, and investment strategies can all have influence over performance. For example, all else being equal, a fund in China is unlikely to have the same performance as one in Africa, a fund invested in 2007 prior to the financial crisis is likely to have different performance than one investing in 2009 post crisis, and a VC fund will have different performance targets and results than a buyout fund. Thus, testing the relationship between diversity and performance requires controlling for variables that may explain performance differences outside of gender diversity, including vintage, geography, and investment strategy. To control for such differences, it is market practice to compare returns to a benchmark. Benchmarks for PE/VC in developed markets such as the United States are available and categorized based on (a) vintage of the fund (i.e., the year the fund started investing) to capture macro impact; (b) investment strategy (i.e., PE compared to VC compared to real assets; (c) geography (to capture local market conditions that could affect performance).

The immediate choice for benchmarking fund performance was industry providers, such as Cambridge Associates. However, most

industry providers tend to group all emerging market regions into one bucket (e.g., combining funds in China and Sub-Saharan Africa [SSA] into one benchmark), which does not control for variances driven by regional factors. Similarly, industry providers also tend to combine all PE/VC strategies into one strategy. We believe that collapsing these dimensions could potentially introduce noise into our analysis and skew results. For instance, analyzing the performance dataset by region shows significant deviations outside by geography and strategy. Our dataset also has enough data points when compared to industry benchmarks, suggesting that a benchmark could be created on our aggregated dataset, though we implemented some grouping based on observed similarities within the dataset. Hence, we created a benchmark for funds based on vintage, geography, and strategy, identifying a median return for the intersection of the three.

For geography, we grouped funds based on geography of investment into East Asia, South Asia, and rest of emerging markets[2]. The choice to combine Latin America, the Middle East and North Africa, Sub-Saharan Africa, and other emerging markets into one category was driven by similarity in performance and availability of fund performance data. The performance differences are shown in Figure 48, which shows a clear step change in performance between East Asia, South Asia, and other emerging market funds.

Figure 48: Median Net IRR by Geography for Benchmark Data



Source: Aggregated Private Equity and Venture Capital datasets from International Finance Corporation; PitchBook; Preqin; RockCreek; and other publicly available datasets.
Note: Multimarket funds are ones that invest in several emerging market regions. ECA = Europe and Central Asia; IRR = internal rate of return; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa

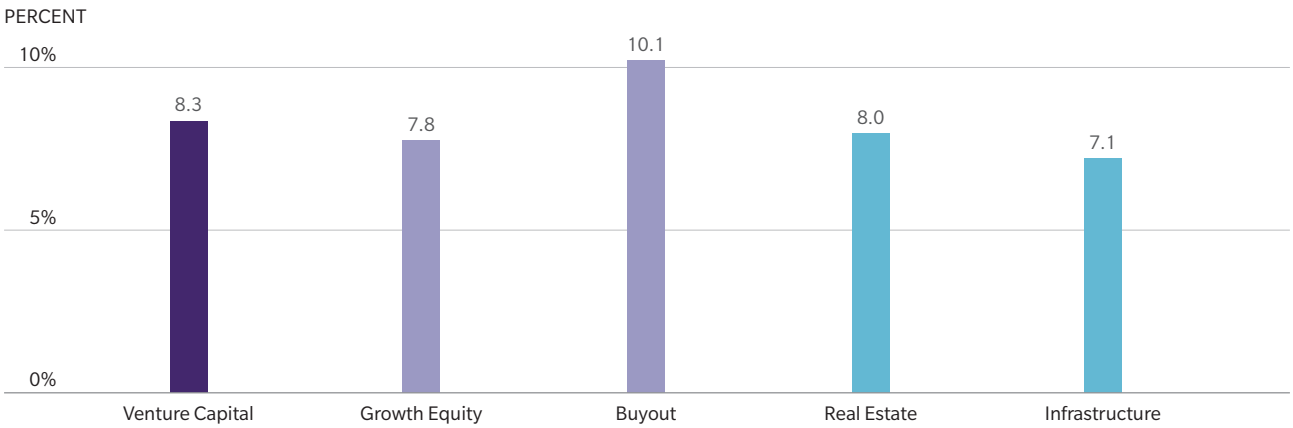
We grouped investment strategy into growth equity and buyout, VC, and real assets due to a combination of sample size constraints as well as expected similarities (and differences) in the return profiles.[3] The median net IRR by investment strategy is shown in Figure 49.

Finally, we controlled for differences in vintage across the funds but, unlike other benchmark variables, we did not group across the vintage years. This is in line with alternative benchmark options from industry providers. The median net IRR from across vintage years is provided in Figure 50.

Our benchmark methodology, which is a view of the median performance for funds at the intersection of vintage, strategy, and geography, uses a minimum sample size requirement for each intersection to exclude funds that do not have enough peers. A median was taken to reduce effect of outliers. After making the requisite exclusions for a clean dataset, we calculated benchmarks for net IRR and TVPI for approximately 590 funds.

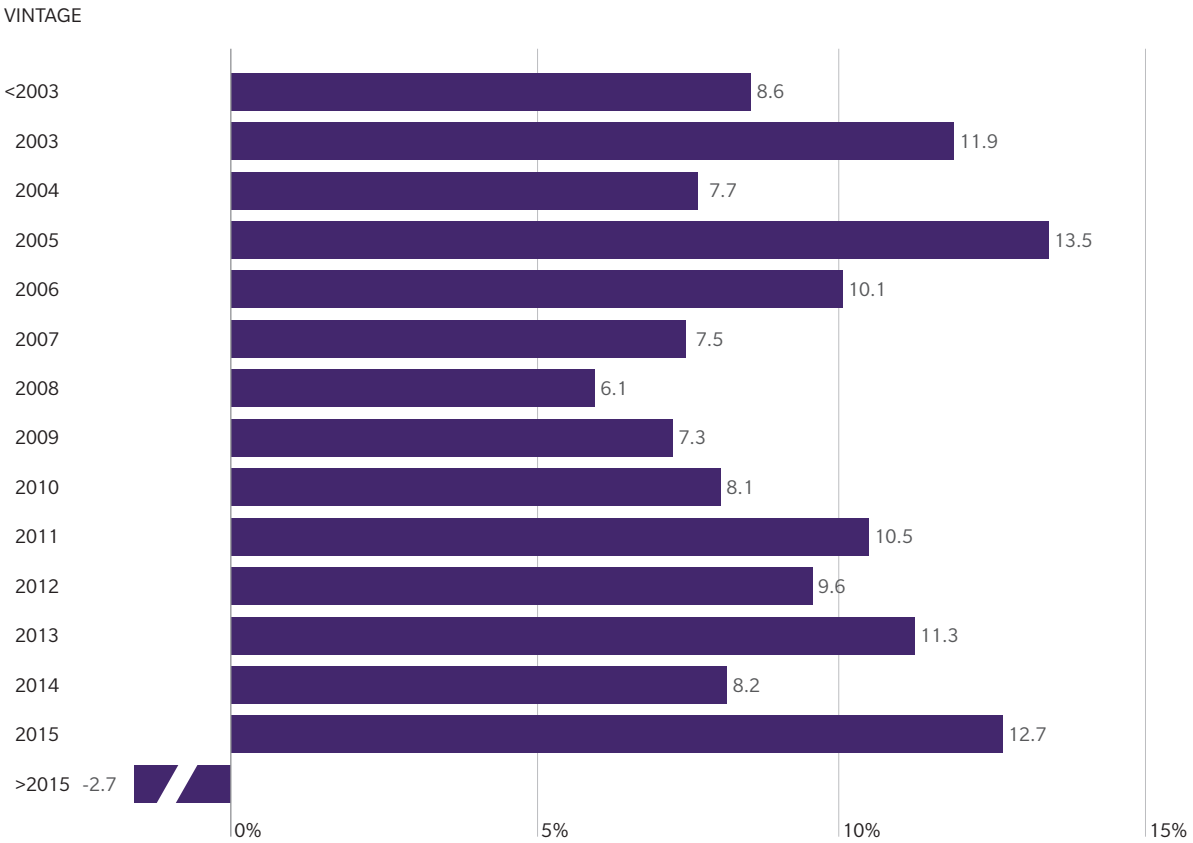
Using these benchmarks, we calculated excess net IRR and TVPI using the difference between performance and mapped benchmarks. The distribution of excess net IRR is shown in Figure 51. The distribution shows centrality around 0 percent, which is expected when normalizing performance variables, and exhibits similarities to a bell curve or normal distribution, with long tails of outliers. Both occurrences would be expected in a proper benchmarking method, supporting our methodology. We conducted the same benchmark process for TVPI, which had similar results.

Figure 49: Median Net IRR by Investment Strategy for Benchmark Data



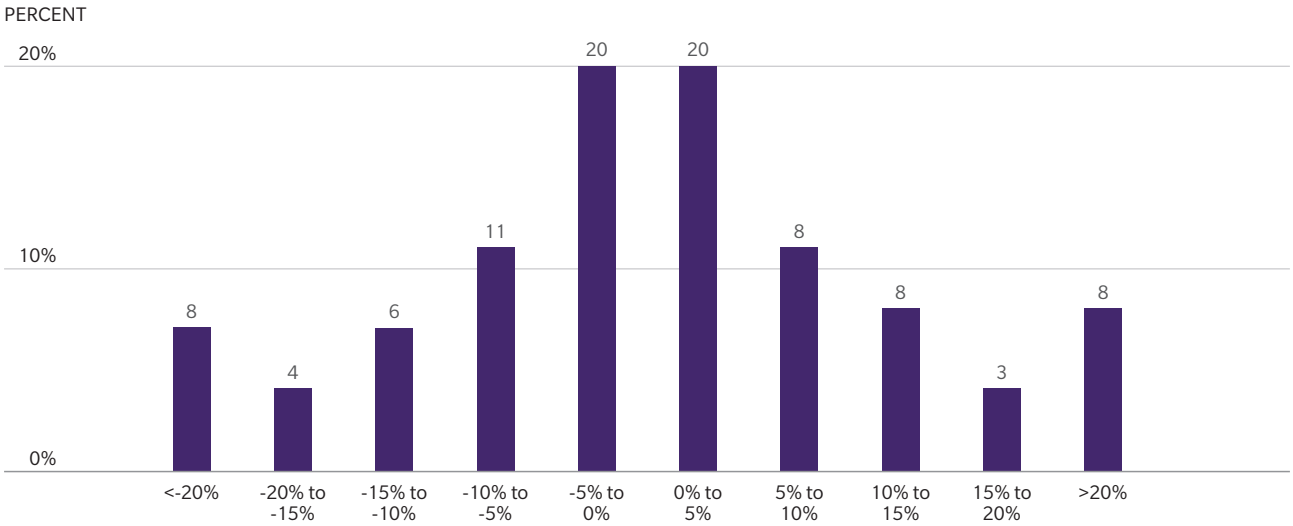
Source: Aggregated Private Equity and Venture Capital datasets from International Finance Corporation; PitchBook; Preqin; RockCreek; and other publicly available datasets.
Note: IRR = internal rate of return

Figure 50: Median Net IRR by Vintage for Benchmark Data



Note: IRR = internal rate of return:

Figure 51: Distribution of Excess Net IRR for Benchmark Data



Source: Aggregated Private Equity and Venture Capital datasets from International Finance Corporation; PitchBook; Preqin; RockCreek; and other publicly available datasets.
Note: IRR = internal rate of return

RESULTS VALIDATION: CORRELATION OF FUND PERFORMANCE AND GENDER BALANCE

We conducted uncertainty and sensitivity analysis to further contextualize and validate our findings that gender balance is correlated with higher fund returns, though we do not claim a causal relationship. To quantify the uncertainty in the estimated difference in median performance between gender balanced and male or female dominated funds, we used median value bootstrapping and a quantile regression technique. To assess the sensitivity of our estimate to key design choices (e.g., benchmark approach), we varied certain design parameters to test whether changes would yield different results in the correlation analysis. We largely include net IRR in this section as our primary performance metric, but found similar results for net TVPI

UNCERTAINTY ANALYSIS

To assess the uncertainty and significance of the estimated median difference between gender balanced and male or female dominated funds, we developed confidence intervals through bootstrap resampling. This median difference approach is similar to a single factor regression, but with the advantage of not requiring significant assumptions regarding the underlying data distribution, for instance.[4] Because a significant amount of the variance in our estimate is driven by the small sample of gender balanced funds, we also test whether expanding or contracting our gender balanced boundaries substantially affects the estimated difference and its uncertainty. While our dependent variable, excess returns, controls for vintage, geography, and strategy, it does not control for fund size (a common variable in other research) (Lerner et al. 2019). As such, we used a multivariate quantile regression to test whether the introduction of fund size would affect the observed correlation between excess returns and gender balance and the certainty of the estimate.

We find that using a median difference bootstrap technique, the difference between gender balanced and male or female dominated funds is positive at an 80 percent confidence interval for teams between 30 percent to 70 percent female. However, the difference is positive at a 95 percent confidence interval for teams between 25 percent to 75 percent female. We also find that adding fund size as a variable in a quantile multivariate regression does not substantially affect conclusions and uncertainties of the correlation between gender balance and performance. Though fund size is significantly correlated with median returns, fund size and gender balance are minimally correlated. By and large, the same confidence intervals observed through median difference bootstrap techniques hold with or without the fund size variable.

We used bootstrap confidence intervals to assess the uncertainty of the observed difference in median performance between funds managed by gender balanced and male or female dominated teams of senior investment professionals. This process uses the observed sample (i.e., the 591 funds that have excess return and gender data) as a starting point. The process then goes through the following steps:

1. Draw a simple random sample from the original 591 data points, with sample size of 591 and with replacement (i.e., with possibility of selecting any given data point several times).
2. With the sample drawn in step 1, compute the difference in median excess returns between funds managed by gender balanced and male or female dominated teams.
3. Repeat steps 1 and 2 numerous times (in our case, 10,000), recording the difference in medians with each simulation.
4. From the simulated distribution of differences in medians, derive the confidence interval.

In the final step, there are several options for confidence interval calculation, most common being basic, percentile, normal, and bias-corrected and accelerated. A comparison of the expected accuracy of these estimates for our dataset through a separate simulation study[5] prompted us to use percentile as the primary confidence

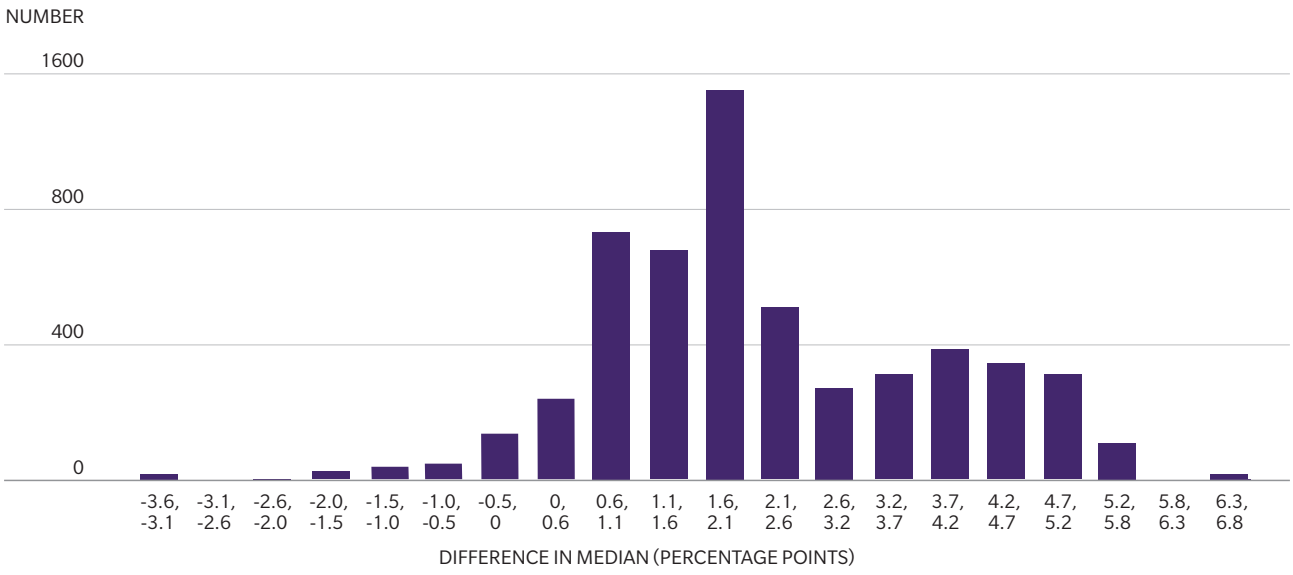
interval estimate (given its simplicity and relative performance compared with the other simple estimates, basic and normal), and bias-corrected and accelerated as a challenger (given its superior accuracy). To assess the impact that our definition of gender balance and varying sample sizes have on the estimate variance, we ran bootstrap simulations under three definitions of gender balance:

- Less inclusive: 33 percent to 67 percent
- Baseline: 30 percent to 70 percent
- More inclusive: 25 percent to 75 percent

Figure 52 shows the histogram of the 10,000 random samples when defining gender balanced teams as having between 30 percent and 70 percent senior investment professionals who are women.

The distribution of bootstrapped resampled populations is centered around the point estimate of 1.7 percentage point difference between gender balanced and male or female dominated funds. The high variance of the parameter is primarily driven by the relatively few number of funds in the baseline definition (n = 46 balanced funds),

Figure 52: Median Difference of Baseline Gender Balance Definition Histogram from Bootstrapped Simulations



Source: Aggregated Private Equity and Venture Capital datasets from International Finance Corporation; PitchBook; Preqin; RockCreek; and other publicly available datasets.
Note: Data reflect median difference of 10,000 samples.

and is reduced when the definition of gender balance is expanded to between 25 percent and 75 percent (n = 74).

Table1 summarizes the results of the bootstrapped samples, including percentiles of the median difference in excess returns for each definition of gender balance. Additionally, it shows percentile-based confidence intervals from the bootstrap samples. The percentile bootstrap method suggests that the less inclusive (33 percent to 67 percent) and baseline (30 percent to 70 percent) median excess return differences between gender balanced and gender dominated funds are positive at an 80 percent confidence interval. For the more inclusive (25 percent to 75 percent) case, the median excess return difference is positive at a 95 percent confidence interval Quantitative analysis of portfolio company data.

Though the percentile bootstrap method is simple, the coverage error of the estimate can be high if the distribution of the bootstrap estimates is not nearly symmetric "(Carpenter and Bitchell (1999)". To address the shortcomings of the percentile method, we also estimated bootstrap confidence intervals using the bias corrected and accelerated (BCa) method. The 80th, 90th, and 95th percentile confidence intervals using the BCa method are included in Table 2. The significance of the confidence intervals between the percentile and BCa methods are by and large similar across methods for each gender balance range, identifying positive differences at the same confidence levels.

We used a quantile multivariate regression to test whether including fund size as a variable would affect the estimated difference in median performance and its uncertainty. The quantile method was used as opposed to an ordinary least squares (OLS) regression, because a Cook's distance test showed a substantial number of outliers with high influence in the OLS model, which was reduced with the quantile regression. Using the quantile regression allowed us to analyze median differences, which is consistent with our broader approach. We used a bootstrap method to obtain confidence intervals (CIs) for the quantile regression coefficient as a distribution-agnostic alternative to the typical standard error and p-value estimates.

As shown in Table3, the estimated median difference between gender balanced and male or female dominated funds is similar with or without fund size. This finding is supported by the fact that the correlation between the gender balance and fund size variables are minimal.[6] The confidence intervals of the estimated differences using the BCa method are also provided, generally suggesting tighter confidence bands with the introduction of fund size. Our hypothesis is that moving

Table1: Bootstrap Resampling Results for Different General Partner Diversity Levels

GENDER BALANCE RANGE (%)	OBSERVED DISTRIBUTION		RESAMPLED DISTRIBUTIONS (N=10,000)				
					Confidence intervals (CIs) (%)		
	Count	Median difference (%)	Std. dev. (%)	Median	80 CI	90 CI	95 CI
33 – 67	42	1.71	1.48	5.55	[0.2, 4.0]	[-0.2, 4.7]	[-0.8, 5.0]
30 – 70	46	1.72	1.47	5.67	[0.2, 4.0]	[-0.2, 4.7]	[-0.8, 5.0]
25 – 75	741	1.85	1.14	5.71	[0.8, 3.7]	[0.6, 4.5]	[0.2, 4.9]

Positive difference in medians

Source: Aggregated Private Equity and Venture Capital datasets from International Finance Corporation; PitchBook; Preqin; RockCreek; and other publicly available datasets.

Note: The bootstrap resampled distributions and confidence intervals were developed using R's "boot" package. More information can be found at this website, https://cran.r-project.org/web/packages/boot/boot.pdf.

Table 2: BCa Confidence Intervals for Median Difference in Gender Balanced vs. Male/Female Dominated Funds' Excess Returns

GENDER BALANCE RANGE(%)	BCa CONFIDENCE INTERVALS (CIs)(%)		
	80 CI	**90 CI**	**95 CI**
33 – 67	[0.4, 4.2]	[-0.1, 4.8]	[-0.5, 5.1]
30 – 70	[0.3, 4.2]	[-0.1, 4.8]	[-0.6, 5.1]
25 – 75	[0.8, 3.7]	[0.6, 4.5]	[0.2, 4.9]

Positive difference in medians

Note: BCa = bias corrected and accelerated.

Table 3a: Median Difference Estimate and BCa Confidence Intervals in Fund Size Quantile Regression

GENDER BALANCE RANGE (%)	OBSERVED (WITHOUT FUND SIZE)	GENDER BALANCED VARIABLE (QUANTILE REGRESSION)			
			Confidence (CIs) using BCa method (%)		
	Median difference (%)	Median difference (%)	80 CI	90 CI	95 CI
33 – 67	1.71	1.71	[1.2, 6.3]	[0.8, 7.0]	[-0.2, 7.4]
30 – 70	1.72	1.76	[1.1, 5.5]	[0.6, 6.1]	[0.1, 6.5]
25 – 75	1.85	1.91	[0.4, 2.6]	[-0.1, 3.0]	[-0.5, 3.6]

Table 3b: Median Difference Estimate and BCa Confidence Intervals in Fund Size Quantile Regression

GENDER BALANCE RANGE (%)	FUND SIZE VARIABLE (IN, QUANTILE REGRESSION)			
	Confidence intervals (CIs) using BCa method (%)			
	Coefficient	80 CI	90 CI	95 CI
33 – 67	-0.005	[-0.0085, -0.007]	[-0.0094, -0.0002]	[-0.0108, -.0004]
30 – 70	-0.005	[-0.0093, -0.0012]	[-0.0106, -0.0006]	[-.00122, -0.0002]
25 – 75	-0.005	[-0.103, -0.0020]	[-0.0121, -0.0021]	[-0.0132, -0.0007]

Positive difference in medians

Source: Aggregated Private Equity and Venture Capital datasets from International Finance Corporation; PitchBook; Preqin; RockCreek; and other publicly available datasets.
Note: Note that the sample size of funds decreased to 556, because the fund size variable was not available for the full set of 591 funds with excess return and gender data.
BCa = bias corrected and accelerated.

toward gender balance would be positively correlated with returns, which our results support. We do not seek to define the right tipping point for being sufficiently gender balanced, because the biases embedded within the fact base (e.g., the lack of senior investment teams that are gender balanced) could bias any such analysis. Nor does this analysis establish a causal relationship. However, the positive correlation between gender balance and performance suggests that there are likely benefits to be reaped over time by becoming more gender balanced.

SENSITIVITY ANALYSIS

To assess the impact of our benchmark approach on our findings, we calculated the difference between gender balanced and male or female dominated funds using two different options: (a) using absolute returns: no benchmark methodology is applied; and (b) using Cambridge Associates' benchmark: a third-party methodology that groups emerging markets by geographies and investment strategies. The purpose of this analysis is not to validate one option relative to another but rather to assess the extent to which the observed relationship is a function of our design choice. To maintain consistency in the observed sample, we used the same set of 591 funds to analyze absolute returns and Cambridge Associates' benchmarks based on vintage, where applicable.[7] The positive relationship between gender balanced and higher performance has held in terms of direction and magnitude regardless of the benchmark method used (our calculate approach compared to Cambridge Associates') or if we looked at absolute returns. The assumptions highlighted in green Table4 reflect our base case model.

Our approach does not make restrictions on fund vintages, opting to include as much performance data as are available given the relative scarcity. However, we did similar sensitivity analysis to assess the impact different vintage year cut-offs (none, after 2000, before 2015, and both) would have on the median performance differences for excess net IRR and TVPI. The funds of gender balanced investment teams outperformed the funds of male or female dominated teams, though the degree of the outperformance varied slightly. The results are shown in Table 5.

Table 4: Performance Comparison Across Benchmark Options

Limited to the population of funds with a calculated benchmark (n = 591)

	NO BENCHMARK	CALCULATED BENCHMARK (EXCESS)	CAMBRIDGE ASSOCIATES BENCHMARK (EXCESS)
Median net IRR difference (gender balanced vs. male/female dominated)	+2.15%	+1.72%	+1.74%
Median TVPI difference (gender balanced vs. male/female dominated	+0.25x	+0.18x	+0.36x

Baseline assumptions

Source: Aggregated Private Equity and Venture Capital datasets from International Finance Corporation; PitchBook; Preqin; RockCreek; and other publicly available datasets.
Note: Limited to the population of funds with a calculated benchmark (n = 591). The number of funds differs across methodologies because our calculated benchmark requires a minimum sample of funds to develop a peer group. When applying this minimum peer sample requirement, 143 funds do not have enough peers at the intersection of geography, investment strategy, and vintage year to create a benchmark. This is the difference between "no benchmark" and "calculated benchmark." Cambridge Associates' benchmark in emerging markets, however, is simply defined by vintage, so most of the funds analyzed have benchmarks. IRR = internal rate of return; TVPI = total value to paid-in.

We also tested the performance difference between gender balanced and male or female dominated teams at various percentiles (e.g., 25th percentile, 50th percentile or median, and 75th percentile) for both excess net IRR and TVPI. The results are shown in Table 6 and Table 7.

In general, the positive correlation between gender balance and performance holds, though there is an exception at the 75th percentile for net IRR. However, the observed sample sizes of gender balanced funds are small, which yields high uncertainty in performance difference estimates. This analysis suggests that

Table 5: Performance Comparison across Vintage Year Cut-Offs

	NO CUT-OFF	AFTER 2000	BEFORE 2015	BETWEEN 2000 AND 2015
Number of funds	591	569	546	524
Median net IRR difference (gender balanced vs. male/female dominated)	1.7%	1.5%	1.8%	1.5%
Median TVPI difference (gender balanced vs. male/female dominated)	+0.18x	+0.18x	+0.20x	+0.19x

Baseline assumptions

Note: IRR = internal rate of return; TVPI = total value to paid-in

Table 6: Percentile Comparison for Excess Net Internal Rate of Return (IRR)

	25TH PERCENTILE	MEDIAN	75TH PERCENTILE
Gender balanced	-5.6%	1.7%	6.6%
Male/female dominated	-6.5%	-0.1%	7.0%
Difference	+0.8%	+1.7% (rounding)	-0.4%

Baseline assumptions

Note: IRR = internal rate of return.

Table 7: Percentile Comparison for Excess Total Value to Pain-in (TVPI) Multiple

	25TH PERCENTILE	MEDIAN	75TH PERCENTILE
Gender balanced	-0.19x	+0.17x	+0.58x
Male/female dominated	-0.26x	-0.01x	+0.24x
Difference	+0.07x	+0.18x	+0.34x

Baseline assumptions

Source: Aggregated Private Equity and Venture Capital datasets from International Finance Corporation; PitchBook; Preqin; RockCreek; and other publicly available datasets.
Note: TVPI = total value to paid-in.

performance differences would need to approach 1.7 percentage points or higher to be meaningful even at 80 percent confidence intervals in the base case scenario. As such, differences outside of the median estimate are even less likely to be meaningful.

QUANTITATIVE ANALYSIS OF PORTFOLIO COMPANY DATA

ANALYSIS OVERVIEW

Our analysis of portfolio companies focused on answering two questions:

- How wide are the gender gaps within senior leadership teams in portfolio companies?
- What is the relationship between performance and gender diversity in senior leadership teams of portfolio companies?

To answer these questions, we needed the following types of data:

- **Basic portfolio companies information**: company name, deal type, geography, deal size (i.e., funds raised), deal date
- **Gender diversity:** name, gender, and position of employees at portfolio companies
- **Performance:** valuation, valuation data

Our analysis of portfolio companies focused on answering two questions:

DATA OVERVIEW

We maximized our sample of available data by aggregating information across several sources to create a comprehensive view of portfolio companies. We combined third-party dataset PitchBook, internal data from IFC, and manually scraped publicly available data. The data we aggregated were at the deal level, which recorded information for portfolio companies at an event of liquidity (including any funding round, exit, or initial public offering [IPO]).

CEO and founder information are available on the majority of portfolio company deals, but information of company senior leadership teams is not available from our aggregated dataset. We manually scraped leadership team information for all portfolio companies, including CEO and founder information when such information was not available. A breakdown of the final dataset of 5,400 deals for which CEO or founder data are available is shown in Figure 53.

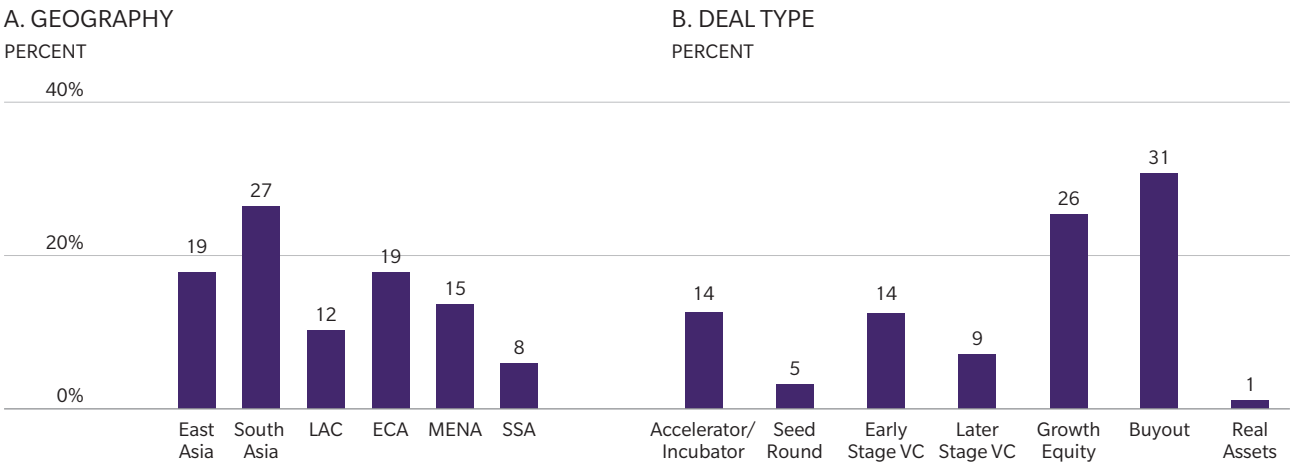
When defining the senior leadership teams of the companies, we included CEOs, founders, other C-Suite executives, managing directors, presidents, board chairmen, directors, and vice presidents. To identify the gender of employees, we used a name and gender mapping database to map employee names to male, female, and unisex. In cases where an employee's name was identified as unisex, we manually scraped for their gender.

MODELING GENDER DIVERSITY

We use CEO and founders to model gender diversity for assessing gender gaps in access to capital and senior leadership teams. In short, using CEOs and founders gave us a much larger sample size to analyze, but would not give a strong proxy for gender balanced compared to male or female dominated teams, because a significant portion of the CEO and founder data only have one identified leader.

One key decision was how to model gender diversity and differentiate between gender balanced and male or female dominated teams. Similar to the GP analysis, we use normalized ratios (e.g., the percentage of senior leaders who are female) as opposed to absolute numbers (e.g., more than three women). We use 30 percent as the tipping point to define gender balanced senior leadership teams. The rationale for these choices is by and large similar to what was described in the GP section. We also explored other tipping points of male dominated, gender

Figure 53: Portfolio Companies by Geography and Deal Type



Sources: Aggregated datasets from International Finance Corporation, PitchBook and publicly available data
Note: ECA = Europe and Central Asia; LAC = Latin America and the Caribbean and the Caribbean; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa; VC = venture capital.

balanced, and female dominated leadership teams, which are shown in the following sensitivity analysis section.

MODELING PERFORMANCE

In general, there are various metrics that can be used to measure the performance of portfolio companies. These metrics include but are not limited to: financial return metrics, including IRR; financial growth metrics, including growth in revenues; earnings before interest, tax, depreciation, and amortization (EBITDA); or valuation increases, including changes in company value between multiple rounds of liquidity, including any funding round, exit or IPO.

In general, financial return and growth metrics are reliable proxies for the performance of portfolio companies; however, those data are rare and generally not available at significant scale. In nearly all cases for private companies, this would require access to the portfolios of PE/VC firms, which would limit available data and potentially bias the sample.

We use valuation increases between multiple rounds of a liquidity as our proxy for portfolio company performance. Valuation increases, on the other hand, are generally available in relation to individual deals and transactions. Though valuation increases are not direct measures of financial performance, because they do not include distributions or cash flows and could also encompass unrealized gains, using this data would allow us to expand our scope to a broader portfolio of emerging market PE/VC investments as opposed to the portfolios of a handful of GPs.

We assessed median changes in valuation between two rounds of liquidity for gender balanced versus male or female dominated senior leadership teams. The valuation change was calculated for each company that had two or more liquidity rounds, in which the valuation of the latest deal was divided by the valuation of the earliest deal to calculate the "step-up" (or change) in valuation

BENCHMARKING APPROACH AND RESULTS

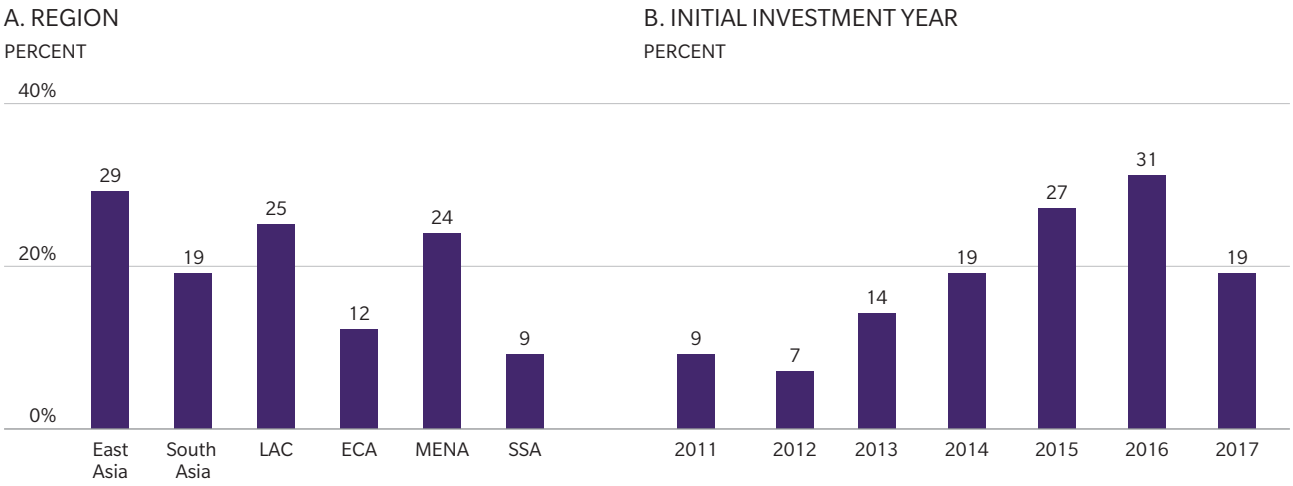
Similar to our analysis of GP funds, we calculated benchmarks to control for variables that could explain performance differences outside of the gender diversity of the portfolio company's leadership team. For portfolio companies, variables that could be expected to correlate

with performance changes include macroeconomic factors, such as the year and region in which the investment is made, and the length for which an investment is held. As such, we conducted two transformations to normalize the changes in valuation between rounds of liquidity and control for other factors.

We looked at compounded annual growth rates (CAGRs) of the changes in valuation based on the dates of the first and final investment. This allowed us to control for differences in holding periods, in which a company whose valuation increased by 60 percent over five years would be viewed as less successful than another company whose valuation increased by the same rate over two years.

We developed peer groups at the intersection of geography and year of investment to control for macroeconomic factors. Defining "like" groups allowed us to develop a view of expected company performance based on forces separate than gender diversity. We used the median CAGR for portfolio companies at each intersection, but applied a minimum sample size requirement to create peer groups. This allowed us to create a view of "excess valuation increases," by taking the difference between the CAGR of an individual company and its peer group.

Figure 54: Annualized Company Valuation Increases by Region and Initial Investment Year



Sources: Aggregated datasets from International Finance Corporation, PitchBook and publicly available data

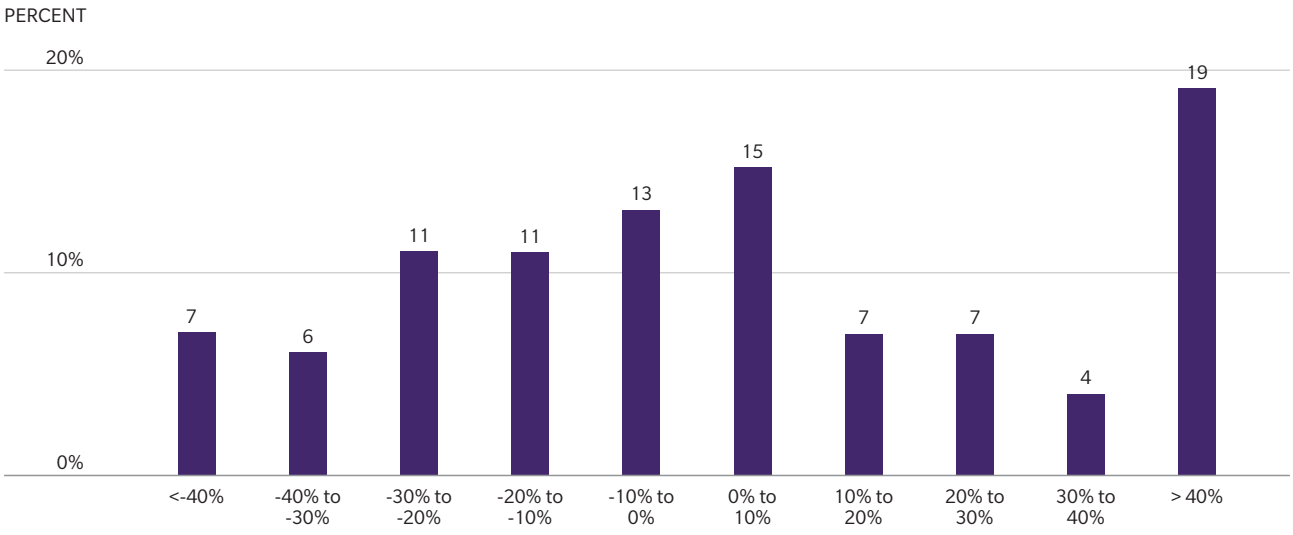
Note: ECA = Europe and Central Asia; LAC = Latin America and the Caribbean and the Caribbean; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa.

The geographic regions used for benchmarking were included East Asia, South Asia, LAC, ECA, MENA, and SSA. The annualized valuation changes by region and initial investment year are shown in Figure 54. This demonstrates significant variance not only by region but also timing of the investment, which supports controlling for these variables.

We applied a minimum sample size requirement for each intersection of geography and vintage to exclude portfolio companies that did not have a reasonable number of peers to define a benchmark. A median was taken to reduce effect of outliers. After making the requisite exclusions for a clean dataset, we were able to calculate benchmarks for annualized valuation increase for 414 portfolio companies.

After determining benchmarks for each portfolio company, we calculated excess annualized valuation increase using the difference between the portfolio company and its benchmark. The distribution of excess annualized valuation changes is shown in Figure 55. Overall, the distribution shows a slight bias toward companies with higher valuations; however, the median excess returns of the distribution is 0 percent

Figure 55: Distribution of Excess Annualized Valuation Increase



Source: Aggregated datasets from International Finance Corporation, PitchBook and publicly available data

RESULTS VALIDATION: CORRELATION OF PORTFOLIO COMPANY VALUATION INCREASES AND GENDER BALANCE

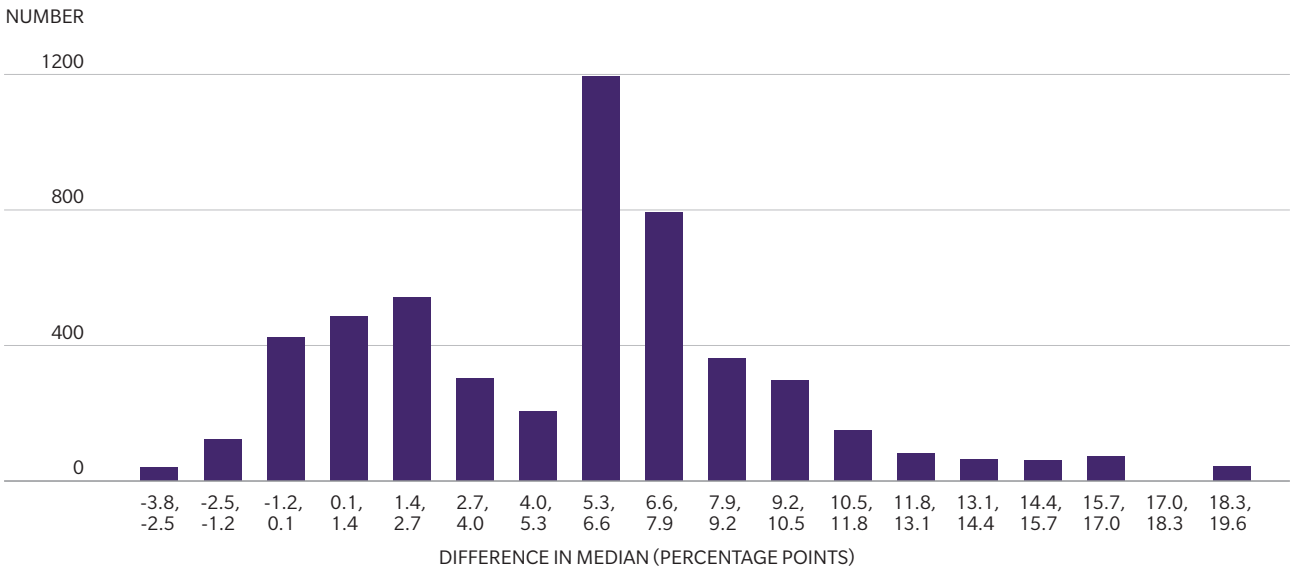
UNCERTAINTY ANALYSIS

Similar to our analysis on the performance of funds of GPs, we used bootstrap confidence intervals to assess the uncertainty of the observed difference in median performance between portfolio companies with gender balanced and male or female dominated senior leadership teams. An overview of bootstrapping with replacement is provided in the fund performance results validation section.

For portfolio companies, we generated 10,000 resampled distributions, calculated the difference in medians for each of those populations, and calculated summary statistics (e.g., standard deviations, 10th to 90th percentiles, 5th to 95th percentiles, and 2.5th to 97.5th percentiles) across the new distributions to quantify uncertainty and confidence intervals of the original estimate. Figure 56 shows the distribution of these 10,000 random samples when defining gender balanced teams as having between 30 percent and 70 percent senior managers who are women.

Similar to our analysis of fund performance, we expected high variance within the estimate given small sample sizes of gender balanced portfolio companies. The distribution of portfolio company returns are generally more dispersed than funds. Since our hypothesis is that moving toward gender balance would be positively correlated to returns, we expected that median excess returns of gender balanced sets (e.g., 25 percent to 75 percent) would still be higher than the median

Figure 56: Distribution of Differences in Median Excess Valuation Changes for Portfolio Companies from Bootstrapped Simulations



Sources: Aggregated datasets from International Finance Corporation, PitchBook and publicly available data
Note: Median is based on 10,000 samples

Table 8: Bootstrap Resampling Results for Different Portfolio Company Diversity Levels

GENDER BALANCE RANGE (%)"	OBSERVED DISTRIBUTION		RESAMPLED (PERCENTILE DIFFERENCE OF GENDER BALANCED VS. MALE/FEMALE DOMINATED)			
				Percentile confidence intervals (CIs)		
	Count	Median diff. (%)"	Std. dev. (%)	50	80 CI	90 CI	95 CI
33 – 67	81	5.50	3.80	5.55	[0, 9.7]	[-0.3, 11.1]	[-0.7, 13.7]
30 – 70	82	5.49	3.84	5.67	[0, 9.7]	[-0.4, 11.2]	[-0.8, 13.8]
25 – 75	108	5.57	4.07	5.71	[0, 10.2]	[-0.3, 11.9]	[-0.1, 15.0]

Positive difference in medians

Sources: Aggregated datasets from International Finance Corporation, PitchBook and publicly available data

performance of male or female dominated teams. Table8 shows the results of the bootstrapping analysis for portfolio companies using the percentile method. The median difference in excess returns for gender balanced portfolio companies at 33 percent to 67 percent and 30 percent to 70 percent at an 80 percent confidence interval. Thus, though our estimates suggest that there could be a positive correlation between gender balance and increased performance in portfolio companies, there is a considerable level of uncertainty in the estimate at all definitions of gender balanced.

Similar to our analysis of fund performance in GPs, we calculated confidence intervals using the BCa approach. The results are shown in Table 9. These results largely confirm the uncertainty of the median performance difference between gender balanced and male or female dominated portfolio companies observed using the percentile method.

To assess the impact of our benchmark approach on our findings, we calculated the difference between gender balanced and male or female dominated funds using two different options: (a) using absolute returns i.e., no benchmark methodology is applied; and (b) using Cambridge Associates' benchmark: i.e., a third-party methodology that defines peers by vintage and geographic region, but uses IRR metrics. To maintain consistency in the observed sample, we used the same set of 414 portfolio companies to analyze absolute returns and Cambridge Associates' benchmarks based on vintage and geography. The positive relationship between gender balanced and higher performance held in terms of direction and magnitude regardless of the benchmark method used (our calculate approach compared to Cambridge Associates') or if we looked at absolute returns. The assumptions highlighted in green in Table 10 reflect our base case model.

We also analyzed the impact of the percentile used on the correlation between gender balance and excess annualized valuation increases. For portfolio companies, gender balanced leadership teams outperformed male or female dominated firms at the 25th, 50th (median), and 75th percentiles. See Table11

Table 9: BCa Confidence Intervals for Median Difference in Gender Balanced vs. Male/Female Dominated Portfolio Companies' Excess Valuation Changes

GENDER BALANCE RANGE (%)	BCa CONFIDENCE INTERVALS (CIs) (%)		
	80 CI	90 CI	95 CI
33 – 67	[0, 9.4]	[-0.4, 10.1]	[-1.1, 13.1]
30 – 70	[0, 9.3]	[-0.4, 10.6]	[-1.2, 12.6]
25 – 75	[0., 9.9]	[-0.4, 11.3]	[-1.2, 14.0]

Sources: Aggregated datasets from International Finance Corporation, PitchBook and publicly available data
Note: BCa = bias corrected and accelerated

Table 10: Performance Comparison across Benchmark Options

Percent

	NO BENCHMARK	CALCULATED BENCHMARK (EXCESS)	CAMBRIDGE ASSOCIATES BENCHMARK (EXCESS)
Difference in median annualized valuation change between balanced & dominated companies	+5.6%	+5.5%	+9.7%

Baseline assumptions

Source: Aggregated datasets from International Finance Corporation, PitchBook and publicly available data
Note: Limited to the population of funds with a calculated benchmark (n = 414).

Table 11: Performance Comparison at Different Percentiles

Percent

	25TH PERCENTILE	MEDIAN	75TH PERCENTILE
Gender balanced	-10.5%	5.4%	29.0%
Male/female dominated	-21.1%	-0.1%	26.7%
Difference	+10.5%	+5.5%	+2.3%

Baseline assumptions

Source: Aggregated datasets from International Finance Corporation, PitchBook and publicly available data

QUALITATIVE SURVEY

Survey overview

We launched a survey on gender diversity in PE/VC in emerging markets to answer several qualitative key questions at scale:

- What are the most significant drivers of gaps in female representation as partners in PE/VC firms and recipients of those firms' capital?
- How do GPs support gender balance in organizational culture, talent management (i.e., applications and recruitment, hiring, retention, and promotion) and investment processes (e.g., deal sourcing, investment decision making, and post-investment oversight)?
- What is the stance and actions of LPs on gender diversity issues, and how are these actions being perceived by GPs?
- Are there differences in perceptions of male and female junior PE/VC investors regarding their likelihood to remain in PE/VC for the foreseeable future?

The survey was disseminated through email from a list of third-party data, publicly available sources, and industry associations. Survey recipients covered both emerging and developed markets, with significant representation from all emerging market regions.

RESPONDENT SCREENING

We received 696 responses from industry participants. However, we included several filters to ensure relevance of the respondents' experience. The survey included profile questions that allowed us to define the following characteristics of each respondent:

- Geographic region, including base location and areas invested in
- Focus of role, including investment compared to noninvestment (e.g., investor relations)
- Seniority, including managing partners, partners, principals, and associates
- Firm type, including LP (e.g., sovereign wealth fund, fund of funds) and GP (e.g., venture capital, growth equity, buyout)

Respondents who did not indicate that they worked for a LP or GP were screened out from the rest of the survey. These responses were then used to tailor specific question paths that would be most relevant to the respondent. Additionally, respondents whose response time was less than the 2.5th percentile were screened out for quality control purposes. The percentile cutoff was applied depending on the respondents' question path, because the length of the survey varied with the respondents' profile.

One consideration for respondent screening was whether to include partial responses (when respondents did not complete the full survey). It is common for survey respondents to not complete the full questionnaire for several reasons, including survey respondents getting distracted or finding the survey topic to be one they are not particularly interested in. In our case, 12 percent of our valid survey responses were partial responses.

The tradeoffs and best practice regarding the inclusion of partial responses in survey analysis is still a topic under debate; however, we opted to include partial responses in our analysis to reduce the bias of topic salience. For instance, respondents who did not complete the survey may be less interested in the topic of gender diversity, and therefore may hold different views on the business case. If there were a bias in the partial respondent population, including partial responses could therefore ensure a more representative sample of the target survey population, even though this would apply only for a portion of the survey.

Including partial responses increased our sample size without meaningfully changing our findings. We compared results of including or excluding partial responses for analyses in both talent management and investments, and two results have been usually within 5 percent difference from each other. Respondent profiles of partial compared to complete responses are largely similar in terms of gender, geography, and position, which indicates that respondent demographics are

largely aligned in both groups. As such, there is not a strong indication that the partial compared to complete response populations are meaningfully different.

In the end, we had 504 responses that were valid (i.e., passed all filters). Emerging market respondents accounted for about 53 percent of total valid responses.[8] We focused on analyzing emerging market responses for the purposes of our research, but also analyzed the response differences across developed and emerging markets.

Emerging Market Respondent Profile

Of 267 valid emerging market responses, 30 percent of respondents are female and 19 percent of senior respondents[9] are female, which is a higher proportion of female partners than what is currently in emerging market PE/VC firms (11 percent). The difference indicates that women are slightly overrepresented in our survey respondents, which could introduce bias into our sample.

We controlled for this bias by showing the divergence between male and female respondents as opposed to aggregating them. This is particularly important on questions including the business case and drivers of low female representation in PE/VC, where differences in gender meaningfully changed responses. The divergence has led to important revelations about the difference in perceptions and gaps between the two gender groups, as well as uncovering "market wisdom" that may have largely been driven from a male lens. Additionally, using a weighted aggregation would introduce additional subjectivity and assumptions into the analysis, which we opted to avoid.

For questions that are more descriptive about firm policies as opposed to about perceptions of drivers of existing gender gaps in PE/VC, we show our findings in aggregate. Responses to these questions were much more driven by the firm than the gender of the respondent. See Table 12.

The second potential bias in our sample was geography. We asked survey respondents to identify the country they are based in and used the result to categorize them into regions. A comparison of the geography distribution of survey recipients from our mailing list and the survey respondents shows that among emerging markets,

Table 12: Valid Responses by Seniority and Gender from Emerging Markets within General Partners and Limited Partners

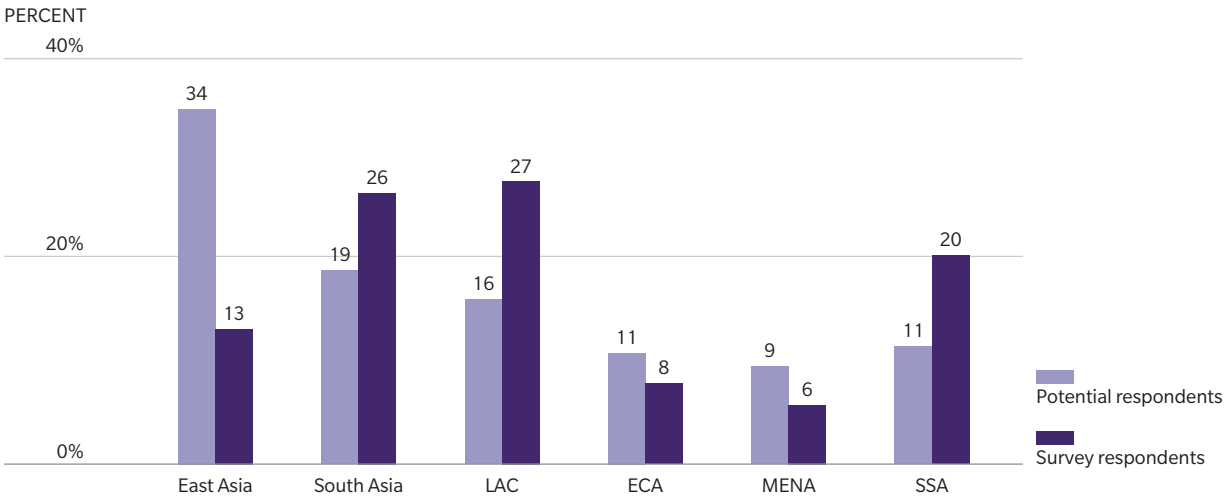
SENIORITY	MALE (COUNT)	FEMALE (COUNT)	FEMALE (PERCENT)	TOTAL
Managing partner and/or Founder	96	19	17	115 (43%)
Partner	42	13	24	55 (21%)
Principal	27	14	34	41 (15%)
Junior (including Vice President, Associate, and Analyst	14	23	61	38 (14%)
Other	8	10	56	18 (7%)
Total	**187**	**79**	**30**	**267 (100%)**

Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018.

South Asia, LAC, and SSA have been overrepresented in our sample. However, our analysis suggests that potential biases in responses across geography are small, particularly relative to gender given that gender is a much larger driver of divergence in survey results compared to geography, the bias introduced is potentially small. See Figure 57.uncovering “market wisdom” that may have largely been driven from a male lens. Additionally, using a weighted aggregation would introduce additional subjectivity and assumptions into the analysis, which we opted to avoid.

Seventy-five percent of respondents indicate they invested primarily in emerging markets, either exclusively in emerging markets or a mix of emerging and developed markets. similar overrepresentation was observed in South Asia, LAC, and SSA in our sample. See Figure 58. Eighty-four percent of emerging market respondents worked at investment-type roles, the target population for our analyses. See Table13.

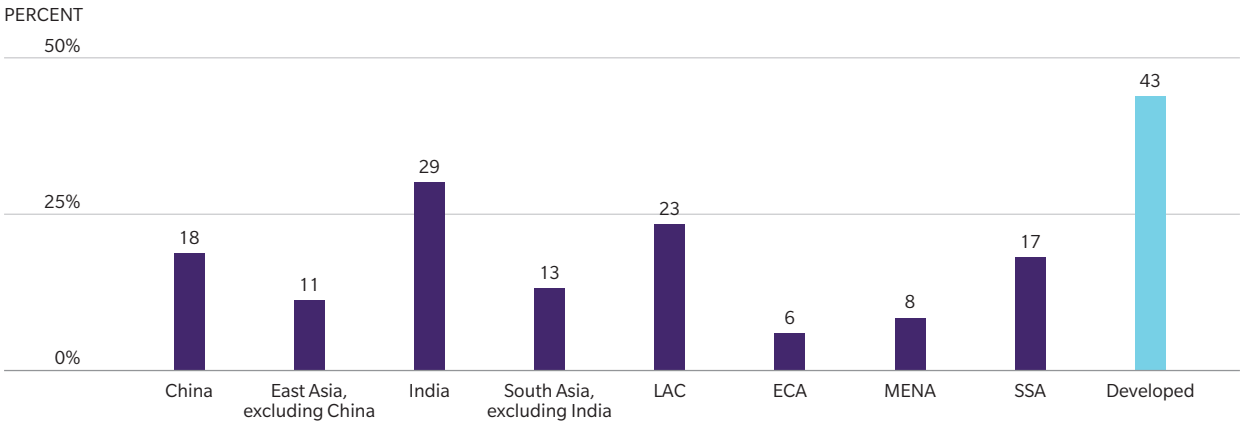
Figure 57: Share of Emerging Market Survey Respondents by Geography



Source: International FInance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018

Note: ECA = emerging Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa.

Figure 58: Survey Respondents by Primary Investment Location



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018
Note: Percentages do not add up to 100 percent because GPs can list more than one primary investment location. ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa.

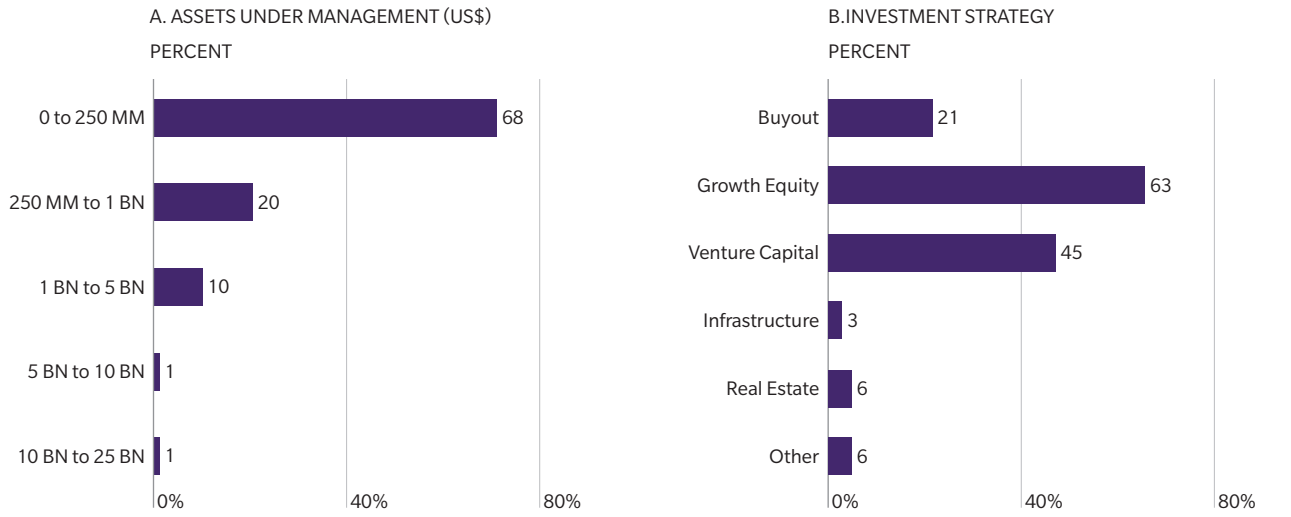
Table 13: Emerging Market Survey Respondents by Role and Gender

ROLE	MALE	FEMALE	TOTAL
INVESTMENTS	155 (88%)	54 (74%)	209 (84%)
OPERATIONS	12 (7%)	2 (3%)	14 (6%)
INVESTOR RELATIONS/ MARKETING	4 (2%)	9 (12%)	13 (5%)
ENFIRONMENTAL, SOCIAL, AND GOVERNANCE COMPLIANCE	–	3 (4%)	3 (1%)
HUMAN RESOURCES	–	–	–
FINANCE/ACCOUNTING	3 (2%)	1 (1%)	4 (2%)
LEGAL	1 (1%)	1 (1%)	2 (1%)
OTHER	2 (1%)	3 (4%)	5 (2%)
TOTAL	**177 (100%)**	**73 (100%)**	**250 (100%)**

Source: IFC Gender Diversity in Private Equity and Venture Capital Survey 2018.
Note: — = not applicable.

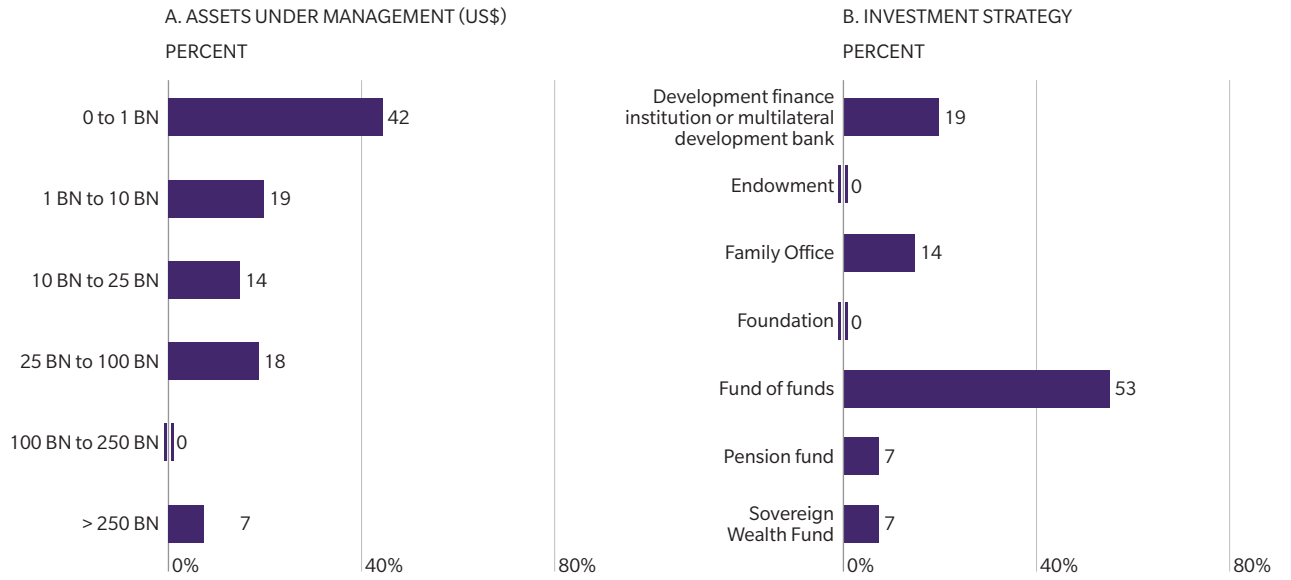
The majority of GP respondents worked at firms that have VC, growth equity, and buyout funds with firm assets under management under US$1 billion. Respondent firms can be multistrategy, and therefore percentages of general partners add up to larger than 100 percent. Most LP respondents work at fund of funds and development finance institutions or multilateral development banks with firm assets under management under US$100 billion.[10] See Figure 59, panels A and B, and Figure 60.

Figure 59: Percent of General Partners by Assets Under Management and Investment Strategy



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 2018

Figure 60: Percentage of Limited Partners Firms by Assets Under Management and Investment Strategy



Source: International Finance Corporation Gender Diversity in Private Equity and Venture Capital Survey 201

APPENDIX B: OVERVIEW OF EXISTING RESEARCH ON GENDER DIVERSITY AND PERFORMANCE

Table 14: Summary of Existing Research on Relationship between Gender Diversity and Performance

	DEVELOPED	EMERGING
Public	• U.S. companies with gender diverse boards realized EPS gains of 37% vs. -8% of non-diverse boards[a] • U.S. gender diverse boards yield higher return on assets, return on invested capital & return on equity[b] • Mandatory quotas for female representation on boards a significant drop in stock price and a large decline in Tobin's Q[c] • A meta-analysis of 20 studies on the relationship between female representation on corporate boards and firm financial performance found that the effect of greater gender diversity was small and non-significant.[d] • Female hedge fund managers beat industry average and have return of 59% vs. industry average of 39%[e] • Morningstar found no statistically significant difference between all-male, mixed, and all-female investor teams[f]	• EBIT margin of African companies whose boards were at least 25% female was 20% higher than industry average[g] • Study of 30 Pakistani listed firms showed board diversity did not significantly influence performance[h] • Study of 153 listed commercial banks in MENA showed negative relationship between board diversity and performance[i]
Private	• US VC firms' performance has a statistically significant positive correlation with the proportion of female-led businesses that are in their portfolio[j] • Calvert Impact Capital found companies in top quartile of proportion of women in leadership positions had an average return on sales of 18.1% vs. -1.9% for companies in bottom quartile[k] • In VC, female-founded companies performed 63% better than all-male teams in revenue growth[l] • Research found "VC firms that increased their proportion of female partner hires by 10% saw, on average, a 1.5% improvement in overall fund returns each year"[m] • U.S. based funds managed by diverse-owned firms generally do not perform better or worse than non-diverse-owned firms within typically accepted statistical confidence intervals after controlling for relevant characteristics.[n]	• Little existing research

Note: EBIT Earnings before interest and taxes; EPS = earnings per share; MENA = Middle East and North Africa; VC = venture capital

a. Eastman, Rallis, and Mazzucchelli 2016.
b. Stiehler and Freedman 2016
c. Ahern and Dittmar 2012.
d. Pletzer et al. 2015.
e. See Financial Times website, https://www.ft.com/content/d923da76-5d1d-11e5-9846-de406ccb37f2#axzz40Vhd0awW.
f. Morningstar 2018.
g. Moodley et al. 2016.
h. Nathan 2013.
i. Sherif 2015.
j. JMG Consulting and Wyckoff Consulting 2013.
k. Moran 2018.
l. See the First Round 10 Year Project website, http://10years.firstround.com/.
m. Gompers and Kovvali 2018.
n. Lerner et al. 2019.

APPENDIX NOTES

1 Research by Moran (2018), for instance, finds that return on assets of companies in their private debt portfolio steadily increased around 30 percent when women are in senior leadership positions, peaked at approximately 50 percent, and tapered off after 70 percent. Newton-Small (2016) finds that the presence of women begins to significantly change a diverse set of institutions between 20 percent to 30 percent. Thirty percent is also in line with industry initiatives, such as the Thirty Percent Coalition

2 Rest of emerging markets includes Europe and Central Asia (ECA), Latin America and the Caribbean (LAC), MENA, and Sub-Saharan Africa (SSA).

3 Real assets includes real estate and infrastructure.

4 The bootstrap is a computer-based method that can often be used to answer questions that may be too complicated or require too many assumptions for traditional statistical analyses. In particular, bootstrap is an effective method for assessing errors of estimates. More information can be found in Efron and Tibshirani (1986).

5 This study was conducted by generating a large population with similar distribution as the real sample (by approximating the sample with two truncated student t-distributions), from which 10,000 samples of 591 funds were drawn to represent the original 591 observations in our data. For each sample, the same bootstrapping procedures used in our analysis was applied. Across all 10,000 samples, we obtain 10,000 confidence intervals per significance-level and estimation method, whereby we can calculate the proportion of times the population parameter falls within the confidence intervals, and compare it with the expected proportion given by the significance level.

6 Less than 5 percent rank correlation between the binary baseline gender balance variable and fund size, and less than 2 percent Pearson and rank correlation between proportion of female in senior fund roles and fund size

7 Cambridge Associates does not include benchmarks for funds that are more recent than the 2015 vintage year.

8 Percentage of respondents in developed market and emerging market do not add up to 100 percent because some respondents do not indicate the country in which they are based.

9 Senior employees are managing partner or founder and partner

10 LP data include both emerging market and developed market.

Contact Information
IFC
2121 Pennsylvania Avenue, NW
Washington, DC 20433 USA

+1 (202) 458-2262
BMurti@ifc.org
www.IFC.org/gender
@WBG_Gender

ifc.org

OLIVER WYMAN

RockCreek

IFC International Finance Corporation
WORLD BANK GROUP
Creating Markets, Creating Opportunities