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THIS RESEARCH WAS CONDUCTED BY INSIGHT AT PACIFIC COMMUNITY VENTURES AS PART OF THE ACCELERATING IMPACT INVESTING INITIATIVE (AI3)

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PRODUCED BY THE ACCELERATING IMPACT INVESTING INITIATIVE (AI3)

The AI3 is a partnership between Enterprise Community Partners and InSight at Pacific Community Ventures, with research support from the Initiative for Responsible Investment.



Enterprise works with partners nationwide to build opportunity, creating and advocating for affordable homes in thriving communities linked to jobs, good schools, health care and transportation. Enterprise's Public Policy team, based in Washington, D.C. brings valued relationships with key policy leaders, as well as deep expertise in tax policy, CRA, and other areas of housing and community development finance policy.



The Initiative for Responsible Investment at the Hauser Institute for Civil Society at Harvard University is an applied research center that focuses on fundamental issues and theories around the social utility of finance. Through research and ongoing dialogue, the IRI looks at opportunities across asset classes, issue areas, and investor types to engage private sector investment around environmental and social goals, risks and opportunities.



PCV InSight is the impact investing research and consulting practice at Pacific Community Ventures. PCV InSight provides information and analysis to investors and policymakers with the goal of driving capital to underserved markets. PCV InSight's work has provided the basis for national and international policy initiatives, including the U.S. National Advisory Board, White House Impact Economy Forum, and the Social Impact Investment Taskforce.

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NAVIGATING THE REPORT

The report is intended for an audience of public and private pension fund trustees, CEOs, CIOs, and investment staff interested in exploring how pension funds can generate appropriate risk-adjusted financial returns and social and environmental benefits through Economically Targeted Investments (ETIs), environmental, social and governance (ESG) incorporation, and impact investing. This report also seeks to support the impact investing field in better understanding the practices and rich history of pension funds' pursuit of ETIs—demonstrating how pension fund investments have generated, and continue to generate, social or environmental benefits.

The report presents an examination of ETIs in the United States, an analysis of current trends and themes, and reflections on the future of pension funds investing for social and environmental benefit. In this report, readers will find:

- Information and data on the characteristics of ETIs in the U.S.
 - Information was compiled based on research for, and analysis of, the AI3 catalog of Economically Targeted Investments, published in October 2016.
- · Prevailing themes affecting ETIs
 - Themes include fiduciary duty, long-termism, and ESG incorporation. The report also includes a discussion of how each theme plays a role in portfolio management, diversification, risk, and opportunity.
- · Five case studies, as current examples of pension fund investments that focus on achieving financial return with the ancillary goal of societal benefit.

The case studies represent different geographies, fund sizes, objectives, and asset classes that showcase a variety of approaches. They also offer insights into what it takes to create a successful ETI program.

This report is based on research conducted to better understand pension fund practices and approaches to ETIs; findings from an industry scan of pension fund ETIs for the development of an online catalog; and interviews conducted with pension fund managers, investment intermediaries, researchers, and other pension fund staff. A list of interviewees as well as a list of resources for further reading can be found in the appendices.



EXECUTIVE SUMMARY

Economically Targeted Investments (ETIs) have a long history in the United States. Since the 1960s, pension funds have invested at least \$86 billion in over 100 ETIs. These investments—made in worker-friendly affordable housing, in-state businesses, infrastructure, and other projects—have a proven track record of providing riskadjusted, market-rate returns and ancillary social, environmental, and economic benefits.

What are Economically Targeted Investments?

Investments that generate collateral benefits apart from the investment return to the employee benefit plan investor

The size and focus of ETIs varies, although most ETIs focus on both a pre-defined geography and a specific sector. An investment vehicle created to invest capital in a specific place is most often focused on the state or region in which the pension fund is based, but the geography can be any predefined area. A sector strategy focuses on the type of collateral benefit a fund manager is seeking for instance, environmental benefits through the financing of renewable energy projects.

OTHER IMPORTANT DEFINITIONS:

Environmental, social, and governance (ESG) incorporation

ESG refers to the incorporation of environmental, social, and corporate governance criteria into investment analysis and decisions.

Impact Investing

Impact investing refers to investments made into companies, organizations, and funds with the intention to generate a measurable, beneficial social or environmental impact alongside a financial return. ETIs have always involved—and continue to involve questions concerning the balance of financial performance and social and environmental goals. However, ETIs are made with a paramount focus on appropriate risk-adjusted financial returns. As such, they provide an opportunity for pension funds to deploy capital in a manner that supports plan participants and beneficiaries, their communities, and the environment, while simultaneously upholding their fiduciary duty.

Purpose of the Research

With ETIs, managers of pension fund assets have the opportunity not only to provide a secure financial future for their members, but also to invest in the sustainability and wellbeing of the communities they represent. In the United States, defined benefit pension funds currently have approximately \$6.5 trillion dollars collectively under management. This report builds on our prior work and explores:

- · How ETIs have been made.
- · How they have evolved over time, and
- Future opportunities and challenges for pension funds as they seek to achieve attractive financial returns and societal benefits.

Pension funds face many challenges, including the volatility of financial markets and the pressure to meet current retirees' needs while planning for future generations. Yet they also have a growing range of opportunities to achieve both financial and social benefit with their portfolios. We hope this report will serve as a resource for pension funds incorporating non-financial data into their investment analyses—and those considering investments that generate social or environmental impact—particularly with the growing understanding of the implications of social and environmental factors as drivers of financial value in the long term. Past and current pension fund ETIs offer valuable lessons for pension funds exploring new ETIs, the practice of ESG incorporation, and impact investing.

ETIs: Past, Present, and Future

ETIs emerged in the 1960s, and became more prevalent in the early 1990s with legal backing and published research supporting the consideration of non-financial, material factors in investment analysis. Pension funds continued to pursue ETIs through the mid-2000s and until the Great Recession. After 2008 there was a significant reduction in the average number of ETIs per year. In the mid-2000s, 7.3 ETIs were made, on average, per year, with an average of only 3.6 per year between 2008 and 2010. ETIs have begun to reemerge post-Recession as pension funds explore the pursuit of financial returns and collateral benefits.

A variety of factors have affected, and continue to influence pension funds' pursuit of ETIs, including:

- Fiduciary duty—A common concern among both fiduciaries and beneficiaries is that in making an ETI, fund managers may be violating their fiduciary duties of loyalty and prudence. However, just as with any investment, so long as a pension fund's investment decisions are made in accordance with the standards of prudence and loyalty, an ETI does not conflict with fiduciary duty.
- **Long-termism**—The incorporation of ESG factors and the intentional pursuit of societal benefit embedded in ETIs and impact investments fit squarely within a nuanced, long-term investment strategy. Because a pension fund has a responsibility to a participant over his or her lifetime, the longterm health of the fund is critical. The incorporation of social and environmental impact or ESG factors into the investment process allows investors to take a broad view and fully assess the risks and opportunities of an investment. They can then make better, more informed investment decisions with an eye toward investment value and performance. More important than simply a long-term investing strategy is accountability to all participants, and a full understanding of the risk and opportunity associated with an investment decision.

• Incorporation of ESG factors—In recent years, pension funds have begun to make investments that incorporate ESG factors in investment analysis and decision-making. ESG incorporation is increasingly viewed as a necessary strategy to capture fully those factors that affect value creation. ESG incorporation utilizes material nonfinancial information to price risk appropriately—leading to better financial returns in the long run. Investors are increasingly utilizing information on climate change and social and economic inequality, for instance, to assess long-term company and shareholder value.

While U.S. pension funds have a long history of making ETIs, many remain reluctant to discuss these or any type of investment that carries environmental or social objectives. Even for those pension funds that have made ETIs for many years and have a strong track record of financial performance, there is concern that such investments might be viewed as not in keeping with fiduciary duty. This concern can be linked to the politicized nature of some past ETIs and the misperception that an ETI or any investment with financial and social objectives delivers concessionary financial returns. This concern has limited, and continues to limit, the pursuit of ETIs among pension funds. However, a growing body of research demonstrates that these investments can generate both social benefit and attractive financial returns on par with those achieved through traditional investments. This research on financial performance, together with an evolving view of fiduciary duty and a supportive body of law and legal interpretations are likely to change perceptions of these investments moving forward.

Beyond misperceptions related to financial performance, there remain other near-term challenges that may limit pension funds' pursuit of investments with social and environmental benefit. These challenges are reflective of a developing market, and include a lack of appropriately sized deals for pension funds, and limited standardized, comparable data on these investments. As the market continues to grow and become more sophisticated, these challenges are likely to be addressed, easing the way for pension funds to invest.

The body of law, legal interpretations, and abundant research on fiduciary duty show that looking beyond traditional investment analysis is clearly permissible for pension funds. Furthermore, the continued evolution of fiduciary duty, particularly in what is viewed as prudent investing, supports pension funds to account for nonfinancial factors. These factors can include social or environmental impact, given their materiality as drivers of financial value. Issues such as climate change, economic inequality, clean water, and poverty documented by the United Nation's 17 Sustainable Development Goals (SDGs)—constitute important factors that some pension funds are already considering, given their long-term connection to financial value and the attractive investment opportunities they may present over the next decade and more.

Successful ETIs have, at their foundation, thoughtful initial planning, consistent execution, transparency, properly trained staff with the appropriate skill sets, and managers and partners with a proven track record. There is not a one-size-fits-all approach to making ETIs, and while common approaches and lessons exist, every ETI must have a clear investment thesis and be created to take advantage of specific investable opportunities in its target location or sector. This report presents five case studies that showcase a diversity of approaches pension funds have taken in pursuing ETIs. Together these case studies offer insights into pension funds' motivations for these investments, as well as how the investments are structured and their results to date—including financial performance and other reflections. Appendix A includes detailed case studies on the following:

- The Wisconsin Private Debt Program
- AFL-CIO Housing Investment Trust
- In-State Private Equity
- CalSTRS Green Bond Program
- Dutch Pension Funds Pursuit of Social Benefit

In the future, we expect to see pension funds incorporate new kinds of ESG information into their investment analyses and decisions, and—as we better understand the long-term implications of these factors on society and financial value—continue to make ETIs and begin to pursue impact investing. As the market for these types of investments grows and matures, pension funds will increasingly be able to identify attractive opportunities that generate appropriate, risk-adjusted returns and societal benefit, provide for participants retiring today, and secure the financial futures of members retiring many years down the line. Such a future will ensure that pension holders enjoy their retirement in thriving economies, a clean environment, and safe and healthy communities.

INTRODUCTION

U.S.-based public and private pension funds have been making Economically Targeted Investments (ETIs)—investments that generate collateral benefits apart from the investment return to the employee benefit plan investor—since the 1960s. 1,2 In that time, more than one hundred of these investments have been made in worker-friendly affordable housing, in-state businesses, infrastructure, and other projects, generating appropriate risk-adjusted returns for plan participants while benefiting local communities, the environment, and society more broadly. In one of the earliest examples, in 1960, AFL-CIO president George Meany worked with Dr. Martin Luther King, Jr. to align the goals of the AFL-CIO and the Civil Rights Movement. Out of this alignment came a proposal from Dr. King to use AFL-CIO pension fund assets to fund affordable housing development. Dr. King's vision for pension fund capital as a source of economic and social justice led Meany to establish the AFL-CIO Investment Department. In 1964, the Investment Department provided a home for a new investment vehicle, the Mortgage Investment Trust, which created an avenue for pension fund investments in affordable housing projects and became a predecessor to the Housing Investment Trust (profiled on page 36).3

In 1974, the Employee Retirement Income Security Act (ERISA) was enacted to set minimum standards for most voluntarily established pension and health plans in private industry in the United States. ERISA, alongside a related body of law and accompanying interpretations, influences how pension funds—both private and public make investments. Multiple Department of Labor (DOL) bulletins issued since 1974 have updated and clarified ERISA rules, including several related to ETIs. However, the main focus of ERISA (and other laws governing pension funds) is, and has always been, fiduciary dutyespecially the core values of loyalty and prudence.

Ensuring that fiduciaries act solely in the interests of their beneficiaries, the legal definition of loyalty has remained consistent over time. This element of the law seeks to balance impartially the conflicting interests of different beneficiaries and to avoid conflicts of interest and opportunities to benefit pension fund managers or third parties. 4 However, what is considered as prudent investing has evolved over time, influencing investment strategy and the types of investments pension funds pursue, including ETIs and the incorporation of environmental, social, and corporate governance (ESG) criteria into investment analysis and decisions.5

The introduction of modern portfolio theory in the late 1950s encouraged investment managers to evaluate a potential investment not only on its own terms, but also in terms of how it would impact the risk/return characteristics, diversification, and liquidity of the entire portfolio. In 1992, the modern prudent investor rule was adopted as a common practice by fiduciary investors, incorporating the tenets of modern portfolio theory, while also providing investment managers with latitude to diversify within a rational and economically defensible strategy. 6 In 2005, the United Nations Environment Programme Finance Initiative and Freshfields Bruckhaus Deringer published research ("the Freshfields Report") that examined the question of prudence, and addressed the legality of incorporating ESG factors into investment strategy. According to the findings of the Freshfields report, as long as the investment portfolio is always focused on the beneficiaries and purpose of the fund, there is no bar to incorporating other factors, such as ESG considerations. In 2015 the Principles for Responsible Investment (PRI) reexamined the question of prudence in their publication, Fiduciary Duty in the 21st Century. PRI's research showed not only that ESG factors have become permissible to consider when investing, but also that "failing to consider long-term investment value drivers, which include environmental, social and governance issues, in investment practice is a failure of fiduciary duty."7



In addition to the body of law and legal interpretations concerning fiduciary duty, recent studies on the financial performance of investments that incorporate ESG factors and pursue social and environmental impact have shown that such investments can achieve the same level of risk-adjusted financial return as traditional investments, and are not inherently concessionary.8,9,10

While pension funds have a long track record of considering and pursuing ETIs, and have recently begun to incorporate ESG criteria across asset classes, the aforementioned laws, interpretations, and research provide further support for continued investing with social and environmental impact considerations. U.S. pension funds are well positioned to pursue these types of investments, especially as they represent a growing set of investment opportunities. Impact investments investments made into companies, organizations, and funds with the intention to generate a measurable, beneficial social or environmental impact alongside a financial return—have emerged as a growing segment of the investable universe.11

While not all impact investments are appropriate for pension fund investors, suitable opportunities that deliver financially equivalent returns to traditional investments and are of appropriate deal size continue to emerge. In particular, the need for \$2.5 trillion in capital annually to meet the UN's 17 Sustainable Development Goals (SDGs) by 2030 provides just one major example of the growing, global opportunity. Dutch pension funds (profiled on page 55), for instance, are actively exploring the SDGs for investment opportunities.

As pension funds seek to identify attractive opportunities and deliver a secure retirement for plan participants and beneficiaries, it is likely that investments that incorporate ESG factors, and pursue social and environmental benefit (such as impact investments) will increasingly become a part of their investment portfolios. When pursued prudently, these investments have the potential to unleash a significant amount of new private investment that supports plan beneficiaries, their communities, and the environment.

PURPOSE OF THIS RESEARCH

This research examines pension funds' pursuit of ETIs and builds on our prior work from October 2016 documenting 118 pension fund ETIs made by public and private pension funds in an online catalog. 12 While there is limited public information readily available, through the process of aggregating, distilling, and examining information on ETIs, we have found significant breadth and diversity among these types of investments. Data sources include published pension fund documentation, pension fund websites, news reports, academic literature and research, and interviews with pension fund investment officers or external investment managers—among others.

Together, this report and the online catalog are intended to support the pension fund community as they consider additional ETIs or pursue new opportunities that incorporate ESG factors or target environmental and social impact through impact investing. Past and current ETIs can help ground pension funds' exploration of new opportunities in an understanding of how pension funds have previously pursued similar types of investments in a manner that is consistent with their fiduciary duty.

Pension funds face many challenges, including volatile financial markets, and the pressure to meet current needs of retirees while planning for future generations. This report explores how ETIs have been made, how they have evolved over time, and future opportunities and challenges for pension funds as they seek to dedicate capital to achieve attractive financial returns and societal benefits.

We hope this report can serve as a resource as pension funds consider ETIs, ESG incorporation, and impact investments.

MARKET OVERVIEW

Investments and the Pursuit of Societal Benefit

Throughout the 50-year history of ETIs in the U.S., other investment approaches have emerged that seek to account for the positive and negative effects on society that companies and projects can generate. The terms for these approaches, such as sustainable, responsible, targeted, or impact investing, and ESG incorporation are often used interchangeably. In fact, these types of investments often differ from one another. The table below (figure 1) provides a comparative overview of ETIs and the incorporation of ESG factors, and can serve as a guide for pension funds looking to incorporate these types of investments into their portfolios.

The Types of Pension Funds Making ETIs

This research draws on data collected from three types of pension funds: Public, Private Taft-Hartley, and Private Corporate. To date, most ETIs have been created by and for public pension funds and private Taft-Hartley funds; private corporate pension funds have had little involvement with ETIs.13

PUBLIC PENSION FUNDS

Public sector pension plans are offered by federal, state, and local governments and are available to most, but not all, public sector employees. Most public plans are defined benefit plans, where the amount of the pension benefit is set by a formula established through the plan and the benefit is payable as a lifetime annuity.14

PRIVATE TAFT-HARTLEY FUNDS

Taft-Hartley funds are defined benefit plans established under section 302 of the Taft-Hartley Act of 1947. They are multiemployer plans formed as a result of a collective bargaining agreement, and are administered by boards of trustees on which labor and management are equally represented.

PRIVATE CORPORATE PENSION FUNDS

A corporate pension fund is a formal arrangement between a company and its employees. It can be a defined benefit or defined contribution plan—although most private pension funds are defined contribution funds—and most often both employers and employees make contributions. There are no requirements for corporate pension funds to publicly report investment information, so there is little data available on investment policies, practices, and management.

	ETIs (1964-CURRENT)	INVESTMENTS THAT INCORPORATE ESG FACTORS (2001-CURRENT)
DESCRIPTION	ETIs target collateral benefits alongside market-rate return— social or environmental objectives are generally secondary or ancillary objectives. Note: Impact investments are similar to ETIs in that they have social or environmental objectives. However, impact investments differ from ETIs in that they prioritize equally social or environmental objectives and financial return objectives.	ESG factors are considered in investment analysis and portfolio construction for their impact on financial return but are not necessarily examined with the goal of generating societal benefit. Incorporation of ESG factors can include positive and negative screening, ESG integration, fundamental analysis, and thematic analysis.
PRIMARY ASSET CLASSES	Private equityReal estateFixed income	Public equityFixed incomePrivate equity

figure 1. A comparative overview of ETIs and the incorporation of ESG factors

AN EXAMINATION OF ETIS (1960s TO THE PRESENT) 15

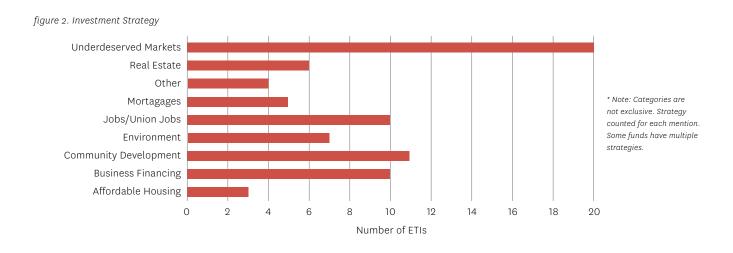
Through ETIs, managers of pension fund assets have the opportunity not only to provide a secure financial future for their members, but also to invest in the sustainability and wellbeing of the communities they represent. In the U.S., defined benefit pension funds currently have approximately \$6.5 trillion dollars under management, and at least \$89 billion have been invested in ETIs since the 1960s. 16,17 The history of ETIs in the United States has been well researched: both Tessa Hebb and Thomas Croft, among others, have chronicled the history and evolution of ETIs in earlier works such as Economically targeted investing: changing of the guard and The Responsible Investor Handbook (see Appendix D for a list of ETI resources). As such, this section is not meant to serve as a comprehensive history of ETIs, but rather as a detailed examination of the characteristics of these types of investments, and draws on data from 118 pension fund ETIs, dating back to the 1960s. 18,19,20

The size and focus of ETIs varies, although most ETIs focus both geographically and on a specific sector. The median size of the ETIs in the catalog is \$524 million, and investment size ranges between \$20 million and \$17 billion. A geographically targeted investment vehicle is created to invest capital in a specifically defined geographic area; most often this is the state or region that the pension fund is in, but the geography can be any pre-defined area.

A sector strategy focuses on the type of collateral benefit a fund manager is seeking—for instance, environmental benefits through the financing of renewable energy projects. The majority of initiatives focus on both geography and sector (64 percent of investments), while 15 percent of initiatives are geographically targeted and 21 percent target a specific sector.

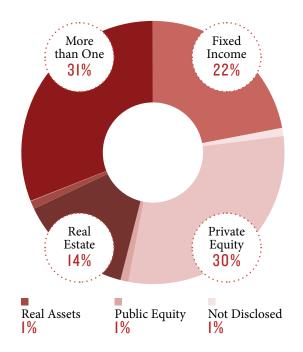
The ETI investment strategy most often used by pension funds is investment in underserved markets (figure 2). With investments in underserved markets, fund managers often seek to identify attractive, place-based investment opportunities that can provide financial returns alongside economic benefits to the community. For many of the ETIs in the catalog, an emphasis on underserved markets is usually paired with another strategy, such as affordable housing or business financing.

Of the 47 ETIs identified in the catalog that were made only by public pension funds, 98 percent are focused in-state, with the remaining vehicles focused regionally. Only five ETIs made by state or city pension funds are sector-focused only. All five invest globally, with three focused on environmental benefits, and the remaining two on investing in underserved markets.



Investments are generally opportunistic in nature rather than part of a dedicated ETI strategy or allocation. While some pension funds have specific allocations for ETI programs, many make them on a more opportunistic basis. The majority of ETIs fall into the private equity (30 percent) and fixed income (22 percent) asset classes, made as investments in private businesses and through bond purchases (figure 3). The majority of ETIs are made by public pension (70 percent) and Taft-Hartley funds (10 percent), with Taft-Hartley funds more likely to have a dedicated ETI program.

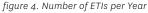
figure 3. ETIs by Asset Class



Shifts in ERISA interpretations over the years may have impacted interest in ETIs, but economic trends appear highly linked to the pursuit of ETIs. In speaking with fund managers actively engaged in making ETIs, it is clear that ETIs are made to maximize financial return first and foremost, like any other investment. Accordingly, the shifts in interpretation issued by the Department of Labor (DOL) have not limited managers' ability to make this type of investment. Economic trends, on the other hand, do appear to affect the number of ETIs made by pension funds, though it is difficult to tease out the effects each has had on ETIs. (For more detail on the DOL Interpretive Bulletins and shifts in ERISA guidance, see Appendix C.) In the table below, the time periods correspond to the publication of DOL interpretive bulletins for ETIs: 1994, 2008, and 2015, respectively.

TIME PERIOD	TOTAL NUMBER Of etis	AVERAGE NUMBER Of etis per year		
1960-1994	46	1.35		
1995-2008	52	3.71		
2009-2015	17	2.83		

As demonstrated in the chart below (figure 4), the average number of ETIs made per year remained fairly steady from their introduction to an increase that began in the 1990s, with another notable increase between 2005 and 2008. The year 2008 (in which a new DOL interpretive bulletin was issued that is believed to have had a chilling effect on the consideration of ETIs) marked the beginning of a definite slowdown in the number of ETIs made per year. Nevertheless, numbers have risen since 2009, and ETIs are beginning to be made once again but remain below pre-Recession levels.







THE CURRENT STATE AND PRACTICE OF INVESTING FOR SOCIAL AND ENVIRONMENTAL BENEFIT

Over the course of our research, we interviewed a number of experts on pension fund ETIs (see Appendix E for a list of interviewees). Most of the insights gained from these discussions are reflected throughout this report; however, there are several topics that merit highlighting here, as multiple interviewees referenced them.

- First and foremost, among U.S. pension funds there is a general reluctance to discuss ETIs or any investment that carries environmental or social objectives. This reticence expands to impact investments and investments that consider ESG factors. Even for the funds that have been making ETIs for many years and have strong track records of financial performance, investment managers, trustees, and lawyers are concerned about the perception that they might not be adhering to their fiduciary duty. This fear is owed to the widespread misperception that these types of investments generate concessionary financial returns. This reluctance can also be traced back to the politicization of some ETIs in the 1980s and 1990s. and pension funds' desire to avoid investments motivated by politics or anything other than the financial merits of an investment.²¹
- The building blocks of a successful ETI program include: thoughtful initial planning, consistent execution, transparency, properly trained staff with the appropriate skillsets, and managers and partners with proven track records.
- A one-size-fits-all approach to making ETIs is not possible. While there are common lessons and approaches that cut across geography and topic area, each ETI must be created to take advantage of specific, investable opportunities in its target location or sector, and must have a clear investment thesis.

- Internal leaders have been central to the creation of ETIs. Historically ETI programs have been created through the internal leadership of individual investment staff members or board members. Examples of this kind of leadership can be found at the State of Wisconsin Investment Board's Wisconsin Private Debt Program, the AFL-CIO's Housing Investment Trust, and CalPERS' California Initiative, to name just a few. While investment staff remain well-positioned to steward ETIs from idea to implementation, and board members have successfully advocated for investments in ETIs in the past, it is expected that more pension funds will invest in these types of opportunities through the normal course of their investment decisionmaking processes as investments that consider environmental and social factors become a greater share of the investable universe.
- There remains the perception among pension fund managers that investments that generate social benefit require a sacrifice in financial returns. The belief that this type of investing is concessionary has negatively affected the prevalence of ETIs among pension funds, as well as pension fund managers' interest in ESG incorporation and impact investing. However, a growing body of research demonstrates that investments can generate social benefit and attractive financial returns on par with traditional investments. 22,23

PREVAILING THEMES AFFECTING ETIS

A variety of factors have impacted pension funds' historical pursuit of ETIs. As the impact investing marketplace grows and becomes more sophisticated, these factors will also affect pension funds' potential interest in and pursuit of impact investments moving forward. Pension funds have been making ETIs for more than 50 years, putting billions of dollars to work in communities across the U.S. The current body of law, along with the research and analysis provided in reports such as Fiduciary Duty in the 21st Century, support pension funds in considering a broad range of investment opportunities, including those that incorporate new sources of information like ESG factors. As pension funds explore these investment opportunities, fiduciary duty, long-termism, and the incorporation of ESG factors will continue to guide investment strategy and decisions in much the same way they have guided pension funds' interest in ETIs.

Fiduciary Duty

Fiduciaries exert discretionary control over the financial assets of beneficiaries. For example, the members of the investment committee of a corporate pension fund serve as fiduciaries managing the assets that fund employees' pensions. The responsibility of a fiduciary is enormous, and, as with any principal-agent relationship, prone to potential abuse. As a result, a long tradition (both domestically and internationally) exists of legislative and judicial efforts to define the role of the fiduciary, so as to protect beneficiaries and the financial assets on which they depend.24

In the U.S., ERISA sets standards for protecting individual beneficiaries of private pension plans. Though ERISA is only legally binding for private pension funds, state statutes governing the investment-making authority of fiduciaries to public retirement systems are often interpreted in light of ERISA and the core values, or requirements, of fiduciary duty—loyalty and prudence.25

Loyalty: Fiduciaries should act in good faith in the interests of their beneficiaries, should impartially balance the conflicting interests of different beneficiaries, should avoid conflicts of interest and should not act for the benefit of themselves or a third party. Furthermore, they must act in a way that is loyal to the stated aims of the financial entity they are managing.26

Prudence: Fiduciaries should act with due care, skill, and diligence, investing as an 'ordinary prudent person' would. Prudence calls upon fiduciaries to engage actively in the investment decision-making process.²⁷

A common concern of both fiduciaries and beneficiaries (and their advocates) is that by making an ETI, fund managers may be violating their duties of loyalty and prudence. Indeed, if a pension fund knowingly makes an investment with less favorable risk/return characteristics for the purpose of pursuing a social or environmental good, this action betrays the standards of both loyalty and prudence. However, as long as an investment decision is made according to the standards of prudence and loyalty, making an ETI is not in conflict with fiduciary duty. 28,29

Long-termism

The long-term nature of pension funds is of particular importance. Pension funds have a responsibility to retirees, workers, and future beneficiaries. Longtermism, or investing with a view of long-term consequences and objectives, is not itself a virtuous investment policy. Determining the appropriate strategic mix of long- and short-term investment goals requires a great deal of nuance and market understanding, and is thus not subject to legal definitions and, as such, should not be treated blindly. Long-termism has been widely adopted among international pension funds, but, according to several interviewees, is only recently reaching a tipping point in the U.S.

ETIs, however, can fit within a long-term investment perspective. The core driver behind ETIs should be the recognition of an opportunity to achieve strong financial returns and provide a secure retirement for beneficiaries. Taking care of plan participants constitutes an impactful goal in and of itself, as does strengthening the social and economic fabric of communities where participants live and work. In the case of the New York State Common Retirement Fund profiled on page 46, Comptroller Thomas DiNapoli created the In-State Private Equity program in 1999 to target appropriate risk-adjusted returns first and foremost, with the added bonus of strengthening the State's economy, providing capital to promising enterprises and creating jobs. Over the last 18 years, the fund has invested in over 300 companies, leveraging an additional \$484 million in capital from other investors, for a total of \$1.21 billion invested in New York companies. The companies receiving capital from the program employ approximately 18,000 people, and more than 70 exits have generated a cumulative \$293 million for the fund on \$179 million invested, for an internal rate of return (IRR) of approximately 20 percent.30

The incorporation of ESG factors and the intentional pursuit of societal benefit embedded in ETIs and impact investing fit squarely within a nuanced long-term investment strategy. The incorporation of impact or ESG factors into the investment process allows investors to take a broader view of financial markets to fully assess the risks and opportunities of an investment. Investors can then make better, more informed investment decisions with an eye toward long-term value and performance. When conducting this type of long-term, holistic analysis, investment managers can assess their ability to add value, a company's ability to navigate both short-term and future market conditions, and the external factors that can lead to increased risk or opportunities. This approach can be seen in the uptake of more sustainable investment strategies by large institutional investors like BlackRock, Morgan Stanley, Prudential, Bain, CalPERS, and others, and is explored in the Organisation for Economic Co-operation and Development's (OECD) project on institutional investors and long-term investment.31

While not specifically focused on ETIs, the institutional investors project was created to increase the amount of capital allocated to long-term investment strategies.

Long-termism is not a goal unto itself, nor is it a responsible way to discount poor performance in the short-term. As pension funds have a responsibility to participants over their lifetime, the long-term health of the fund is incredibly important. More important than simply a long-term investing strategy is accountability to all participants, and a full understanding of the risk and opportunity associated with an investment decision.

Incorporation of Environmental, Social, and Governance (ESG) Factors

In recent years, pension funds have begun to make investments that incorporate ESG factors in investment analysis and decision-making, and ESG incorporation is increasingly being viewed as a necessary strategy to capture fully those factors that affect value creation.³² Today, a variety of ESG incorporation approaches exists in the market, including both positive and negative screening as well as **ESG integration**, or the systematic and explicit inclusion by investment managers of environmental, social, and governance factors into traditional financial analysis.33 ESG incorporation strategies exist across asset classes, result in various methods of disclosure, and range in practice from due diligence checklists, to bespoke proprietary frameworks. For example, CBRE Global Investors includes in its due diligence checklist for property investments the measurable sustainability factors appropriate to the specific asset class and market it is considering for investment, while Calvert Investments maintains inhouse sustainability research analysts to analyze how ESG factors relevant to a particular company, given its sector, may affect the credit drivers of spread performance and its valuation.34

In 2005, the authors of the Freshfields Report outlined the legal argument for inclusion of ESG factors in institutional investment policy. The report found that integrating ESG considerations into an investment analysis so as to predict financial performance more reliably is not only permissible, but also arguably required in all jurisdictions. It also suggested that ESG considerations must be integrated into an investment decision where a consensus (express or, in certain circumstances, implied) amongst the beneficiaries mandates a particular investment strategy. They may also be integrated into an investment decision where a decision-maker is required to decide between a number of value-neutral alternatives.35

In the ten years since the publication of the Freshfields Report, a shift in the conversation and the market has taken place. In 2015, DOL Interpretative Bulletin (IB) 2015-01 not only provided support for ETIs, but acknowledged that ESG factors may have a direct relationship to the economic and financial value of an investment. When they do, these factors should function as more than just "tiebreakers" among a series of investment options; rather, they are proper components of the fiduciary's analysis of the economic and financial merits of competing investment choices.36

The incorporation of ESG factors is becoming increasingly important to investors worldwide, including among the pension fund community, as managers and trustees evaluate their long-term risks and opportunities. In 2016, the DOL published another interpretive bulletin, IB 2016-01, which provided guidance to pension fund investors on proxy voting and ESG issues. Key points of IB 2016on include clarification on consideration of ESG factors in proxy voting, and the legitimacy and importance of engagement with portfolio holdings.³⁷ According to the US SIF 2016 Trends Report, ESG factors are considered across \$8.72 trillion of professionally managed assets, a 33 percent increase since 2014. Previous US SIF reports have shown a steady increase in assets incorporating ESG factors.38

Materiality of Non-Financial Factors

Materiality: Any factor which might have a present or future impact on companies' value drivers, competitive position, and thus on long-term shareholder value creation. 39

The issue of materiality often arises in discussions about ESG factors, as ESG incorporation utilizes material nonfinancial information to price risk appropriately leading to better financial returns in the long run. Material ESG issues impact a company's financials in terms of revenues, costs, and the cost of capital. Evidence suggests that firms making investments that account for material ESG issues outperform their peers in terms of profit margin growth. 40 In particular, investors are increasingly considering climate change and economic inequality as material factors to long-term company and shareholder value.

CLIMATE CHANGE AND ECONOMIC INEQUALITY AS MATERIAL FACTORS TO FINANCIAL VALUE

In September 2016, the Global Impact Investing Network (GIIN) published a paper exploring the role of the UN SDGs in impact investing. The SDGs outline a global agenda to end poverty by 2030, and many of the 17 goals relate to inequality, poverty, climate change, and the environment. Investment dollars may have the opportunity to move the SDG agenda forward. Furthermore, considering the scope and scale of these global challenges, the interests of investors and society as a whole are likely to converge over the long term. 41

Climate Change

Climate change has been addressed as a source of risk by institutional investors. Divestment from fossil fuels represents one method some are utilizing to manage their portfolios to address the risks associated with longterm effects of climate change. Divestment has been undertaken in the last several years by some institutional investors like the Rockefeller Brothers Fund and local government pension fund schemes in the UK. Other tools exist that investors can use to reduce financial risk due to climate change and pursue opportunities related to innovation, including investing in clean energy

companies, sustainable agriculture, and green bonds. 42 The financial impacts of climate change are already proving to be significant. According to the Risky Business Project (an initiative created by former New York City Mayor Michael Bloomberg and former U.S. Secretary of the Treasury Henry Paulson to assess the economic risks to the U.S. associated with climate change), "the American economy is already beginning to feel the effects of climate change. These impacts will likely grow materially over the next 5 to 25 years and affect the future performance of today's business and investment decisions."43 According to a 2015 Citi Global Perspectives & Solutions (GPS) report, the economic and investment costs of continuing on a path that does not take climate change into account in investment decisions are, in fact, higher than a strategy that involves transitioning to a low-carbon energy mix.44

Concrete effects of climate change will be felt in crop yield declines, the need for increased power generation, and stranded assets held by fossil fuel companies, among other negative impacts. The Economist Intelligence Unit calculates that by 2100, 4°C of warming would result in expected losses of \$4.2 trillion in present value to the world's total stock of manageable assets of \$143 trillion—roughly equivalent to the total value of all the world's listed oil and gas companies, or Japan's entire GDP. Much of the impact on future assets will come in the form of weaker growth and lower asset returns across the board. 45

Inequality

The financial and economic risks associated with economic inequality—the gap between the rich and poor in income and wealth—are not yet as widely discussed as those associated with climate change, but are beginning to be recognized in investment strategy. UN SDG 10 states, "while income inequality between countries may have been reduced, inequality within countries has risen. There is growing consensus that economic growth is not sufficient to reduce poverty if it is not inclusive and if it does not involve the three dimensions of sustainable development—economic, social and environmental."46

In a 2016 discussion paper published by PRI, David Wood, Director of the Initiative for Responsible Investment at Harvard University, examined the connection between inequality and financial risk, highlighting three reasons why investors might see inequality as a material factor:

- · Inequality (and its growth) might have negative consequences to investors' long-term investment performance.
- The emergence of inequality as a topic of domestic and global concern may change the risks and opportunities that affect the available universe of investment opportunities.
- Inequality might negatively affect the financial system in which investors participate, and the communities in which beneficiaries live. 47

Wood brings to light many of the arguments for incorporating considerations of inequality into investment decisions, basing his conclusions on research by the International Monetary Fund (IMF), OECD and other global institutions that have conducted detailed analyses of the issue worldwide. 48 According to an OECD report, "For many OECD countries inequality is today at its highest since data collection started. This long-run increase in income inequality does not only raise social and political but also economic concerns: income inequality tends to drag down GDP growth, and it is the rising distance of the lower 40 percent from the rest of society which accounts for this effect."49

The precise effects of inequality on the global economy are, as yet, not fully understood, but as research continues, additional data will allow researchers to draw more detailed conclusions. In a 2013 paper, research from the Center for American Progress suggested "causal linkages between inequality and opportunity, most notably in the educational sphere."50 Other studies have found connections between inequality and social immobility, reductions in aggregate economic demand, and the establishment of government policies that lead to less economic growth.51 These linkages may not immediately affect economic growth in the short term, but increasing inequality can only harm economic projections in the long term.

FUTURE CONSIDERATIONS

While the number of pension fund ETIs has declined since 2008, the current, relevant body of law, legal interpretations, and research support pension funds' ability to make investments that pursue social or environmental objectives or incorporate ESG factors. Pension funds will likely still face some hurdles, but as the market for these types of investments continues to grow and mature, and as new data is incorporated into financial analysis, we will likely see more pension funds make investments that utilize ESG factors, and begin to engage in impact investing.

Challenges for Pension Funds

Pension funds need to be mindful of a number of challenges when seeking to identify appropriate opportunities to invest with social and environmental impact considerations. These challenges include identifying appropriate deal sizes, combatting the belief that creating social or environmental benefit necessitates financial concessions. and working with a lack of available, standardized data.

DEAL SIZE

In the research for this report, the most frequently cited challenge to making ETIs is the lack of appropriately sized deals. Pension funds are institutional investors with billions of dollars of assets under management, and are usually looking to be no more than a small percentage of any given deal, while also needing to deploy large sums of capital with each investment. This concern aligns with the challenges reported by the GIIN's Annual Impact Investor Survey, a comprehensive survey of the impact investing market, with data from 158 impact investors collected and distributed between December 2015 and February 2016.52

According to the survey, investors committed over \$9 billion to impact investments in 2015, and while the average deal size has grown from \$2.1 million in 2013 to \$3 million in 2015, the gap between the average deal size and the amount of capital a pension fund needs to deploy in one transaction remains significant.53

However, the World Economic Forum explored the issue of deal size in a 2014 paper and identified several examples of large funds able to receive appropriately sized commitments from institutional investors. The funds mentioned in the report include Storebrand, Equilibrium, Obviam, and Investing 4 Growth—all with opportunities in the \$50-100 million range.⁵⁴ Larger institutions are beginning to enter the market, and funds offered by firms like BlackRock Impact, Bain Capital, and TPG Growth will enable pension funds to deploy more capital to create social and environmental impact. TPG Growth's Rise Fund has already secured commitments from several pension funds, and Bain Double Impact has a commitment from the Los Angeles City Employees' Retirement System. 55,56

RATE OF RETURN

As previously noted, the belief that impact investments are necessarily concessionary remains widespread among investors, and is often cited as a reason to avoid these investments outright. This misperception remains a central challenge for many investors, especially pension funds, given their focus on providing secure retirements for plan participants and beneficiaries. However, studies have shown that this view is unfounded. For example, research from the GIIN and Cambridge Associates, the University of Oxford and Arabesque Partners, and the Wharton School of the University of Pennsylvania demonstrates that there does not have to be a trade-off in financial performance when pursuing social impact.⁵⁷ Moreover, funds that consider social or environmental impact can, in some instances, out-perform traditional funds.58 The Impact Investing Benchmark (a study of 51 private investment funds) has shown strong performance for impact investment funds in several of the vintage years studied. In fact, in aggregate, impact funds launched between 1998 and 2004 have outperformed others in a comparative universe of conventional funds. 59 As more vehicles are created, and more information is collected and aggregated from existing funds, sources like the GIIN Benchmark will continue to be updated and the data will only improve.

The research published by Wharton and Oxford and Arabesque supports the findings of the Impact Investing Benchmark. According to the Wharton report, impact investments made by survey respondents demonstrated a gross internal rate of return of 12.94 percent, and early results indicated financial performance comparable to a Russell Microcap index (Public Markets Equivalent (PME) 0.98) and to an S&P 500 index (PME 1.00) for the period between 2000 and 2015. 60 The Arabesque report, a meta-study examining more than 200 different sources and aimed at giving an overview of the current research on ESG, found that 88 percent of sources show that sound ESG practices result in better operational performance of firms. Additionally, 80 percent of the studies show that stock price performance of companies is positively influenced by good sustainability practices. 61

NEED FOR DATA

Pension fund managers considering engaging in impact investing often cite a lack of standardized, comparable data as an impediment. 62 This shortage of information affects not only the ability to conduct due diligence on a fund or series of investment opportunities, but also necessitates devoting more internal resources to identifying appropriate opportunities that fit a pension fund's investment strategy. An increase in the number of institutional products with better information will lessen the burden on investment staff in conducting due diligence and help bring the transaction costs more in line with traditional investments.

A number of research efforts across the industry seek to address this particular challenge. Tideline, an impact investing consulting firm, published a report in 2016 on "impact classes" to address challenges around common language, standardization of deals, and alignment of financial and impact objectives. 63 Impact classes "are intended to cluster investments by the approach they take to delivering impact, providing a useful, intuitive method for quickly sorting through a fast-growing universe of investment opportunities, across asset classes and in both private and public markets."64

The work of the GIIN in providing investor education, field-level definitions, impact metrics, and a searchable, online database of funds and products designed for investors, has also helped bring needed clarity to impact investing while reducing transaction costs.65

Opportunities for Pension Funds

Going forward, fund managers will increasingly need to find ways to balance their fiduciary duties with the shifts in participant and beneficiary demographics, and to capitalize on the financial opportunity presented by the growing sophistication of impact investing intermediaries. ETIs, ESG incorporation, and impact investment strategies can help fund managers account for these changes. Current practice in Europe and Australia can be seen as a harbinger of what is to come. Pension funds in the Netherlands, France, and Australia (among others), for example, have already begun committing capital to impact investing. These international peers offer instructive examples for U.S. pension funds considering how impact investing might fit within their respective investment strategies.

PARTICIPANT VALUES AND FIDUCIARY DUTY

Divestment has long been a tool used to align investment portfolios with participant values: in the 1960s and 70s, religious investors began to divest according to their values; in the 1980s, students in the U.S. pushed universities to divest from companies in Apartheid South Africa; and in the 1990s, there was a similar push in the U.S. for funds to divest from tobacco companies. After the Sandy Hook school shooting in Newtown, Connecticut in 2012, public pension funds were urged to divest from weapons manufacturers. In a similar expression of public protest, some U.S. citizens are currently advocating divestment from institutions funding the Dakota Access Pipeline. While divestment remains a powerful tool for beneficiaries to align their pensions with their values, ETIs and the incorporation of ESG factors into investment strategy represent proactive steps pension funds can take to demonstrate to an increasingly vocal and conscientious participant base that they take societal impact into consideration when making investment decisions.

A growing body of research examines the evolving role of finance and business in our daily lives. Studies show that the public—and the millennial population in particular—is increasingly conscious of the impact of their day-to-day decisions, like purchasing and investing, on broader society. In the Harvard Business Review, Vilas Dhar and Julia Fetherston write, "of all the generations alive today, millennials are the most willing to trade financial return for greater social impact."66 While pension fund managers, plan participants, and beneficiaries will not permit financial performance to falter in pursuit of social benefit, research shows that the next generation is interested in pursuing investment strategies that not only avoid negative impacts, but also produce positive social benefit.

According to the 2015 EY Global Institutional Investor Survey, investors are increasingly using companies' nonfinancial disclosures to inform their investment decisions. In its survey of over 200 institutional investors, 59.1 percent of respondents view nonfinancial disclosures as "essential" or "important" to investment decisions, up from 34.8 percent in 2014.67 CEOs of major companies are also feeling the pressure to incorporate sustainability into their business models. According to the UN Global Compact Sustainability CEO Study, 79 percent of survey respondents view brand, public trust, and reputation as driving action on sustainability, and 55 percent see consumers collectively as a key influencer, the highest of any stakeholder. Furthermore, CEOs report a mandate to help solve societal challenges as a core element of gaining competitive advantage. 68

Given the growing public interest in sustainability and social impact, moving forward pension fund managers will need to find ways to balance their fiduciary duties with the values of this new generation of participants. ETIS, ESG incorporation, and impact investing represent opportunities to deploy capital in a manner consistent with these values and trends.

IMPACT INVESTMENTS

The term "impact investing" was coined a decade ago to describe investments made with the intention of generating both financial return and social and environmental impact. 69 These investments are similar to and yet distinct from ETIs, and make up a growing segment of the investable universe. Previously, pension fund managers could dismiss or ignore impact investments because they did not have a track record of successful financial performance. Today, however, many existing funds have long track records, and are managed by teams that have worked together successfully for years. Fund managers like DBL, Equilibrium, HCAP Partners, and TPG Growth count pension funds among their limited partners because of their proven financial success.

Both fund managers and investors can have multiple reasons for making an investment that generates societal benefit—and the motivations of the two parties need not be the same. Investment managers have a duty to explore the entire investable universe when looking for opportunities, and it behooves investors not to dismiss impact investments out of hand. Pension fund investors are motivated by their duty to generate financial return, and impact investments can be viewed as a possible avenue for generating alpha. Dave Chen, Principal and Chairman of Equilibrium, for example, espouses the value of intentional, sustainable investing, and believes that "sustainable practices are the drivers of returns."70 Pension funds making ETIs have long understood the importance of sustainable business practices, and— especially Taft-Hartley funds that focus on supporting good labor practices for their participants and others—have proven that stable, market-rate returns are possible from investments in businesses and projects that use responsible hiring practices.

A fund manager who intentionally pursues social impact often seeks to capitalize on market gaps, inefficiencies, and the financial opportunity presented by trying to address some of society's most intractable problems. The UN SDGs can be used as a framework for investing to confront these problems. SDG-related sectors in developing countries still face an annual funding shortfall of some \$2.5 trillion, and pension fund investors might find attractive investment opportunities in this unmet need that generate alpha.71

INTERNATIONAL EXAMPLES: **EUROPEAN AND AUSTRALIAN PENSION FUNDS** PURSUIT OF SOCIAL AND ENVIRONMENTAL IMPACT

NETHERLANDS

Building Highways to SDG Investing In 2016, Dutch pension funds APG and PGGM and other Dutch financial institutions came together to create the Sustainable Development Goal investing (SDGI) agenda. As part of this initiative, they published Building Highways to SDG Investing, to outline their commitment and plan to invest capital to further the SDGs.

FRANCE

The Solidarity Investment Fund has a 90/10 structure wherein 90 percent of the fund is invested in listed companies screened and selected according to ESG criteria, and the remaining 10 percent is allocated to social investments, which include less liquid investments (usually low-cost debt) in smaller charities and social enterprises.

AUSTRALIA

First State Super and Christian Super invest the pensions of nearly 800,000 Australians. Both funds are PRI signatories and have detailed responsible investment and ethical investment policies. As part of their investment strategies the funds engage in positive and negative screening, undertake proxy voting and company engagement, and make impact investments.

Several international pension funds have developed investing strategies that prioritize social and environmental impact alongside financial performance, and may offer insights for U.S. pension funds as they explore similar types of investments.

NETHERLANDS

Dutch fund managers APG and PGGM (profiled in this report on page 55) are at the forefront of pension fund impact investing. In the 2015 Sustainable Investment report released by APG, the firm describes its investment approach as follows: "We invest the pension contributions the participants of our clients and their employers pay in each month in such a way that they earn the best possible returns at an acceptable risk. Investing responsibly helps ensure participants receive a good pension now and in the future."72 Likewise, PGGM invests nearly all of its assets (94 percent) with consideration for ESG factors. Additionally, five percent of its total assets are invested in its "solutions" portfolio, which invests for positive social or environmental benefit aligned with the UN SDGs.73 In 2016, the Dutch funds came together to publish Building Highways to SDG Investing, a collaboration among financial institutions and their supporting networks to create a platform for investing in the SDGs.74

FRANCE

In France, a different model is employed. Since 2001, the French government has mandated that employers and pension providers offer their employees the option of investing in the Solidarity Investment Fund. The Solidarity Investment Fund has a 90/10 structure wherein 90 percent of the fund is invested in listed companies screened and selected according to ESG criteria, and the remaining 10 percent is allocated to social investments, which include less liquid investments (usually low-cost debt) in smaller charities and social enterprises. 75 Initially, this 10 percent portion could only be invested in non-profit organizations, but commercial businesses with a social mission are now included as well. 76 Recent Social and Solidarity-based Enterprise (SSE) law, governing which businesses can be accredited to receive the 10 percent, identifies two main criteria:77

- Business pursues the objective of creating a significant social impact, either by helping people in fragile situations, or by fighting exclusion and territorial inequalities,
- Business can be financed through private equity in a classical way.

Together these examples showcase the ways in which international pension funds invest for both financial return and social and environmental benefit.

AUSTRALIA

In Australia, First State Super—one of the country's largest superannuation funds—is vocal about its commitment to responsible investing. In August 2016, First State Super published a revised Responsible Investing policy, which established a focus on long-term, sustainable value creation, engagement with companies and managers on issues of risk, environmental practices and community, and the importance of good governance practices.78 First State Super is a PRI signatory (an organization that has signed the internationally-recognized Principles for Responsible Investment, thereby publicly demonstrating commitment to responsible investment) and a member of several initiatives aimed at supporting responsible investing, including: The Carbon Disclosure Project, The Water Disclosure Project, ESG Research Australia, and the Investor Group on Climate Change.

Also in Australia, Christian Super invests 100 percent of its assets according to an ethical framework that utilizes ESG factors and other factors aligned with Christian values, and maintains a 10 percent target allocation for impact investments. As of 2013, it had reached 8 percent of that goal.79 Christian Super has run its impact investment portfolio inhouse since the outset, but in 2016 launched Brightlight, an investment consulting and management service provider to support other asset owners who want to access the impact investment universe. Christian Super will provide the seed capital loan for Brightlight, and be the first retainer client.80,81

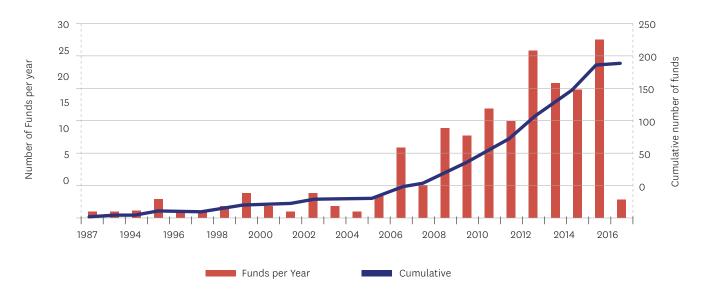
Together these examples showcase the ways in which international pension funds invest for both financial return and social and environmental benefit. The international pension fund managers are actively incorporating ESG factors into investment decision making and have embedded impact investing as a component of their overall strategies. While the institutions of the Dutch, French, and Australians differ from another, and from U.S. defined benefit pension funds more broadly, their focus on ESG factors and allocations to impact investing highlight a shared common belief in the potential to realize strong financial results for pension holders and beneficiaries through strategies that account for and address societal challenges.

THE GROWTH AND MATURATION OF INTERMEDIARIES

One promising trend towards a larger and more sophisticated impact investing market is the growth and maturation of intermediaries pursuing impact investing strategies. Just over half of the respondents to the GIIN annual survey report that they invest through funds or intermediaries, and describe several reasons for doing so—the most commonly cited being general partner expertise in investment selection and management. In addition to the impact investors, over 90 fund managers responded to the GIIN annual survey. Overall, institutional investors (pension fund, insurance companies, and banks) are the largest sources of capital for fund managers who raised \$6.7 billion in capital in 2015.82 The number of impact funds launched in the last ten years has risen dramatically. The chart that follows is simply a sample of the market and does not represent the entire universe of impact investing funds, but gives an indication of the growth in new funds.83

Impact investing fund managers provide an increasingly valuable service: they have the expertise to build investment portfolios that provide market-rate returns, the skillsets to measure social or environmental impact, and increasingly, track records that pass muster with pension fund trustees and other institutional investors. Recent examples of pension funds investing in impact funds include LACERS' \$10 million commitment to the Bain Capital Double Impact Fund, and two pension funds committing large sums to TPG Growth's \$2 billion Rise Fund. Three fund managers (profiled in Appendix B)—DBL Partners, Equilibrium, and TPG Growth provide the expertise, institutional quality, and strong investment track records that pension funds seek. Each profile provides a view of the motivations, practices, and structure of these high performing impact investing intermediaries. For more information, see Appendix B on page 6o.

figure 5. Number of Funds by Vintage Year Data from GIIN Annual Impact Investor Survey 2016. Data as of Feb. 2016



CONCLUSION

ETIs have been considered by pension funds for more than 50 years. In that time, pension funds have invested billions of dollars in initiatives that support good jobs, affordable housing, local business growth, and community development, all while seeking market-rate financial returns for fund participants and beneficiaries.

As pension funds have pursued ETIs, other investment approaches have emerged, including ESG incorporation, in which investors consider social and environmental factors in their investment decisions, and impact investing, which seeks to create measurable benefits to society. As the market for these types of investments continues to grow in size and sophistication, opportunities for pension funds will increase accordingly. Improved market conditions include:

- · The introduction of larger funds and institutional products designed to take large commitments from pension funds;
- · A greater number of fund managers and intermediaries with a demonstrated track record of strong financial performance and impact;
- · More comparable data and information on investment opportunities that support more efficient due diligence while reducing transaction costs for pension funds; and
- · Research showing that these investments are not concessionary, and in fact result in financial returns on par with traditional investments.

Pension funds have long faced questions about how to balance the pursuit of social and environmental goals alongside financial performance. ETIs should be made with a paramount focus on financial performance and providing secure retirements for beneficiaries, and as such, remain a viable investment option for pension funds. The body of law, legal interpretations, and abundant research show that looking beyond the considerations of traditional investment analysis is clearly permissible for pension funds. Furthermore, the continued evolution of fiduciary duty, particularly in what qualifies as prudent investing, supports pension funds in accounting for nonfinancial factors in their investment decisions. These factors can include social or environmental impact, given their materiality as financial value drivers.

A shift of even a small percentage of the \$6.5 trillion under management by defined benefit pension funds to portfolios that consider social and environmental impact alongside financial return would put billions of dollars to work in creating societal benefit. The consistent driver behind ETIs should be the belief that opportunity exists to achieve strong financial returns and secure retirements for beneficiaries. Building on the history of ETIS, pension funds have an opportunity to explore ESG incorporation and impact investing, incorporating social and environmental factors into responsible risk analysis, and considering investments that benefit their broader group of stakeholders.

While ETIs have often been focused on the local community, pension funds also have an opportunity to help address larger societal challenges with their investment dollars—particularly challenges that have a material effect on investment value. Areas such as climate change, inequality, clean water, and poverty captured in the UN SDGs—are important to consider given their long-term connection to financial value, as well as the attractive investment opportunities they present. The Building Highways to SDG Investing report published by Dutch investors has created a roadmap for investing in the SDGs. Pension funds and other institutional investors in the U.S. can look to this report, the work of PRI around fiduciary duty, and the lessons learned from pension fund ETIs over the years to support investment strategies that incorporate broader types of societal benefit.

In the future, we expect to see pension funds continue to consider ETIs, incorporate new kinds of environmental, social, and governance information into their investment analyses and decisions, and as understanding grows of the implications of these factors on society and financial value in the long term—begin to pursue impact investing. As the market for these types of investments matures, pension funds will increasingly be able to identify attractive opportunities that generate appropriate risk-adjusted returns and societal benefit. In turn, they will be able to provide for both their participants retiring today, and those who will retire years down the line, all while helping to ensure that pension holders enjoy their retirement in thriving economies, a clean environment, and safe and healthy communities.





APPENDIX A

PENSION FUND ETI CASE STUDIES

Over 100 pension fund ETIs have been made in the United States since 1960, varying in size, asset class, target objective, and geography. These investments have been made by public pension funds at the state and city level, as well as by private, Taft-Hartley plans. As ESG incorporation and impact investing mature, and investment opportunities proliferate, the lessons learned from decades of ETIs can help support new investment models and strategies.

With that in mind, we selected five case studies that showcase the diversity of ETIs. Four of the cases provide a window into how U.S. pension funds have made these kinds of investments, while the last case on Dutch pension funds APG and PGGM—serves as an example of how pension funds can embed impact investing within their investment strategy. Taken together, these case studies provide insight into the history of individual ETIs, and the potential for achieving societal benefit alongside financial return now and in the future.

These case studies provide narrow windows into the complex nature of making ETIs. Each vehicle discussed herein has a different objective, operates in a unique market context, and was created for a different reason. Yet each case study provides insight into the nuances of a pension fund's fiduciary duty and investment strategy, and the opportunities available to pension fund managers, trustees and other stakeholders searching for a way to meet financial expectations and provide a stable, secure retirement for beneficiaries while simultaneously achieving societal benefit.

ETI	ASSET CLASS	TARGETED OUTCOME	YEAR OF INCEPTION	AUM	GEOGRAPHY
WISCONSIN PRIVATE DEBT PROGRAM	Fixed Income	Job Creation, Business Assitance	1983	\$99 Billion	Wisconsin
AFL-CIO HOUSING INVESTMENT TRUST	Fixed Income	Housing, Job Creation	1984	\$6 Billion	U.S.
IN-STATE PRIVATE EQUITY	Private Equity	Local Economic Growth	1999	\$750 Million- \$1.25 Billion	CA, FL, NY
CALSTRS GREEN BOND PROGRAM	Fixed Income	Enironmental Sustainability	2009	\$304 Million	Global
DUTCH PENSION FUNDS	Real Estate, Public Equity, Fixed Income, Private Equity	Responsible Investment	2008	€8.9-€38 Billion	Global

PENSION FUND ETI CASE STUDY

THE WISCONSIN PRIVATE DEBT PROGRAM



INVESTOR

The State of Wisconsin Investment Board (SWIB)

ASSETS UNDER MANAGEMENT

\$99 Billion as of December 31, 2015

ETI

The Wisconsin Private Debt Portfolio

YEAR OF INCEPTION

1983

AREAS OF FOCUS

Geographic

LOCATION OF INVESTMENTS

Wisconsin and other Midwest states

ASSET CLASS

Fixed Income

OBJECTIVE

The Wisconsin Private Debt Portfolio's objective is to invest funds of the Wisconsin Retirement System in business activities that provide market-rate returns consistent with SWIB's fiduciary responsibilities, while providing financing to small- and medium-sized Wisconsin businesses with limited access to senior and subordinated debt financing, creating local jobs, and supporting Wisconsin's economy while serving the long-term interests of plan participants and beneficiaries.

History

The State of Wisconsin Investment Board (SWIB) manages the assets of the Wisconsin Retirement System (WRS), which helps provide for the retirement of 600,000 current and former employees, as well as other state trust funds. In the 1960's, then-Investment Director Bob Zobel pioneered SWIB's foray into private capital investing. Zobel remained with SWIB until 1997 helping to lead the efforts to invest in Wisconsin. SWIB was one of the first pension funds to invest in private equity, and from that experience, began a national private debt portfolio. While sourcing deal flow for the national private debt portfolio, Zobel began to see attractive private debt opportunities in Wisconsin, and started to invest locally. SWIB staffed the portfolio with people who had a deep understanding of credit and Wisconsin businesses. These one-off investments became part of a formalized strategy and standalone portfolio in 1983.

The Wisconsin Private Debt Portfolio started by providing only long-term, fixed-rate senior debt investments, but has made several changes to its investment strategy over the years. In 2002, investments were established in a separate portfolio, which held loans to 27 borrowers totaling \$364.4 million. In 2003, the portfolio began to offer mezzanine financing when staff saw an opportunity to make subordinated investments, as there was a lack of capital within that segment in Wisconsin. In many cases, the Private Debt Portfolio is one of the only options for smaller businesses seeking modest-sized loans. Occupying this niche in the market has contributed to SWIB's success.

Staff emphasizes SWIB's role as a long-term and patient investor. Deal flow often comes from SWIB's network of commercial and investment bankers, attorneys, accountants, consultants, and CEOs/CFOs with whom SWIB has developed deep relationships through prospecting and securing repeat borrowers. The Private Debt Portfolio staff knows the company management teams and has industry knowledge, which can help companies weather the challenges they face during their investment period.

Program Structure

The Private Debt Portfolio does not have a specific allocation within SWIB's private markets asset class, but rather is opportunistic, and seeks to take advantage of market volatility or tight credit markets.

SWIB applies the same due diligence to potential Wisconsin investments as it does for its other investments. However, potential Wisconsin investees must be either:

- 1. Headquartered in Wisconsin,
- 2. Operating in Wisconsin, or
- 3. Intending to invest proceeds in Wisconsin.

The overall objective of the Private Debt Portfolio is to invest funds of the Wisconsin Retirement System in market-rate fixed income instruments consistent with SWIB's fiduciary duty. Private Debt Portfolio investments may be made in fixed income instruments or in instruments with both fixed income and equity features. The portfolio is benchmarked against the Barclays Duration Adjusted BAA Corporate, with the specific objective of plus 20 basis points (bps). Private Debt Portfolio investments are made according to five guidelines outlined in the table below.

PRIVATE DEBT PORTFOLIO GUIDELINES

- 1. Investments may carry a rating from a national rating agency, the National Association of Insurance Commissioners (NAIC) or SWIB. The Portfolio Manager may make investments that carry a "BBB" or better rating from a national rating agency or the NAIC, provided that if the investment carries only a SWIB rating, it shall be approved by the Managing Director—Private Markets & Funds Alpha, regardless of size.
- 2. Investments may be made in below-investment grade instruments provided that such investments do not in the aggregate constitute more than 25 percent of the Private Debt Portfolios' par value. Any investment below investment grade requires approval from the Managing Director—Private Markets & Funds Alpha.
- 3. The Private Debt Portfolios' aggregate portfolio issuer limits shall be scaled by quality and a purchase may not cause the Private Debt Portfolios' exposure to a borrower or issuer to exceed the following limits (at par value):

Rating **Maximum Position** U.S. Government/Agency No Limit "AA" or higher \$100 million "A" \$75 million "BBB" \$50 million "BB" or less \$25 million

- 4. The Private Debt Portfolios shall maintain at minimum a weighted average rating of "BBB", where "AAA"=4, "AA"=3, "A"=2, "BBB"=1, and "BB" or less =0.
- 5. Other guideline limitations notwithstanding, portfolio managers or other staff authorized by the Managing Director—Private Markets & Funds Alpha may modify or waive terms of investments in the portfolio and generally take any and all other actions that are necessary and reasonable to protect, maintain or enhance the value of SWIB's position in the investments.

Source: Investment Policy, Objectives, and Guidelines, State of Wisconsin Investment Board, August 10, 2016.

Current Status

Since 1983, SWIB's Private Debt Portfolio has invested approximately \$2 billion in over 200 transactions, with some repeat transactions with the same company, and a majority going to Wisconsin businesses. Borrowers come from a wide range of industries including manufacturing, healthcare, and insurance. SWIB prides itself on providing highly customized loans and working closely with management, and in some cases with other partners to create a loan that will serve the needs of the business (and, ultimately, the community) and SWIB.

Staff closes anywhere from seven to ten deals per year, on average, with an average deal size of between \$10 million and \$15 million. The typical term on an investment is eight to nine years, a change from the early 2000's when staff could make deals with 15-20year terms because of the different interest rate environment. The Private Debt Portfolio, while heavily invested in Wisconsin, has always had the flexibility to invest in Minnesota, Iowa, Illinois, and Michigan. In 2015, staff expanded the investable area to include three new states: Indiana, Ohio, and Pennsylvania. Staff describes the Private Debt Portfolio as opportunistic; the 2015 geographic expansion was made to take advantage of opportunities they saw in the Midwest, but could not initially invest in. The majority of the portfolio (approximately 85 percent) remains invested in Wisconsin-based companies or companies doing business in Wisconsin.

SWIB remains committed to its Private Debt Portfolio and actively seeks new investment opportunities through marketing and relationship building. The Private Debt Program typically has \$300-400 million invested in Wisconsin businesses at any given time, spread across 35 to 40 businesses. As of September 2016, the market value of the Private Debt Portfolio was \$507 million. Of that, \$429 million was invested in Wisconsin private debt.

Performance

Staff of the Private Debt Portfolio focus their efforts on understanding the financial merits of each investment, and are not actively looking to put money to work for economic development or job creation. Ancillary benefits are seen as an additional positive, with the priority always on achieving appropriate risk-adjusted returns for beneficiaries. Overall, the portfolio has performed well. Staff does not actively promote or share information on the ancillary benefits of the Private Debt Portfolio. However, staff is required to report every two years on all Wisconsin investments across asset classes, which includes information on the Private Debt Portfolio.

As of September 30, 2016, the Private Debt Program's annualized one-year return was 10 percent versus a benchmark of 8.1 percent, and the ten-year return was 8.3 percent versus 6.4 percent.

Lessons from the Wisconsin Private Debt Program

- · Innovative investment strategies can be sourced internally from investment staff. SWIB Investment Director Bob Zobel was a pioneer in private capital investment, and the origins of the Private Debt Program can be traced back to the 1960's, when SWIB was one of the first pension funds to invest in private equity. SWIB invested in the first KKR fund, and made early debt investments in Walmart, financing its distribution centers early on. Zobel began to see the need for other sources of capital in Wisconsin, and recognized that Wisconsin-based businesses presented an attractive investment opportunity for the pension fund that would also create local jobs and support the state's economy. Zobel had the foresight not only to start the Private Debt Portfolio, but also to staff the program with people who understood credit markets well, setting the program up for future success.
- Staff structure and skills should match program goals. The Private Debt Portfolio is managed by a staff of two, with administrative and back office support provided by SWIB. The program is not staff-intensive; SWIB is very cognizant of expenses and runs remarkably lean overall, especially in this portfolio. Staff relies on external relationships for deal flow, with significant outreach to bankers, attorneys, accountants, and turnaround consultants, while also working with legislators to keep them up-to-date on the progress and purpose of the fund.
- Thoughtfulness and deliberate planning have set the fund up for success. Building a portfolio like the Private Debt Portfolio takes patience and planning. Measured expectations for the fund were set from the beginning, and SWIB built a portfolio slowly and thoughtfully so as not to jeopardize the credit quality. SWIB staff has also made changes to the portfolio throughout its history, bringing the focus to Wisconsin in the 1980's, gaining approval to make subordinated debt investments in 2004, and expanding the market to include more Midwestern states in 2015. This ability to plan strategically, but also to iterate as the market changes, is key to the success of the Private Debt Portfolio.

SWIB welcomes new investment opportunities that fit the Private Debt Portfolio's guidelines. Staff actively seeks new investment possibilities by marketing this financing resource to Wisconsin businesses and collaborating with financial institutions. If an investment opportunity does not fit within the portfolio's criteria, staff works to identify other potential sources of funding and frequently makes referrals on behalf of the borrower to the Wisconsin Economic Development Corporation, commercial banks, private equity groups, or other capital sources.

PENSION FUND ETI CASE STUDY

AFL-CIO HOUSING INVESTMENT TRUST



INVESTOR

393 institutional investors (Taft-Hartley funds, public pension funds, and labor organizations)

ASSETS UNDER MANAGEMENT

\$6 Billion

YEAR OF INCEPTION

1984

AREAS OF FOCUS

Sector-focused—affordable housing, union jobs

LOCATION OF INVESTMENTS

United States

ASSET CLASS

Fixed Income

OBJECTIVE

The Housing Investment Trust (HIT)'s primary investment objective is to generate competitive risk-adjusted returns for its participants. The creation of union construction jobs, economic stimulus to help revitalize communities where union members live and work, and affordable and workforce housing are also important collateral objectives for the HIT.

Note: Information as of September 30, 2016

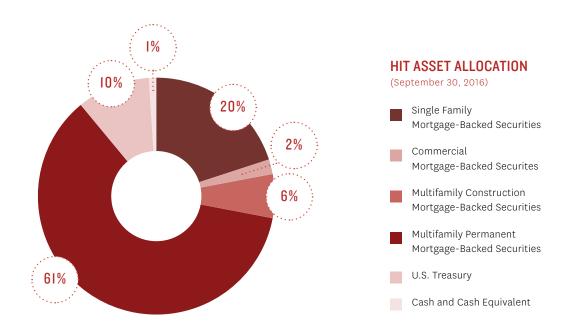
History

In 1964, AFL-CIO President George Meany established the Mortgage Investment Trust (MIT)—a new investment vehicle created to "provide a medium for mortgage investment program available to all affiliates of the AFL-CIO and any qualified Labor-Management, Welfare, Pension or retirement plan desiring to participate."84 The MIT was one of the earliest Economically Targeted Investment vehicles, and the direct predecessor to the AFL-CIO Housing Investment Trust (HIT). The HIT is an open-end mutual fund, which registered with the SEC in February 1983 and has managed assets for its institutional investors since September 1984. The HIT's initial \$100 million in net assets has grown to nearly \$6 billion as of September 2016.

The fundamental objective of the HIT has been to deliver a marketrate return to investors, but the HIT was also created with the intention of providing collateral benefits: the creation of union jobs and affordable housing. The HIT directly sources multifamily and healthcare construction-related investments that have higher yields than investments of similar duration and credit quality. These investments contribute to the HIT's competitive returns while also creating family-supporting union jobs, and affordable housing.85

Program Structure

The HIT is an investor-owned, internally managed mutual fund invested in fixed income securities, with a focus on high credit quality multifamily securities. These securities typically represent 50 to 70 percent of the HIT's portfolio. As of September 2016, the majority of the assets (approximately 67 percent) were multifamily permanent and constructionrelated mortgage-backed securities (MBS)—GNMA, FHA, Fannie Mae, Freddie Mac, and housing finance agency investments. The remainder was allocated to agency single family MBS, U.S. Treasury securities, AAA-rated commercial MBS (CMBS) and cash, as outlined in the following chart: 86



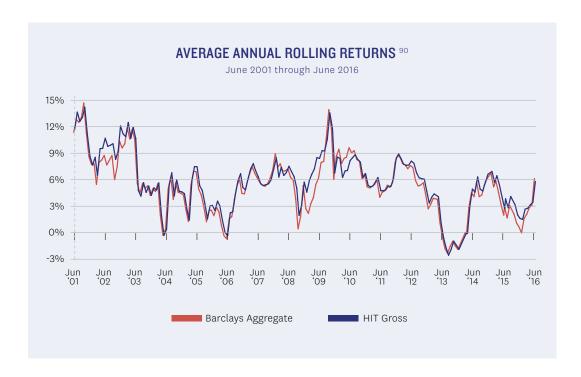
The HIT actively seeks investments in newly originated multifamily securities. The HIT can customize the securities to meet the needs of the borrower and provide relative value for its portfolio. Fund managers negotiate terms, such as prepayment protections, instead of simply buying and selling securities with the terms already set. This process helps provide a better rate of return than that offered by Treasury securities, but with lower risk than many other fixed income vehicles. The early participation in the process also enables the HIT to ensure that construction is done with 100 percent union labor, creating good paying union jobs in communities across the country.

Two types of eligible investors may purchase investment units in the HIT: Eligible Pension Funds and Labor Organizations.87

- 1. An Eligible Pension Plan is a pension plan with beneficiaries represented by a Labor Organization and constitutes either a pension plan qualified trust under Section 401(a) of the Internal Revenue Code (the Code); a governmental plan within the meaning of Section 414(d) of the Code; or a master trust that holds assets of at least one such pension plan or governmental plan.
- 2. A Labor Organization is an organization that advocates on behalf of employees to employers regarding terms or conditions of employment, and in which employees participate, directly or through affiliated organizations.

Investment units are sold directly by the HIT, with a minimum investment requirement of \$50,000. Distributions of net income earned are paid to investors each successive month in cash for the preceding month, with an option to reinvest these distributions automatically. Throughout 2015 and the first half of 2016, approximately 90 percent of dividends were reinvested in the HIT.

Since 1993, the HIT has used the Barclays Capital Aggregate Bond Index as its benchmark. The HIT's investment management strategy involves constructing a portfolio with similar interest rate risk relative to the Barclays Aggregate, 88 while maintaining a portfolio with superior credit quality and a higher yield. The fund substitutes prepayment protected, high credit quality, multifamily MBS for corporate bonds and most Treasury and agency securities in the index. This strategy not only provides an income advantage relative to the index, but may also provide diversification benefits to other fixed income investments that hold corporate debt, whose performance tends to be more highly correlated with equities. 89



As seen in the graph above, historical comparisons show that over the last 15 years, the HITs returns have tracked very closely with the Barclays Aggregate. During periods of market stress, the HIT's outperformance versus the Barclays Aggregate tends to increase. The HIT has preserved capital and provided consistent income during periods of economic contraction, offering diversification benefits to investors.91

Current Status

Over more than 30 years, the HIT has grown to include nearly 400 investors and nearly \$6 billion in assets. The majority (65 percent) of HIT net assets are from Taft-Hartley funds. Other investors include Public funds (27 percent of assets) and labor organizations (8 percent of assets).

As demonstrated in the following graphic, an investment in the HIT not only provides comparable (and often better) returns to peer funds, but the collateral benefits created also allow for increased contributions to pension funds, and a growing investment pool at the HIT.

Union pension funds invest in HIT HIT finances Contributions to pension funds increase projects through 5 THE HIT with more work guaranteed securities INVESTMENT **CYCLE** 3 4 Construction projects Construction securities help provide generate familycompetitive returns supporting union jobs

CYCLE OF SUSTAINABLE INVESTMENT 92

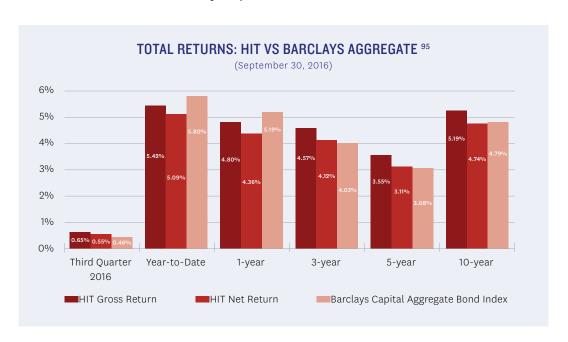
HIT staff see their fundamental obligation as delivering a market-rate of return to investors. The collateral benefits of supporting job creation and the wellbeing of union members and their communities not only provide benefits to the plan participants, but are integral to stable, high-performing investments. Union members are well trained both in their craft and in workplace safety, and buildings constructed with union labor are more likely to provide long-term returns on investment, as the quality of initial construction can add to the value of the development.

In 2009, in an effort to stimulate economic recovery in the construction sector, the HIT established the Construction Jobs Initiative. The Initiative has put \$2 billion into investments that not only represent attractive, income-generating additions to the portfolio, but have also generated close to 24,000 union construction jobs. To date (February 2017), this initiative has helped fund 90 projects in 39 cities across the country, generating an estimated 23,871 construction jobs and creating or preserving 28,552 housing units. HIT investments of over \$2 billion, combined with \$85 million of New Markets Tax Credits from subsidiary Building America, have launched over \$4.8 billion of development through this initiative.93

Performance

FINANCIAL

Financial data available as of September 30, 2016 shows the HIT out-performing its benchmark on a gross and net basis for the third quarter of 2016. During the three-, five-, and ten-year periods ending September 30, 2016, the HIT's gross returns exceeded the Barclays Aggregate by 54, 47, and 40 basis points, respectively. Its net returns also beat the index for the three- and five-year periods. 94



COLLATERAL BENEFITS

Alongside its primary duty to provide competitive returns, the HIT creates union construction jobs; increases the supply of multifamily housing, affordable housing for low-income families, and workforce housing; and promotes community and economic development throughout the United States. In 2016, the HIT invested over \$153 million in seven projects with total development investment of \$320 million, creating an estimated 1,210 union construction jobs and building more than 840 housing and healthcare units. 96 The HIT cannot commit to a construction-related investment unless the contractor and borrower agree to use union labor as required by the local building trades council.

Since 1984, HIT and its subsidiary, Building America, have created over 76,000 union construction jobs—or 153 million hours of work, at 423 construction projects in 29 states. These projects have generated an estimated \$25.2 billion in economic benefits for local communities, including close to \$10 billion in personal income, including health insurance, retirement, and other benefits, with over half of the income going to union construction workers. The activity has generated more than 161,600 total jobs across industries. State and local governments have received tax and fee revenue totaling \$1 billion, while federal revenue has been over \$2.1 billion.97

The Future

The HIT announced the new \$2 billion MidWest@Work Initiative in November 2016. Under this initiative, the HIT intends to invest in some 90 projects in states bordering the Great Lakes over seven years with the goal of helping communities struggling with aging neighborhoods, divestment, and unemployment. Investments began in Detroit, with a potential investment of up to \$30 million to repair and rehabilitate up to 300 homes. The MidWest@Work Initiative also includes HIT's commitment to invest up to \$1 billion to build or rehabilitate 60 multifamily rental workforce housing projects in the region, and is currently being expanded to eight additional cities, including Minneapolis, St. Louis, Cleveland, and Pittsburgh. 98 In total, the strategy seeks to create around 25,000 jobs across business sectors, including approximately 9,700 union construction jobs.

"The cycle of despair in the urban centers of America's Midwest is hard to break," said Stephen Coyle, chief executive of the Housing Investment Trust. "Job loss leads to population loss, which leads to vacant and abandoned homes." According to Coyle, projects aimed at breaking this cycle must focus on people as well as markets. A large element of the work, he said, involves preventing housing from falling into uninhabitable disrepair. 99 Ideally, the work in Detroit will serve as a model for the newly added cities, and possibly future locations as well—whether through the Midwest@Work Initiative or another vehicle.

Lessons from the Housing Investment Trust

- 1. Find your niche (both investment and mission). Identify market gaps and develop a strategy that would fill the gap or meet the need. The HIT's creators saw an opportunity to bring a product to market that filled a gap, providing financial returns and advancing their mission at the same time. The HIT is a bond fund with key differentiating factors: a focus on high credit-quality, multifamily mortgage securities and direct sourcing of construction-related securities. The HIT is a professionally and internally managed, mission-oriented bond fund with a 30-plus year track-record of competitive returns, third party valuation, and an expanding investor base.
- 2. You can invest the right way and maintain your mission focus. Investors can earn competitive fixed-income returns while helping to create well-paying jobs and economic benefits for communities across the country. HIT fund managers have always looked to earn a competitive financial return from their investments. However, they have never lost focus on their mission, with the result that investments in union members, union-built construction, and economic development projects have provided the bedrock of a solidly performing portfolio.

Note: Job and economic benefit figures in this report are provided by Pinnacle Economics, Inc. and HIT. Estimates are calculated in 2015 dollars using an IMPLAN input-output model based on HIT project data and secondary source materials.



PENSION FUND ETI CASE STUDY

IN-STATE PRIVATE EQUITY



PROGRAM

Califoria Intitative

YEAR OF INCEPTION

2001

ASSETS UNDER MANAGEMENT

Approximately \$1.1 Billion



PROGRAM

In-State Private Equity Program

YEAR OF INCEPTION

1999

ASSETS UNDER MANAGEMENT

Approximately \$1.25 Billion



PROGRAM

Florida Growth Fund

YEAR OF INCEPTION

2009

ASSETS UNDER MANAGEMENT

\$750 Million

Pension funds have been making in-state investments since the 1970s. In-state investments are a proven way to use capital to support the local economy, employment, and better quality of life for pension fund participants, their families, and communities. Most in-state investment vehicles have been designed as either fixed income or real estate investment funds focused on small business financing and affordable housing.

It was not until the late 1990s that public pension funds began to create their own in-state focused private equity funds, moving the focus from debt and business loans to equity investments in local companies. The most well known in-state private equity programs are CalPERS's California Initiative and the New York State Common Private Equity Investment Program, but others, inspired by the work of these two programs, were launched in Florida, Louisiana, Wisconsin, Indiana, Connecticut and Oregon. In-state private equity initiatives usually grow out of an understanding of the investment opportunities provided by untapped local markets and the belief that a stronger economy benefits participants and the communities they live in.

In June 2000, California State Treasurer Phil Angelides released the report "The Double Bottom Line: Investing in California's Emerging Markets" outlining the importance of investment in community development and sustainable growth. 100 That year, in a speech to the nonprofit organization Congress of the New Urbanism, Angelides said, "as the State's Chief Investment Officer, it is my obligation not only to be a prudent steward of our fiscal resources today, but also to look ahead and take actions which will strengthen California's economy into the future. A large and growing underclass outside of the mainstream of hope will not only tear at our social fabric, it will also dim the economic prospects for all Californians."101 This speech, and the accompanying report became the foundation of the CalPERS California Initiative, an investment strategy seeking attractive financial returns while also addressing growing inequality in California. The New York State Common Retirement Fund (CRF or Fund) created the In-State Private Equity Investment Program to target appropriate risk-adjusted returns in New York State first and foremost, with the added bonus of strengthening the State's economy, providing capital to promising enterprises, and creating jobs.

Evolving Strategies

All of the funds profiled in this case study make private equity investments in geographically-targeted companies, as investors focus on strengthening the state economy by supporting local businesses. Nevertheless, regional economies are also incredibly important predictors of local economic growth, and many initiatives especially those in smaller states—also invest in neighboring states. Furthermore, most funds do not require that a business's entire operations be located in-state to receive funding, and will invest if a company is headquartered, or has a significant presence or a large number of employees in-state. This built-in flexibility allows for a wider investment universe, and does not constrain managers within a small geographic market, allowing for a more diversified and financially stable portfolio. These investments are most often made through partnerships, but are occasionally made as direct co-investments in local companies. While each has its own clearly delineated rules, in-state investment programs share many common features, including:

- · A commitment to risk-adjusted market rate returns;
- Fund managers with a successful track record of making private equity investments;
- A desire to invest alongside other sources of capital—both to diversify risk and leverage investment; and
- A requirement that companies receiving investment have a business presence in-state, defined as being headquartered or having a majority of operations or employees located in-state—or else be in the process of relocating to or expanding operations in-state.

In-state investment vehicles are often created to capture opportunities in areas overlooked by traditional sources of capital, also known as domestic emerging markets. Fund managers use capital to build new sectors where they don't exist and invest in businesses with limited access to institutional capital, including those run by female or minority entrepreneurs and managers.

While many funds were (and still are) focused on venture capital and early stage investments, several new initiatives coming to market focus on mezzanine and growth capital investments. Since 2008, six new mezzanine funds have raised capital.

Three of these initiatives—at CalPERS, Colorado PERA, and Invest!Michigan—are managed by GCM Grosvenor, while the other three—two credit programs in New York and one in Florida—are managed by Hamilton Lane. In-state investments are becoming increasing popular as pension funds focus on supporting existing businesses and deploying capital in areas that promise attractive financial returns.

Examples of In-State Investment Programs

The following three programs, with close to \$3 billion under management collectively, are dedicated to providing private equity capital to in-state businesses, supporting business growth and strong local economies.

	Calpers California Initiative ¹⁰²	NYSCRF IN-STATE PRIVATE EQUITY INVESTMENT PROGRAM 103	FLORIDA GROWTH FUND ¹⁰⁴	
YEAR OF INCEPTION	2001	1999	2009	
ASSETS UNDER MANAGEMENT	\$1.1 Billion	\$1.25 Billion	\$750 Million	
NUMBER OF FUND MANAGERS	CalPERS + 3 external	18	1	
ETI FOCUS	Invest in California businesses located in underserved markets, create jobs, and promote economic opportunity in California.	Finance startup, emerging, and established businesses throughout New York State.	Make financially prudent technology and growth investments with the potential to generate high-growth and high-wage jobs that economically benefit the state.	

CALPERS CALIFORNIA INITIATIVE

The California Initiative is a \$1 billion private equity investment vehicle that invests in private companies in underserved markets mostly located in California, with the primary objective of generating attractive financial returns. As an ancillary objective, the California Initiative was designed to create jobs and promote economic opportunity in the state. To determine the extent of the ancillary benefits, CalPERS measures the impact of the California Initiative by examining portfolio companies that:

- Employ workers living in economically disadvantaged areas;
- Provide employment opportunities to women and minority entrepreneurs and managers; and
- Have traditionally limited access to institutional equity capital.

In 2001, CalPERS established the California Initiative to invest private equity in "traditionally underserved markets, primarily, but not exclusively in California."105 The California Initiative began with a capital commitment of \$475 million, known as Phase I, which included a \$100 million allocation to the Banc of America (now HarbourVest) California Community Venture Fund. In 2006, CalPERS made a second commitment totaling \$560 million in an investment vehicle known as the Golden State Investment Fund (GSIF), externally managed by Hamilton Lane. In 2014, CalPERS committed an additional \$80 million to in-state private equity. This vehicle, known as the California Mezzanine Opportunity Program, is managed by GCM Grosvenor, and will seek to invest in Californian companies using mezzanine debt financing to assist in supporting their growth and expansion.

As of 2015, over \$1 billion had been committed through the first two phases of the California Initiative. These commitments provided capital to 538 companies through 40 private equity funds and 17 direct co-investments. 106 The California Mezzanine Opportunity Program remains in its early stages, with little data to report as capital only began to be deployed in 2016.

As of June 30, 2016 the net internal rate of return (IRR) of the California Initiative Phase I and GSIF were 13 percent and 8.52 percent, respectively, with net multiples of 1.6x and 1.4x. 107,108,109 No available information is currently available on the California Mezzanine Opportunity Program, as its date of inception is so recent. The California Initiative alone has invested in 538 companies through Phase I and GSIF, supporting 164,753 workers since inception. Additionally, investee companies employ a significant number of economically disadvantaged persons, with 49 percent of employees in the GSIF portfolio classified as low- to moderate-income. 110

NEW YORK STATE COMMON IN-STATE PRIVATE EQUITY INVESTMENT PROGRAM

In November 1999, the New York State Common Retirement Fund (CRF or Fund) created the In-State Private Equity Investment Program to target investments in New York State. The Program was developed in response to a component of the "Jobs 2000 for New York State," or "J2K," Act adopted in August 1999 and signed into law in November 1999. III Since its creation, the fund has built a diverse portfolio (by industry, stage of business, and geography) working with 18 private equity firm partners to identify statewide opportunities.

The In-State Private Equity programs target appropriate risk-adjusted returns first and foremost, while strengthening the state's economy, providing capital to promising enterprises, and creating jobs. Since 2007, NY State Comptroller Thomas P. DiNapoli has doubled the capital commitment to this program to \$1.25 billion, with more than \$800 million already invested in the state of New York. 112

The NY State Private Equity Investment Program continues to invest in the New York economy today, with investments in over 300 companies as of 2014. Building on the success of this program, New York State committed \$50 million to a \$200 million Small Business Investment Company (SBIC) fund in 2015 to provide credit financing to eligible companies and deliver attractive returns to the state pension fund. Managed by Hamilton Lane, the fund—with five other bank investors—is one of the first to offer in-state focused credit financing. In addition to the SBIC fund, New York State committed \$100 million to a dedicated in-state credit program, while making a follow-on commitment to the in-state equity program started in 2002, thereby increasing the total capital of the equity program to \$410 million. These programs are also managed by Hamilton Lane. NY State common now includes three in-state programs: Private Equity, SBIC, and the Business Corporation Development Fund, which makes small business loans throughout the state.

At the end of 2012, 71 of the NY State In-State Private Equity Investment Program investments had been completed or "exited," generating a cumulative \$293 million for the fund on \$179 million invested, for an IRR of approximately 20 percent. 113 Companies receiving capital employ almost 18,000 people and have added some 4,000 jobs since the time of investment.¹¹⁴ The program has also leveraged an additional \$484 million in capital from other investors, for a total of \$1.21 billion invested in New York companies. Including other types of capital, such as bank loans, a total of \$6.7 billion—close to ten times the fund's capital—was provided to 282 companies.

FLORIDA GROWTH FUND

In 2008, the Florida legislature determined that using state pension funds to make financially prudent technology and growth investments had the potential to generate high-growth and high-wage jobs that would economically benefit the state.¹¹⁵ Out of that ruling came the Florida Growth Fund (FGF), established in 2009 to enhance Florida's capacity for development, growth, and innovation. State law authorizes the SBA to invest up to 1.5 percent of net Florida Retirement System Trust Fund assets in the program, managed by Hamilton Lane. In 2009, Hamilton Lane was awarded a first tranche of \$250 million, while the fund currently has \$750 million under management. The FGF actively pursues private equity investment opportunities in technology and high-growth businesses with a significant presence in Florida. In 2013, to address Florida small businesses' need for debt capital, SBA managers initiated negotiations with Hamilton Lane to devote approximately \$100 million of the un-invested capital from the second tranche to credit opportunities. Due to the success of the Florida Growth Fund, SBA managers authorized Hamilton Lane to initiate Florida Growth Fund II, which started making investments in December 2014. To date, the fund has made six commitments and five co-investments, totaling \$92.6 million in capital. 116

As of June 30, 2016, the Florida Growth Fund had invested \$512.4 million in 37 technology and growth companies and 29 private equity funds across 12 Florida counties. The fund has experienced a gross IRR of 13.9 percent and a net IRR of 11.1 percent since inception. 117 The ancillary benefits to the state of Florida include the creation of 15,331 jobs, with 4,240 jobs created by technology and growth companies and 11,091 jobs created through investments made by underlying private equity funds commitments. Portfolio companies reported paying an average annual salary of \$85,604 for the jobs created in 2016, although salaries range from \$15,000 to \$767,000 per year. 118

The Future

Steady increases in commitments to in-state investment strategies by the New York State Common Retirement Fund and Florida Retirement System Trust Fund continue to generate risk-adjusted financial returns and ancillary benefits for plan participants, beneficiaries, and communities, and demonstrate that in-state investment vehicles are not "one-off" opportunities, but rather can offer sustained financial returns and benefits in the states they target.

TIMELINE OF IN-STATE INVESTMENT VEHICLE ALLOCATIONS

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
NYS CRF	\$50M	\$7.5M	\$46.9M	\$152.4M	\$65M	\$76M	\$55.5M	\$408M	\$25M	\$70M	\$15M	\$16.2M	\$40M	\$222	.5M
CalPERS		Phase I \$475M					GSIF \$560M								Mezz. \$80M
FL RST										FGF I \$250M					FGF II \$500M

The firms currently managing these in-state programs are increasingly being tapped to manage similar funds or additional allocations. Hamilton Lane's track record has allowed it to progress from managing the New York State Common Private Equity Investment Program to managing GSIF, the Florida Growth Fund, Nevada's Silver State Opportunities Fund (SSOF), targeted investments for the state of Idaho, and the New York Credit SBIC fund.¹¹⁹ Banc of America (now HarbourVest)—tapped to manage an allocation of California Initiative Phase I—began working with the California State Teachers Retirement System (CalSTRS) around the same time, and continues that relationship through to today. HarbourVest currently manages a fourth impact-focused vehicle for CalSTRS known as CalSTRS Capital Access Fund IV. GCM Grosvenor has been chosen to manage the California Mezzanine Investment Fund for CalPERS, the Colorado PERA Mile High Fund, and a component of the Invest! Michigan Growth Capital Fund, among other instate, targeted, and pension fund private equity vehicles.

The recent growth in pension fund capital targeting in-state investment vehicles demonstrates that these types of investments can provide appropriate financial returns, while also benefiting state and local economies. In-state funds have created tens of thousands of jobs since they began in the late 1990s. However, the significant, broader economic benefits that come from in-state investment are not typically showcased, as they are difficult to measure concretely.

A strong local economy relies on the creation of jobs—not merely for companies receiving investment, but also for related industries. A growing business sector translates to a larger tax base, and a city or region that can support a variety of industries and jobs at all levels. By investing in their local economies through in-state focused vehicles, pension funds not only help to safeguard retirement assets for pension fund participants and beneficiaries, but also help create stronger communities for their stakeholders both now and in retirement.

Lessons from In-State Private Equity Investing

Through discussions with external fund managers and pension fund staff managing instate private equity programs, two central themes emerged for pension funds interested in pursuing in-state private equity investments.

1. A strong mandate is often tied to the presence of a strong leader. Phil Angelides and Thomas DiNapoli each served as the driving force of in-state investments in California and New York, respectively. Both saw an opportunity to generate strong financial returns for their state by investing capital locally, in areas where it was needed most. Without their vision—and in New York, DiNapoli's continued drive to invest in-state—the California Initiative and NY In-State Private Equity Program would likely not exist today, at least in their current form.

The creation of the Florida Growth Fund was not led by one individual, but by a legislature that believed in the power of devoting pension fund capital to in-state investments that could spur the development of Florida's technology sector, while supporting business growth and economic opportunity.

2. It is important to work with an established fund manager with a long track record of strong financial performance. Hamilton Lane, GCM Grosvenor and HarbourVest all have one main attribute in common: a track record of strong financial performance in private equity. Pension funds are focused first and foremost on their fiduciary duty, and one of the most oft-cited concerns with in-state investments is that the pursuit of social benefits will require the investor to take a concessionary return on investment. Proven financial performance and a track record of successful in-state private equity programs can help alleviate concerns with regard to concessionary returns.

PENSION FUND ETI CASE STUDY

CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM (CaISTRS) FIXED INCOME GREEN BOND PROGRAM



INVESTOR

CalSTRS

ASSETS UNDER MANAGEMENT

\$304 Million

YEAR OF INCEPTION

2009

AREAS OF FOCUS

Sector-Environment

LOCATION OF INVESTMENTS

Domestic and International

ASSET CLASS

Fixed Income

OBJECTIVE

To manage the risks and capture the opportunities associated with global sustainability issues by identifying environmentally focused strategies intended to enhance the risk-adjusted returns of the CalSTRS Investment Portfolio

History

CalSTRS began investing in green bonds with a \$10 million allocation in 2009 after pension fund participants expressed interest in green and sustainable investments. CalSTRS's five-person credit team was interested in the green bond market since its inception, believing the bonds to be an attractive investment opportunity, and purchased CalSTRS's first green bond from the World Bank. As a credible institution with a long history of financing development-related investment programs, and an AAA credit rating for over 50 years, the World Bank made an ideal first partner. 120 Investing in green bonds provided the first opportunity for the Fixed Income team to invest in alignment with the ESG objectives set forth in the CalSTRS 21 Risk Factors. Cathy DiSalvo, an Investment Officer in the Fixed Income Program, cites a specific alignment with the "environmental" risk factor in CalSTRS's strategy. DiSalvo sees no reason not to choose green bonds, "all else being equal," as they offer comparable returns to other bonds. Thus far the bonds have delivered exactly the results the team expected.

The green bond market grew slowly initially, allowing CalSTRS staff ample time for due diligence before increasing their exposure. Accordingly, their investments in green bonds began slowly; they initially purchased the bonds only from the World Bank and International Finance Corporation (IFC), as investment managers recognized the importance of determining whether the bonds provided both the promised financial and environmental returns. CalSTRS does not specify an allocation to green bonds, or segregate them from the overall portfolio. Rather, CalSTRS Green Bond investments are made opportunistically and are integrated across the portfolio based on the type of investment. They currently form part of the Investment Grade, Short-Term, and High Yield bond portfolios. CalSTRS has increased investment in green bonds over the last four years, growing exposure from \$25 million in 2013 to \$296.9 million in 2016, as described in Figure 1.

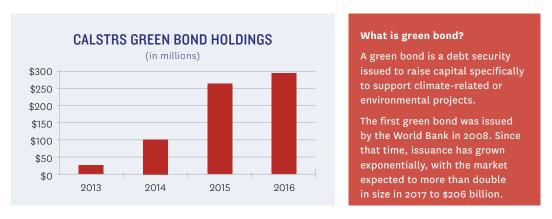


figure 1. CalSTRS Green Bond Holdings | Source: CalSTRS Green Initiative Task Force Annual Report 2016

CalSTRS staff also plays a leadership role in the green bond market, serving on the Climate Bond Standards Board of the Climate Bonds Initiative and as an executive committee member of Green Bond Principles (GBP). The GBP provides issuers guidance on the key components involved in launching a credible green bond, aids investors by ensuring availability of information necessary to evaluate the environmental impact of their green bond investments, and assists underwriters by moving the market towards standard disclosures.¹²¹ According to DiSalvo, the CalSTRS board is active in promoting ESG issues, and has a strong interest in pursuing cutting-edge responses. CalSTRS leadership on green bounds is an outgrowth of its commitment to ESG issues. Its involvement in the market thus "evolved until [CalSTRS was] known as a go-to investor on green bonds."

Current Status

CalSTRS's status as a "go-to investor" does not translate to driving the green bond market, as they do not buy significant allocations of the bonds. Nevertheless, their leadership in the market reflects their profound belief in its importance. DiSalvo observes, "as governments and corporations focus on environmentally-friendly projects, it shows us they are concerned with the future, which is important to us as long term investors." In 2015, \$42 billion dollars worth of green bonds were issued, an increase of nearly \$5 billion from 2014. 2016 set another record, nearly doubling the 2015 total, with green bond issuances of \$81 billion. 122 CalSTRS's allocation is purely market-driven; as the market grows, so does their exposure.

The "green" in green bond is important to CalSTRS, but is ancillary to the creditworthiness of the bonds themselves. As DiSalvo explains, the focus is "credit first, green second." Because green bonds are not separated within their own portfolio, if a potential green bond investment falls into another team's area, DiSalvo works with the appropriate team member before investing. If "they don't like the credit," she says, "we don't buy the green bond." Such problems rarely arise, however, as 80 percent of the green bond offerings come from issuers with which CalSTRS already has a relationship.

PENSION FUND ETI CASE STUDY: CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM (CALSTRS) FIXED INCOME GREEN BOND PROGRAM

CalSTRS seeks to ensure that the capital they provide to green bond issuers is serving the intended purpose. Most issuers comply with the Green Bond Principles (GBP), as they want to be included in bond indexes, bringing some amount of standardization to the market. CalSTRS staff also attend and actively participate in "roadshows" put on by issuers, taking the opportunity to ask questions and provide feedback prior to making an investment. In ideal scenarios, CalSTRS receives annual reports from each green bond issuer. However, in cases where the reporting is not as consistent, CalSTRS engages with issuers to try and improve it.

As of September 2016, CalSTRS's green bond exposure was \$304 million. Staff does not specify the types of projects they invest in, but does look out for red flags (often hydro and nuclear projects) during the due diligence process. As of June 30, 2016, CalSTRS held green bonds issued by 29 different entities, with the largest percentage of the dollars invested in two issuers: Toyota Motor Company (for the financing of hybrid/electric vehicles), and the Import-Export Bank of Korea (for renewable energy projects).

CalSTRS bought its first sustainability bond in 2016 through the Starbucks Corporation, and in April 2017, made a \$5 million investment in its first social bond through the International Finance Corporation (IFC). The Starbucks sustainability bond is a \$500 million, 10year, 2.45 percent note. It will fund projects that ensure coffee is grown and distributed sustainably, including by establishing farmer support, ethical sourcing standards, wildlife protection, and fair pay for workers. 123 The IFC issued the social bond on March 22, 2017. The \$500 million bond issuance has a maturity date of March 30, 2020, and carries an issue price of 99.942 percent and a coupon of 1.75 percent. Proceeds from the bond will be invested in companies that serve vulnerable populations, including by: sourcing directly from smallholder farmers, providing low-income households with better access to services, offering more affordable housing or health and education services to low-income populations, and/or providing goods and services to low-income populations. 124

While sustainability and social bonds do not count toward CalSTRS's green bond totals, they constitute another type of fixed income security that supports socially and environmentally beneficial projects, while offering financial returns.

Performance

CalSTRS's commitment to fiduciary duty ensures that the financial return provided by a bond is prioritized first. CalSTRS does not aggregate performance data from across its individual green bonds. However, some specific examples of its green bond investment performance include:

1. African Development Bank:

- CalSTRS purchased \$4.5 million of a total bond offering of \$500 million in 2015 (due in 2018). One of the projects included in the bond portfolio involves a wind power initiative in Kenya. The project will add 300MW to Kenya's power generation capacity, reducing energy costs for consumers and eliminating approximately 736,000 tons of greenhouse gas emissions. 125
- Financial details of the transaction are displayed in the chart below: 126

Re-Offer Price/Yield	99.903% /1.408%	
Coupon	1.375% (semi-annual, 30/360)	
Spread vs. Mid-Swaps	+14bps	
Spread vs. U.S. Treasury 1.25% due December 15, 2018	+18.15bps	

2. Kommuninvest:

- Kommuninvest issued a \$600 million green bond in 2016, due in 2019. CalSTRS owns \$4 million in bonds from this issuance. Projects in this portfolio support Swedish governments in their financial operations, including by helping to fund projects such as building out the electric bus infrastructure in the country and completing of one of Europe's largest wind farms.
- Financial details of the transaction are displayed in the chart below: 127

Issue Price	99.972%	
Coupon	1.5% (semi-annual)	
Spread vs. Mid-Swaps	+33bps	
Spread vs. U.S. Treasury 1.0% due April 23, 2019	+35.5bps	

The Future

As the green bond market continues to grow, CalSTRS is likely to increase its exposure accordingly. DiSalvo reports it could grow up to \$500 million. However, because the life span of a bond is short, these investments often roll off faster than they issue. DiSalvo believes that the coming years will bring better standards for renewables, and more standardization of metrics and reporting requirements. One current question for the market is whether non-"green buyers" should be allowed to purchase green bonds. CalSTRS does not technically have a green bond portfolio, and therefore might not be seen as a "green fund." DiSalvo believes that this type of restriction would be harmful to the market, whereas allowing green bonds to be purchased by "normal" investors will make the market more liquid.

The future will likely bring a continued increase in the number of corporate-issued green bonds, like that of Starbucks. While the pace of issuance growth slowed between 2014 and 2015, evidence points to a growing market going forward. Involvement among emerging markets and development banks has increased, as has investor demand—especially among institutional investors and corporate treasuries. 128 China was the largest issuing country in 2016, with more than one guarter of the total issued amount—\$23 billion—last year. 129 CalSTRS increased its U.S. exposure in 2015 with green bonds from Morgan Stanley, Regency Centers and NRG Yield. These bonds support projects like wind farms in Texas and California, and LEED Silver and Gold certified buildings in North Carolina.

According to the 2015 Green Initiative Task Force report, the CalSTRS Fixed Income team will continue to take on a leadership role in the green bond market, meeting with peers, bankers and issuers to better define the green bond space. The CalSTRS Fixed Income team will also serve as a resource to others looking to enter the field as investors or issuers.

Lessons from the CalSTRS Green Bond Program

- · Credit first, green second. As the market for green bonds continues to grow, investors should place import on the credit-worthiness of each bond. Signatories to the Green Bond Principles (GBP) are committed to transparency, integrity and disclosure. Bond issuers also receive ratings from outside auditing agencies. Both GBP and outside agencies can provide information on the credit-worthiness of a bond, as well as the environmental impact it is likely to have. These resources are likely to be helpful in due diligence.
- · Engage with other investors and take advantage of available resources for **information and guidance.** Fellow investors are an excellent source of information, and membership in the Green Bond Principles has provided staff with an opportunity to help develop the principles, and hone their own knowledge and practice accordingly.
- Participate in the market. CalSTRS staff makes a point to participate in roadshows and conferences, and is not shy about expressing opinions to issuers and underwriters. This involvement allows staff to ensure that the bonds they purchase will be used to support appropriate projects.

PENSION FUND ETI CASE STUDY

DUTCH PENSION FUNDS PURSUIT OF SOCIAL BENEFIT



ASSETS UNDER MANAGEMENT

€436 Billion¹³⁰ €38 Billion (sustainable development)131

LOCATION OF INVESTMENTS

International

ASSET CLASS

Real estate, public equity, fixed income, private equity

OBJECTIVE

APG has three concrete objectives:

- Contributing to the risk-adjusted financial returns;
- · Demonstrating social responsibility; and
- · Contributing to the integrity of financial markets.132

DATE OF INCEPTION



ASSETS UNDER MANAGEMENT

€183 Billion¹³³, €172.2 Billion (according to Responsible Investment Implementation Framework)¹³⁴, €8.9 Billion (invested in solutions)¹³⁵

LOCATION OF INVESTMENTS

International

ASSET CLASS

Public equity, real estate, fixed income, private equity

OBJECTIVE

PGGM believes that responsible investment pays off. They also believe in the driving force of capital, and are convinced that financial returns and sustainable development strengthen each other

DATE OF INCEPTION

2012

History

The two largest Dutch pension fund managers, APG and PGGM, have been investing pension capital for nearly 100 years. Founded in 1922, APG manages the pension funds for the government and education sectors in the Netherlands. PGGM was founded in 1969 to consolidate several smaller funds and manage the pension assets for Dutch healthcare workers. The Dutch pension system has, at its heart, a belief in longterm sustainability, supporting society and community, and investing in alignment with the values of its participants.

The Dutch describe their impact investing strategies today as "responsible investing." While this term is relatively new and does not date back to their founding days, the funds have always invested with an eye toward sustainability. The use of the term "responsible investing" and a focus on these types of investments have become much more explicit for APG and PGGM in recent years, due both to their own values (and the values of their participants), and to legislative mandates. A number of European pension directives that legislate fund fiduciary duty policy have been instituted since the early 2000's, including a requirement to integrate ESG factors into investment decisions. As Claudia Kruse, Managing Director and Head of Governance & Sustainability at APG, said, "As a Dutch pension fund investor, APG is required to integrate ESG factors across all its asset classes and investment processes as part and parcel of what it does. It is core to our pension fund investing proposition."136

APG

APG invests on behalf of over 30,000 employers, providing pensions for approximately 4.5 million participants, or one in five families in the Netherlands.¹³⁷ Their mission, expressed as "tomorrow is today," reflects APG's long-term focus and commitment to meeting the pension obligations of both current and future retirees. This statement underscores their investment philosophy that "a good pension in the future is only possible with the foundation of a sound long-term investment strategy and robust pension management today."138

APG has been encouraged to engage in responsible investing by its clients, including fund managers, employers, and plan participants. The 2015 Responsible Investment Report features descriptions of client-initiated policies that have pushed APG forward in responsible investing. In one instance, APG's largest client initiated a policy to pursue increased measurement and movement toward sustainable investments, increased investments in renewable energy, and an equity portfolio with a lower CO2 footprint. In the report, CEO of APG Eduard van Gelderen stated, "implementing this innovative approach will require us to develop new systems and processes whilst continuing to build on the ways of working that we have already adopted some time ago."139

In 2015, APG had €38 billion (of a €436 billion portfolio) invested in sustainable development, with the majority (55 percent) in real estate, followed by 18 percent in equities in developed markets and 8 percent in corporate bonds. In 2015, the firm had €2.5 billion invested in renewable energy and was in contact with 199 companies regarding ESG issues. 140 The APG portfolio includes investments in sustainable development initiatives, green real estate, green bonds, and renewable energy, among others. Highlights from this portfolio include:141

- · Sustainable development investments—These investments focus on activities that contribute to solutions for climate change, water scarcity, flooding, pollution, loss of habitats or fauna, and micro-financing. They also include investments in companies with high ratings in the Access to Medicine Index—an index partly financed by the Dutch and British governments that measures how pharmaceutical companies contribute to accessible healthcare in countries with low average incomes.
- Responsible real estate—In 2015, APG increased its responsible real estate portfolio from €14.7 billion to €20.7 billion by making investments in buildings achieving the highest category in the annual sustainability survey conducted by the Global Real Estate Sustainability Benchmark (GRESB).
- Green bonds—Approximately 1.6 percent of the bond portfolio is invested in green bonds, including investments in wind farms in the Dutch and German sectors of the North Sea. Over €63 million was invested in two bonds aimed at protecting the country against rising sea levels.
- **Renewable energy**—Renewable energy investments increased from €1.6 billion to €2.5 billion, partly as a result of additional investment in Norwegian hydroelectric power stations.
- Reducing CO2 footprint— A key part of APG's new responsible investment approach is a sharp reduction in the CO2 footprint of its equity portfolios, with a target of 25 percent fewer CO2 emissions by 2020.

As a PRI signatory, APG reports annual data to PRI, but also publishes a publicly available Annual Responsible Investment report.

PGGM

PGGM manages €183 billion for approximately 2.7 million participants overall, with a mandate to invest €20 billion responsibly by 2020. 142 Of the approximately €183 billion under management, €172.2 billion fall under the Responsible Investment Implementation Framework, or within the PGGM funds and internally managed mandates to which responsible investment activities are applied. A smaller proportion (€8.9 billion) of those dollars are invested in "solutions for social development," with €994 million of that from new investments in 2015. 143 PGGM's solutions portfolio is focused on seven overall areas aligned with the UN Sustainable Development Goals (SDGs): climate and environment, water, food, health, human rights, corporate governance and sustainable financial systems. PGGM is committed to ongoing measurement of the social impact of its investment and reports annually to its stakeholders and as shown in the table below.

AREA OF FOCUS	EUROS INVESTED	IMPACT IN 2014 144		
Climate and Environment	€2,140 million (€761 million in 2015)	Generated 1.6 million megawatt hours of sustainable energy; Avoided 4.6 million tonnes of CO ₂ emissions.		
Water	€253 million (€0 in 2015)	Treated [70 million m³ of water		
Food	€1,208 million (€165 million in 2015)	Produced [13,000 additional tonnes of food		
Health	€473 million (€68 million in 2015)	II6,000 persons provided with access to good healthcare		
Other*	€4,817 million (€0 million in 2015)	Impact not measured		

PGGM invests based on the principle that "financial and social returns go hand in hand," and the investment strategy is based on the beliefs that:

- Responsible investment pays off—Sustainability has a positive influence on the riskreturn profile of the investments and this influence will continue to increase in the future.
- No good and stable return can be realized in the long term without sustainable development—Global sustainable development is essential in order to generate good and stable investment results for its clients over the long term.
- Capital must be a driving force in sustainable development—Using the driving force of its investments, the firm can and must make a positive contribution to sustainable development.145

Along with investments in the Solutions portfolio, PGGM makes a point of investing in the Netherlands specifically. In 2015, 10.9 percent of the pension assets of its clients were invested in the Netherlands, representing a total of over €19.9 billion. Approximately 72 percent of the investments in the Netherlands are in government bonds, and €1 billion in the Netherlands Solutions portfolio. The firm's commitment to responsible investing has not been a detriment to achieving financial returns. Since the founding of the fund in 1971, the average return on the total investment portfolio has been 8.2 percent. 146

The Future

In the last several years, both APG and PGGM have solidified their commitment to responsible investing. APG recently created a new responsible investing policy with an eight-principle commitment to integrating responsible investing across asset classes. Both PGGM and APG are part of a new initiative to integrate the UN SDGs into their investment strategy. The new SDG investing (SDGI) agenda was created to increase the amount of institutional and private capital allocated toward financing the SDGs.

Twenty-three Dutch institutions have signed on to the SDGI, and they published a report in December 2016 to explain the importance of investing in alignment with the SDGs, and as an invitation to other investors to join the effort. The report, Building Highways to SDG Investing, "serves to reinforce our commitment and to offer concrete recommendations for 'SDGI action' in context of Dutch investment value chains. It articulates milestone achievements to date, priorities that we will collectively undertake, as well as ways in which individual institutions will seek to make a difference. More importantly however, it identifies areas where we believe that collaboration with the De Nederlandsche Bank and the Dutch government will unlock greater SDG investment and increase our net positive contributions to each of the seventeen SDGs."147 The report provides four recommendations for integrating the SDGs into investment strategy:

- 1. Blend public and private capital. Catalyze significant SDG investment through the systematic deployment of blended finance instruments.
- 2. Mobilize retail-oriented impact capital. Make SDG investment the "new normal" by encouraging and enabling all Dutch retail investors to invest with impact.
- 3. Stimulate data standardization. Establish an enabling SDG investment data environment by stimulating the uptake of sustainability indicators and standards.
- 4. Ensure a supportive regulatory environment. Identify and address actual and perceived regulatory barriers and incentives to SDG investment. 148

This move by the Dutch institutions not only highlights their commitment to responsible investing, but also serves as an example of how pension funds can integrate this type of investing to the core of their strategy and practice. Both PGGM and APG are committed to achieving competitive financial returns and protecting the financial futures of their members, but as PGGM states, they "are convinced that financial and societal returns go hand in hand. They enable our clients to realize a valuable future for their beneficiaries." 149

Lessons from Dutch Pension Funds

Responsible investing and the incorporation of ESG factors are part of the fabric of both APG and PGGM's investment approach. As this commitment is not similarly intrinsic to most U.S. pension funds, it may be difficult to identify transferable practices and approaches from among these two Dutch funds. Nevertheless, their foundational belief that financial performance and societal benefit are intertwined, and their financial, social, and environmental impact over the years are useful for U.S. funds to consider. The Dutch funds approach impact investing as a question of risk and opportunity, with the understanding that the health of the planet and the global population is directly linked to vibrant economies and investments that generate financial return. The SDGs present great financial, social, and environmental opportunities, as Dutch pension funds' leadership on sustainable investment demonstrates.

APPENDIX B

IMPACT INVESTMENT INTERMEDIARY PROFILES

A growing number of intermediaries are pursuing impact investing strategies. These firms are helping to build a more sophisticated impact investing market while providing the expertise, institutional quality, and strong investment track records that pension funds seek. The three fund managers profiled below—DBL Partners, Equilibrium, and TPG Growth—provide a glimpse into the motivations, processes, and structure of these highperforming impact investing intermediaries.

While these firms represent a small sample of all the fund managers in the market today, they offer instructive examples for the field, as they have managed funds at different points in time, operate with varied investment strategies, and demonstrate the evolution of impact investing over the last ten-to-fifteen years.

MANAGER	DBL PARTNERS	EQUILIBRIUM	TPG GROWTH
DATE FOUNDED	2004	2007	2007
AUM	\$625 million	\$1.75 billion	\$8 billion
INVESTMENT PHILOSOPHY	Invest in companies that can deliver top-tier venture capital returns, while working with companies to enable social, environmental and economic improvement in the regions in which they operate.	Create and operate a market-driven investment platform that catalyzes a significant part of the planet into sustainable prosperity.	Provide the capital, expertise, and support that partners need to reach their full potential and create greater possibilities.
IMPACT FUNDS (FUND SIZE)	 Bay Area Equity Fund I (\$75 million); DBL Equity Fund (\$150 million); and DBL Partners III (\$400 million). 	 Agriculture Capital Management (ACM) 1 (\$250 million); ACM 2 (undisclosed); Wastewater Opportunity Fund 1 (\$183 million); and Gerdling Eden Development Green Cities (GED GC) 1, GED GC 2, GED GC 3 (AUM undisclosed) 	Rise Fund (\$2 billion)
FUND DESCRIPTION	The fund utilizes double bottom line venture capital, seeking to optimize both financial return and positive social impact, including social, environmental, and regional economic benefits.	Each strategy leverages sustainability to create a combination of process, operational cost, underwriting insight, and/or asset pricing competitive advantage.	The fund is committed to achieving social and environmental impact alongside financial returns, and is focused on investments in seven sectors in which research has shown that impact is both achievable and measurable.

DBL PARTNERS 150

DBL's first fund, The Bay Area Equity Fund (housed within JP Morgan) closed at \$75 million in 2004. In 2008, DBL Investors spun out of JP Morgan. Two years later the firm closed its second fund, the DBL Equity Fund at \$150 million. In 2015, DBL Investors' Nancy Pfund partnered with Ira Ehrenpreis (who led the clean tech practice of Technology Partners) to found DBL Partners. They successfully closed the third fund, DBL Partners III, a \$400 million impact venture capital fund. DBL Partners is a pioneer of double bottom line venture capital, seeking to optimize both financial return (First Bottom Line) and positive social impact, including social, environmental and regional economic benefits (Second Bottom Line). The firm focuses on sustainable energy, products and services, digital media and imaging, health care, and IT. The team has invested in a wide range of successful portfolio companies, including Pandora Media, SolarCity, Tesla Motors, Revolution Foods, SpaceX, and many others, creating collectively more than 45,000 jobs.

DBL is the first venture capital firm to use a double bottom line approach to investing for impact at scale. The firm's approach to creating social value involves strategically designing high-impact programs across its portfolio of companies. Like other venture capital firms, DBL invests and nurtures high-impact, high-growth companies with market-changing innovation. Unlike other traditional venture capital firms, however, DBL works with its companies to create "double bottom line" impacts across the areas of workforce development, environmental stewardship, community engagement, and public policy.

Thanks to a long track record of strong financial and social performance, DBL had many repeat Limited Partners for its third fund. Pension funds, as well as other institutional investors, recognize DBL's commitment to double bottom line investing, and continue to invest because DBL has proven that the first and second bottom lines are not mutually exclusive, but in fact mutually reinforcing. DBL's investor base has changed over the course of the three funds. In the case of Fund III, the majority of investors consisted of private foundations, followed by private corporate pension funds, and a UK public pension fund. Other investors included nonfinancial corporations, high net worth individuals, and financial advisors and university endowments.

Impact measurement is an important aspect of DBL's work. Accordingly, the firm publishes annual reports that provide a summary of the business and financial performance (the first bottom line) as well as the social, environmental, and economic impact (the second bottom line) for each portfolio company, as well as at the fund level.

EQUILIBRIUM

Equilibrium was founded in 2007, as a real asset manager with a focus on sustainable strategies for institutional investors. Equilibrium currently invests in agriculture and food systems, water and waste, renewable energy, and sustainable real estate. With \$1.75 billion on its platform, Equilibrium is focused on generating alpha through a unique insight on the market. While sustainability and intentional impact are at the core of the firm's mission, Equilibrium managers focus on financial returns in conversation with existing and prospective investors, making clear their commitment to achieving market-rate financial returns.

Equilibrium defines sustainability as "the strategic long-term management of resources," and believes that "sustainability drives economic value, portfolio advantage and alpha returns and intentional positive impact on [the] environment and community."151 Equilibrium expresses this strategy in its mantra: "come for the return, stay for the impact."

Equilibrium's returns-oriented sustainability approach has supported the fund in attracting a number of pension funds as investors. As Equilibrium's Principal and Chairman, Dave Chen states, "The leaders in sustainable investing are the pension funds. Our pension fund clients are interested in sustainability, but they frame it as resiliency—better assets will last longer—and risk management." Equilibrium works hard to understand the problems an institutional investor is trying to solve, and develops strategies and investment structures to meet these needs. They look for large, scalable opportunities where sustainability creates a returns advantage. Often this means aggregating fragmented assets into large institutional bundles.

TPG

Founded in 1992, TPG currently has \$70 billion under management with investment and operational teams in 18 offices around the world. With investments in approximately 300 companies, TPG has built a diverse set of asset classes, including private equity, growth equity, public equity, credit, and real estate. In 2013, TPG signed on to the PRI to further their commitment to responsible investing and promote greater transparency in finance.

TPG Growth was founded in 2007 to focus on growth equity and middle-market buyout opportunities. The firm manages over \$8 billion in investments across the U.S., Europe, Africa, and Asia and is able to draw on the expert global operational resources from the broader TPG platform.

In September of 2016, TPG Growth announced it would begin to raise capital for the Rise Fund—a partnership with Elevar Equity, a venture capital firm focused on delivering essential services to disconnected communities underserved by global networks—making it one of the largest impact investing funds to date. 152 The developers of the Rise Fund worked closely with the Bridgespan group to create a series of metrics by which to measure social impact, and have brought in an auditor to ensure transparency and accuracy. Pension funds and sovereign wealth funds are expected to be among the biggest investors, with at least two large pension funds and one sovereign wealth fund already committed. Rise is expected to invest about half of its money domestically in health care, education, and clean energy; and half in emerging markets, in financial services, housing, and education.¹⁵³ Investment sectors will include education, energy, food and agriculture, financial services, healthcare, information and communication technology, and industrials and infrastructure. 154,155

APPENDIX C

SUMMARY OF ERISA GUIDANCE SHIFTS

In October 2015, the DOL withdrew its 2008 ERISA guidance covering ETIs, reverting back to the guidance established in 1994. Below is a brief overview of the language used in the interpretive bulletins at each shift in guidance.

	DOL IB 1994-01 ¹⁵⁶	DOL IB 2008-01 ¹⁵⁷	DOL IB 2015-01 158
GUIDANCE TEXT	The requirements do not prevent plan fiduciaries from deciding to invest plan assets in an ETI if the ETI has an expected rate of return that is commensurate to rates of return of alternative investments with similar risk characteristics that are available to the plan, and if the ETI is otherwise an appropriate investment for the plan in terms of such factors as diversification and the investment policy of the plan.	Before selecting an economically targeted investment, fiduciaries must have first concluded that the alternative options are truly equal, taking into account a quantitative and qualitative analysis of the economic impact on the plan. ERISA's fiduciary standards do not permit fiduciaries to select investments based on factors outside the economic interests of the plan until they have concluded, based on economic factors, that alternative investments are equal.	Plan fiduciaries may invest in ETIs based, in part, on their collateral benefits so long as the investment is economically equivalent, with respect to return and risk to beneficiaries in the appropriate time horizon, to investments without such collateral benefits. Plan fiduciaries should appropriately consider factors that potentially influence risk and return. ESG issues may have a direct relationship to the economic value of the plan's investment. In these instances, such issues are not merely collateral considerations or tie-breakers, but rather are proper components of the fiduciary's primary analysis of the economic merits of competing investment choices.
SUMMARY OF GUIDANCE	ETIs can be made if the investments meet the same risk and return hurdles that any other investment would have to meet.	ETIs should be rare and require a higher burden of proof.	ETIs can be made, and integration of ESG factors into investment decision-making is an accepted investment practice.
AVERAGE NUMBER OF ETIS MADE PER YEAR (BETWEEN GUIDANCE SHIFTS)	3.71	2.83	TBD

APPENDIX D

ETI RESOURCES

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APPENDIX E INTERVIEWEES

NAME	TITLE	ORGANIZATION		
Adam Downs	Fund Administrator	Laborers' International Pension & Retirement Funds		
Alison Omens	Advisor to the Secretary for Private Sector Engagement	U.S. Department of Labor		
Amanda White	Director of Institutional Content	top1000funds.com		
Ben Thornley	Managing Partner	Tideline		
Cathy DiSalvo	Investment Officer	California State Teachers' Retirement System		
Chris Prestigiacomo	Wisconsin Private Debt Portfolio Manager	State of Wisconsin Investment Board		
Dave Chen	Principal and Chairman	Equilibrium Capital		
Dave Merwin	Investment Officer	California Public Employees' Retirement System		
David Helgerson	Managing Director Co-Investment Team United States	Hamilton Lane		
Farzana Hoque	Manager of Research and Programs	US SIF		
Greg Smith	Executive Director	Colorado Public Employees Retirement Association		
Heather Slavkin Corzo	Director	AFL-CIO, Office of Investment		
Joncarlo Mark	Founder	Upwelling Capital Group		
Judy Mares	Deputy Assistant Secretary and Advisor	U.S. Department of Labor		
Laura Tomasko	Senior Policy Advisor and Deputy Associate Director	White House Office of Social Innovation		
Lisa Hagerman	Director of Programs	DBL Partners		
Marta Jankovic	Senior Sustainability and Governance Specialist	APG Asset Management		
Matt Hoganbruen	Managing Director	HarbourVest Partners		
Meg Voorhees	Director of Research	US SIF		
Monte Tarbox	Director	National Electric Benefit Fund		
Paul Yett	Managing Director Investment Committee	Hamilton Lane		
Randy Kinder	Senior Vice President	AFL-CIO, Investment Trust Corporation		
Ray Kanner	Acting Executive Director	Committee on Investment of Employee Benefit Assets Inc		
Rob Lake	Independent Responsible Investment Advisor	Rob Lake Advisors		
Steve Sleigh	_	Sleigh Strategy, LLC.		
Ted Chandler	Chief Operating Officer	AFL-CIO, Housing Investment Trust		
Tessa Hebb	Distinguished Research Fellow	Carleton Centre for Community Innovation		
Thomas Croft	Managing Director	Heartland Capital Strategies		
Vicki Hearing	Communication Manager	State of Wisconsin Investment Board		

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