

The Business Case for ESG Investing for Pension and Sovereign Wealth Funds

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Abstract

Investors' interest in investments that consider environmental, social, and governance factors (ESG investments) is increasing as they seek investments that combine financial returns with societal benefits. Using Chile's sovereign wealth funds and pension funds as a case study, this policy brief contributes evidence indicating that ESG investments can deliver better environmental, social, and governance performance without sacrificing financial returns. Given their large share of global assets and long-term investment horizon, as well as governments' concerns for societal outcomes, ESG investments are particularly important for sovereign wealth funds and pension funds.

JEL classifications: G11, G15, G18, G32, Q50

Keywords: ESG investing, Stakeholder value, Pension funds, Sovereign wealth funds

1 Introduction

Investors increasingly seek investments that couple good financial returns with the promise of a better future. The desire to consider societal benefits in investment strategies has driven a huge increase in the demand for investments that consider companies' performance in terms of environmental, social, and governance (ESG) factors in addition to financial performance. ESG investing does not imply a singular focus on firms with a double bottom line, such as firms with socially impactful business models, instead investment decisions incorporate evaluations of environmental, social, and governance performance. The specific ESG indicators and metrics used vary but typically cover issues such as air pollution, deforestation, gender equality, labor conditions, data security, and tax evasion. Investing in ESG certified companies allows investors to match their money to their values, channeling investments to companies that do not exacerbate global problems such as climate change, human rights violations, and corruption.

Investors consider ESG factors in investment decisions for multiple reasons. First, systematically incorporating ESG factors can help manage risks that may affect financial performance, especially over a long horizon. For example, according to a survey of 1,100 CFA Institute members, the majority believe ESG issues impacted share prices in 2017.¹ Second, regulators are increasingly considering ESG factors as part of an investment manager's fiduciary duty. For example, the U.S. Department of Labor has issued guidance confirming that fiduciaries with obligations under the Employee Retirement and Income Security Act of 1974 can consider ESG factors.² Similarly, in Mexico, the national retirement savings commission (Consar) that oversees the country's pension fund administrators encourages the incorporation of ESG factors into investment and risk management strategies³. Third, investors are demanding greater transparency on the impact that investments have on people, communities, and the world. Many ESG investors engage in shareholder advocacy and utilize proxy voting to pressure firms to improve their ESG performance and to hold firms accountable for their actions.

The rise of ESG investment has signaled to firms that investors value environmental, social, and governance performance and these concerns are now mainstream. Over \$20 trillion USD, approximately a quarter of all professionally managed assets worldwide, follow ESG strategies.⁴ 2,500 signatories, representing over \$80 trillion USD assets under management, have pledged to follow the UN's Principles of Responsible Investment.⁵ Moreover, the share of assets following

¹Orsagh, Matthew. *Principles for Responsible Investment*. Are investment horizons preventing integration of ESG factors? November, 2019. www.unpri.org/pri-blog/are-investment-horizons-preventing-integration-of-esg-factors/5084.article

²Hamilton, Lisa A. *Center for International Environmental Law*. ESG Guidance from the Department of Labor Clarifies Fiduciary Duty. May, 2018. www.ciel.org/esg-guidance-department-labor-fiduciary-duty/

³Comisión Nacional del Sistema de Ahorro para el Retiro. Se fortalece regulación financiera en el SAR. <https://www.gob.mx/consar/prensa/se-fortalece-regulacion-financiera-en-el-sar?idiom=en>

⁴Kell, Georg. *Forbes*. The Remarkable Rise Of ESG. July, 2018. <https://www.forbes.com/sites/georgkell/2018/07/11/the-remarkable-rise-of-esg/#2535cd7b1695>

⁵*Principles for Responsible Investment*. What is responsible investment? www.unpri.org/pri/an-introduction-to-responsible-investment/what-is-responsible-investment

ESG strategies is likely to increase as the investment power of younger generations grows. For instance, a recent survey in the United States found that nearly three-fourths of respondents aged 18-24 believe that investment decisions can have a meaningful impact on climate change.⁶

Even in the height of the Covid-19 pandemic, individuals around the world continue to voice concern about climate change. According to an online survey conducted by Ipsos in April 2020, nearly two-thirds of individuals across 14 countries agreed that climate change should be prioritized as part of the recovery from the Covid-19 pandemic and 71% of individuals believe that climate change is as serious a concern as the Covid-19 pandemic in the long-term.⁷

In this policy brief, we argue that sovereign wealth funds (SWFs) and pension funds should follow ESG investment strategies. In Section 2, we argue that ESG investment strategies are particularly important for sovereign wealth and pension funds, given their long-term investment horizons. Section 3 provides an overview of the academic literature on the link between ESG performance and financial performance. In Section 4, we use the case of Chile to present evidence indicating that ESG investing does not result in a substantial difference in financial performance relative to investment in conventional indexes. We conduct counterfactual exercises for each of Chile's sovereign wealth funds by swapping the sovereign wealth funds' equity and fixed income benchmarks with their ESG equivalents to show that financial returns are not substantially different when invested in the latter. We conduct a similar exercise for Chile's pension funds. For each pension fund, we construct an ESG portfolio with the same allocation as the average allocation of that fund to show that in most cases the return of the ESG portfolio exceeds that of the fund's average allocation. We show the results using the full time period available and also splitting the time period at January 1, 2020 to provide evidence that our results are not driven by the coronavirus pandemic. In Section 5, we show that the results presented in the previous section for Chile's sovereign wealth funds and pension funds are likely to be seen more broadly. Using four global equity indexes and three global fixed income indexes, we show that ESG indexes outperform their conventional counterpart in about one-half of the weeks since their introduction. Furthermore, ESG indexes often outperform their conventional counterpart in terms of cumulative returns over the full-time period since their introduction. In this section, we also present results that indicate the ESG indexes are not more volatile than the conventional counterparts. The results in this section are also shown for the full time period available and for the split sample. In Section 6, we discuss the IDB's corporate sustainability indexes, IndexAmericas, and compare its performance to relevant benchmarks. In Section 7, we demonstrate that ESG investments deliver non-pecuniary benefits and avoided costs. In Section 8, we conclude by noting that the incorporation of ESG factors into investment decisions is part of a broader trend of redefining the role of companies in

⁶Chhabra, Esha. *Forbes*. This Startup Shows How To Grow Your Wealth Without Compromising Values. January, 2019. www.forbes.com/sites/eshachhabra/2019/01/30/this-startup-shows-how-to-grow-your-wealth-without-compromising-values/#55d871957344

⁷<https://www.ipsos.com/en-au/two-thirds-citizens-around-world-agree-climate-change-serious-crisis-covid-19-ipsos-survey>

society and by calling attention to the need for greater standardization of ESG metrics.

2 ESG Investment Strategies are Particularly Important Sovereign Wealth Funds and Pension Funds

It is particularly important for governments to focus their funds' strategies on ESG investments. Governments should understand the impact of companies on communities and invest in those that promote values consistent with societal objectives, regardless of whether those investments and impacts are local or global.

First, the costs of unethical and unsustainable practices such as carbon emissions or unfair labor conditions generally are not priced, so these costs are not borne by firms. Instead, these costs fall on societies, communities, and employees. Externalities are one of the traditional arguments for government intervention in markets through its investments or regulation, and ESG investments enable governments to align their investment strategies with such market interventions. Although pricing these externalities, such as carbon emissions, so that firms fully internalize these costs will require global coordination, an important first step is for sovereign wealth and pension funds to invest in firms with better sustainability practices and fewer negative impacts on societies and communities.

Second, SWFs and pension funds often have a long investment horizon. Over a long horizon, ESG risks are more likely to materialize, and the costs of unsustainable practices are likely to become priced, negatively impacting financial returns of firms with poor management of ESG risks. As one example, according to McGlade and Ekins (2015) approximately 30% of oil, 50% of gas, and 80% of coal reserves must remain unburned to limit the increase in mean global temperature to 2 °C. Many believe that these factors are not yet fully incorporated into equity share prices. In addition, some firms will incur additional costs to improve their ESG performance or manage their ESG risks in the short run, while returns accrue in the long run. A focus on short-term returns may preclude investment from flowing to firms with strong ESG performance in the market. This makes government investment in this area particularly attractive.

Third, SWFs and pension funds control a large share of global assets. Worldwide, sovereign wealth funds are projected to reach \$15 trillion USD in assets under management by 2020 (PWC, 2019). Norway's Government Pension Fund Global alone controls over \$1 trillion USD of investments, including more than 1% of equity shares globally.⁸ There is currently enough volume for SWFs and pension funds to follow ESG strategies—investment in ESG companies is currently estimated at \$20 trillion USD or approximately one-quarter of all professionally managed assets globally⁹— but the desire to meet the investment criteria of government investment funds could

⁸*The Economist*. Norway's sovereign-wealth fund passes the \$1trn mark. September, 2017. <https://www.economist.com/finance-and-economics/2017/09/23/norways-sovereign-wealth-fund-passes-the-1trn-mark>

⁹Kell, Georg. *Forbes*. The Remarkable Rise Of ESG. July, 2018. www.forbes.com/sites/georgkell/2018/07/11/

also encourage firms to improve their ESG performance and achieve ESG certification. Furthermore, these type of investors could wield their power to engage with companies as shareholders to promote better ESG performance and the creation of stakeholder value instead of a single focus on shareholder value.

Some SWFs already employ negative screens for unethical companies or tilt their portfolios toward firms with better environmental performance. For example, legislation limits the fossil fuel investments of Norway's Government Pension Fund Global and creates a legal mandate for the fund to invest directly in renewable energy projects.¹⁰ But to date, despite mounting evidence of societal benefits and similar or better financial performance, there has not been a broad trend toward ESG investing by SWFs and pension funds.

3 Academic Literature

There are a plethora of studies seeking to determine whether there is a relationship between corporate social, environment, and governance performance and corporate financial performance. Many of these studies provide evidence for a positive correlation between environmental, social, and governance performance or ratings and financial performance. Kempf and Oshtoff (2007), and Statman and Glushkov (2009) utilize KLD ESG ratings, one of the longest-running ESG metrics, to show a positive correlation between ESG rating and financial performance. Eccles et al. (2012) document that firms that adopted sustainability policies by 1993 continue to have different organizational and management processes related to sustainability in 2009. Further, they document that those firms that were early sustainability adopters significantly outperform their conventional counterparts in terms of stock market performance and accounting performance over the long-term. Flammer (2015) utilizes a regression-discontinuity design to study the effect of corporate responsibility proposals from shareholders on financial performance, finding evidence of a positive correlation between corporate social responsibility and corporate financial performance. Lys et al. (2015) find a positive correlation between firms' corporate and social responsibility spending and financial returns, but the authors argue that the positive correlation stems from increased corporate and social responsibility expenditures in the current period when firms expect stronger financial performance in future periods.

Several studies have attempted to separately identify the effect of corporate social performance or corporate environmental performance on corporate financial performance. Many studies find a positive correlation between corporate environmental performance and corporate financial performance (Albertini, 2013; Dixon-Fowler et al., 2013; Endrikat et al., 2014) and between corporate social performance and corporate financial performance (Combs et al., 2006). Endrikat et al. (2014)

the-remarkable-rise-of-esg/#155d4dc11695

¹⁰Ambrose, Jillian. *The Guardian*. World's biggest sovereign wealth fund to ditch fossil fuels. June, 2019. www.theguardian.com/business/2019/jun/12/worlds-biggest-sovereign-wealth-fund-to-ditch-fossil-fuels

conduct a meta-analysis of 149 studies that examine the link between corporate environmental performance and corporate financial performance. The authors conclude that there is a positive correlation between corporate environmental performance and corporate financial performance, noting that there is some evidence that the relationship is bidirectional and strongest when corporate environmental actions are proactive as opposed to reactive. In a second-order meta-analysis, Busch and Friede (2018) find that the correlation between corporate social performance and corporate financial performance is larger than that for corporate environmental performance but that the difference is not statistically significant.

There are also some studies that provide evidence of no correlation or a negative correlation between environmental, social, and governance performance or ratings and financial performance. Brammer et al. (2006) find a negative relationship between ESG scores and financial returns using stock market returns in the United Kingdom. Dorfleitner et al. (2015) find that the difference in returns between an ESG portfolio and a conventional portfolio depend on the ESG rating used and the particular sample, arguing that firms with high ESG rating do not overperform.

The large number of studies focused on the link between ESG ratings and performance and financial performance has given rise to several meta-analyses. Orlitzky et al. (2003) conduct a meta-analysis of 52 studies, finding a positive correlation between corporate social performance and corporate financial performance. The authors caution that the effect may not be generalizable due to high variability across studies. Margolis et al. (2009) conduct a meta-analysis of 251 studies and find a small, positive correlation between corporate social performance and corporate financial performance. On the other hand, in a meta-analysis of 85 studies, Revelli and Viviani (2015) conclude that incorporating social responsibility performance into stock market portfolios does not lead to differential returns compared to conventional investments. One reason for divergent results may be the lack of a standardized set of ESG metrics, which is a topic we return to in the conclusion.

Overall, the literature points to a positive correlation between ESG performance and financial performance. In an exhaustive meta-analysis, Friede et al. (2015) combine the primary and secondary data of approximately 2,200 academic studies to show that the business case for ESG investing is strong. Around 90% of the included studies find a non-negative relationship between ESG performance and corporate financial performance, and in the large majority of these cases, the relationship is positive. Similarly, in a second-order meta-analysis of 25 meta-analysis, Busch and Friede (2018) find a positive correlation between corporate social and environmental performance and corporate financial performance and conclude that “based on the extant literature, the business case for being a good firm is undeniable”.

The positive correlation between ESG performance and rating and financial performance is hardly surprising given that better management of ESG risks often implies better management, which can lead to cost savings and process improvements. For example, Dow Chemical reported

\$9.4 billion USD savings from energy efficiency improvements over a 16-year period and General Motors reported \$2.5 billion USD savings from recycling and reuse initiatives.¹¹

The literature also provides empirical evidence that consumers value ESG information and that there is strong investor demand for ESG investments. Hartzmark and Sussman (2018) study the introduction of sustainability ratings for more than 20,000 Morningstar mutual funds and find that funds categorized as low sustainability experienced net outflows of more than \$12 billion USD, while funds categorized as high sustainability experienced net inflows of more than \$24 billion USD. The authors point out that this pattern of net flows demonstrates that investors market-wide value sustainability.

4 The Case of Chile's Sovereign Wealth Funds and Pension Funds System

In this section, we conduct counterfactual exercises using Chile's sovereign wealth funds to show that financial returns would not have been harmed by ESG investing. We conduct this exercise for Chile's two sovereign wealth funds, the Pension Reserve Fund (PRF) and the Economic and Social Stabilization Fund (ESSF). We conduct a similar exercise using Chile's Pension Funds A to E. We construct an ESG portfolio with the same allocation as the average allocation of each fund. In most cases, the financial returns of the ESG portfolio exceeds that of the fund's average allocations. For both the sovereign wealth funds and the pension funds, we show the results using the full time period available and splitting the time period at January 1, 2020 to separate the pandemic period from the rest of the sample.

The Economic and Social Stabilization Fund

The Economic and Social Stabilization Fund (ESSF) was established on March 6, 2007, replacing the Copper Stabilization Fund. The initial contribution to the fund was \$2.58 billion USD. The ESSF finances fiscal deficits and amortization of public debt. It provides fiscal spending stabilization since it can finance fiscal spending when budgets are reduced due to economic downturns. According to the Fiscal Responsibility Law, in each year the ESSF receives contributions equal to the effective fiscal surplus net of contributions to the Pension Reserve Fund, discounting the payment of public debt and advances from the prior year.¹² As of the end of April 2020, the market value of the ESSF was US\$ 10,467.08 million.¹³

¹¹Serafeim, George. *Centre for Effective Public Management at Brookings*. Turning a Profit While Doing Good: Aligning Sustainability with Corporate Performance. December, 2014. www.brookings.edu/research/turning-a-profit-while-doing-good-aligning-sustainability-with-corporate-performance/

¹²Ministry of Finance, Chile. Economic and Social Stabilization Fund. www.hacienda.cl/english/sovereign-wealth-funds/economic-and-social-stabilization-fund.html

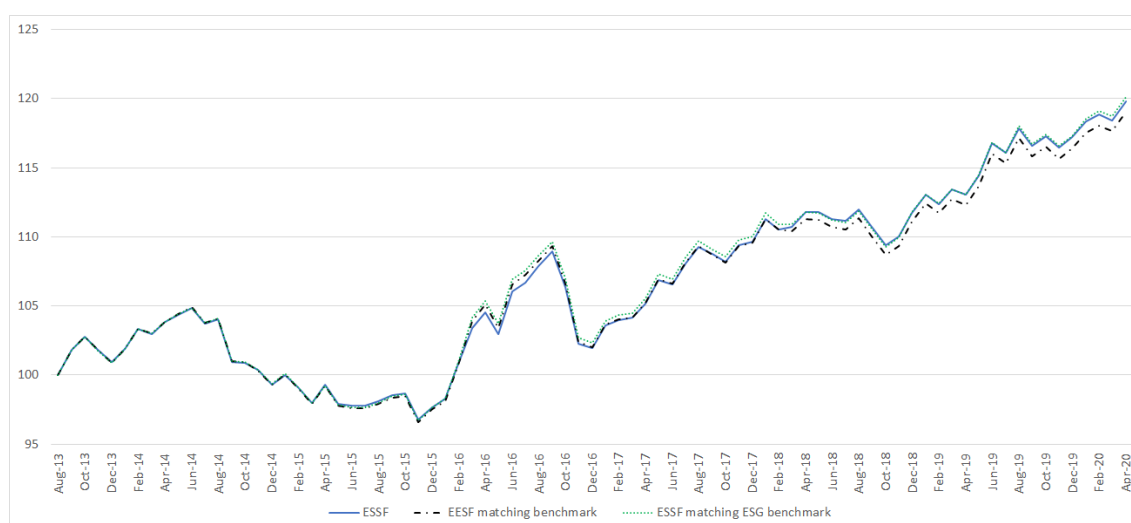
¹³<https://www.hacienda.cl/english/sovereign-wealth-funds/economic-and-social-stabilization-fund/financial-situation/market-value.html>

The ESSF invests in four assets classes: sovereign bonds, money market, equities, and inflation-linked sovereign bonds. Approximately 91.1% of the fund’s assets are invested in sovereign bonds and the money market. A further 5.4% of assets are invested in equities¹⁴. The ESSF uses the Bloomberg Barclays Global Treasury Unhedged Index as its benchmarks for sovereign fixed income and the MSCI ACWI Index as its benchmark for equities. We use the Bloomberg Barclays MSCI Global Treasury ESG Unhedged Index as the ESG benchmark for sovereign fixed income, and we use the MSCI ACWI ESG Leaders Index as the ESG benchmark for equities. Approximately 3.5% of the fund’s assets are invested in inflation-linked sovereign bonds¹⁵, for which we do not have an ESG counterpart. The MSCI ACWI ESG Leaders Index exists for the entire time period under consideration, but data for the ESG sovereign fixed income index are not available for dates prior to January 3, 2014. Prior to this date, we use the actual fund returns in the counterfactual exercise for the sovereign fixed income asset class.

Full Sample

We begin our counterfactual exercise at the date of the first monthly report from Chile’s Ministry of Finance that reports the fund’s benchmarks and monthly allocations across asset classes. We compare the fund’s actual performance to the performance of its benchmarks and to the performance of the ESG counterparts of the benchmarks. We create the counterfactual benchmark fund and the counterfactual ESG benchmark fund using the weights of the actual funds. We normalize the starting value of the fund to 100 so that figure 1 below displays the cumulative returns of a representative 100 US Dollars in the fund over time.

Figure 1: Cumulative Returns of the Economic and Social Stabilization Fund



Source: IDB staff calculations based on Chile’s Ministry of Finance and Bloomberg data.

¹⁴Correct as of April 2020

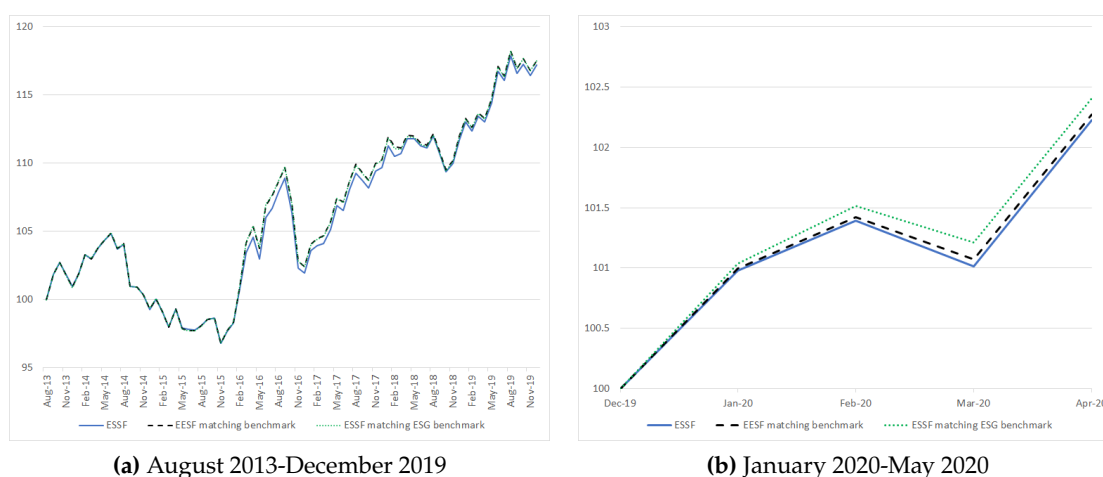
¹⁵Correct as of April 2020

Figure 1 shows that the counterfactual ESSF benchmarks fund and the counterfactual ESSF ESG counterpart fund closely track each other. In the case of the ESSF, the actual performance has closely tracked its counterfactual benchmarks fund during the time period under consideration. The observed cumulative return for the ESSF during this period was 19.82% and the cumulative return for the counterfactual using the current benchmarks was 19.04%. With a cumulative return of 20.13%, the financial return of the counterfactual using ESG benchmarks was higher than the current benchmarks counterfactual. The differences in performance are not substantial over this period of time, indicating that there would have been no significant financial gain or loss from using ESG benchmarks to follow a more sustainable approach to investing.

Split Sample

Here we repeat the above exercise but split the time period at January 1, 2020. The first sample includes August 2013 to December 2019 and the second sample includes January 2020 to May 2020. Figure 1 shows both counterfactual exercises. As before, both counterfactual series closely track actual performance and each other very closely before the pandemic. However, during the pandemic the ESG counterfactual outperforms the conventional benchmark counterfactual and actual performance. In this case, ESG strategies had no negative effect on financial performance and provided relative out-performance during turbulent times.

Figure 2: Cumulative Returns of the Economic and Social Stabilization Fund and Counterfactuals



The Pension Reserve Fund

The Pension Reserve Fund (PRF) was established on December 28, 2006 to support the financing of government pension obligations. The initial contribution to the fund was \$604.5 million USD. According to the Fiscal Responsibility Law, each year the PRF receives contributions of 0.2% of the previous year's gross domestic product (GDP). If the actual fiscal surplus exceeds 0.2% of GDP,

the PRF receives a contribution equivalent to said surplus, up to a maximum of 0.5% of GDP.¹⁶ As of the end of April 2020, the market value of the PRF was US\$ 10,391.25 million.¹⁷

The PRF holds investments in six asset classes: sovereign bonds, corporate bonds, equities, inflation-linked sovereign bonds, high yield bonds, and U.S. Mortgage Backed Securities. Three of these asset classes have close ESG counterparts available for the counterfactual exercises: sovereign bonds, corporate bonds, and equities. Until early 2019, the PRF invested approximately 48% of its assets in sovereign bonds, 20% in corporate bonds, and 15% in equities. In early 2019, the funds' allocation across these three asset classes changed as two more asset classes were introduced. As of April 2020, the allocation is as follows: 36.4% of assets in sovereign bonds, 13.5% of assets in corporate bonds, and 27.8% of assets in equities. The PRF uses the MSCI ACWI Index as its benchmark for equities and the Bloomberg Barclays Global Treasury Unhedged Index and the Bloomberg Barclays Global Aggregate-Corporate Unhedged Index as its benchmarks for sovereign and corporate fixed income. We use the MSCI ACWI ESG Leaders as the ESG counterpart for the benchmark equity index. The MSCI ACWI ESG Leaders Index was launched on June 6, 2013.¹⁸ Data prior to the launch date are back-tested data created by MSCI. For the fixed income ESG benchmarks, we use the Bloomberg Barclays MSCI Global Treasury ESG Unhedged Index and the Bloomberg Barclays MSCI Global Corporate Sustainability Unhedged Index. Data for the Bloomberg Barclays MSCI Global Treasury ESG Unhedged Index are not available prior to January 3, 2014. Prior to this date, we use the actual fund returns in the counterfactual exercise for the sovereign fixed income asset class.

The PRF additionally has investments in the asset classes of inflation-linked sovereign bonds, high yield, and U.S. Mortgage Backed Securities, for which close ESG counterparts do not exist. For these assets, we use the actual returns data for the counterfactual exercises. Until early 2019, approximately 17% of assets were invested in inflation-linked sovereign bonds. As of April 2020, this percentage has dropped to 8.8% of assets as the fund has added two new asset classes, high-yield bonds and U.S. Mortgage Backed Securities, accounting for approximately 7.2% and 6.2% of assets, respectively.

To conduct the counterfactual exercise, we use monthly reports on the funds' weights and benchmarks from Chile's Ministry of Finance and begin our counterfactual analysis at the date of the first monthly report that reports returns and allocation by asset class. We compare the fund's actual performance to the performance of its benchmarks and to the performance of the ESG counterparts of the benchmarks. We create the counterfactual benchmark fund and the counterfactual ESG benchmark fund using the weights of the actual funds. We normalize the starting value of the fund to 100 so that figures 3 and 4 below display the cumulative returns of a

¹⁶Ministry of Finance, Chile. Pension Reserve Fund. www.hacienda.cl/english/sovereign-wealth-funds/pension-reserve-fund.html

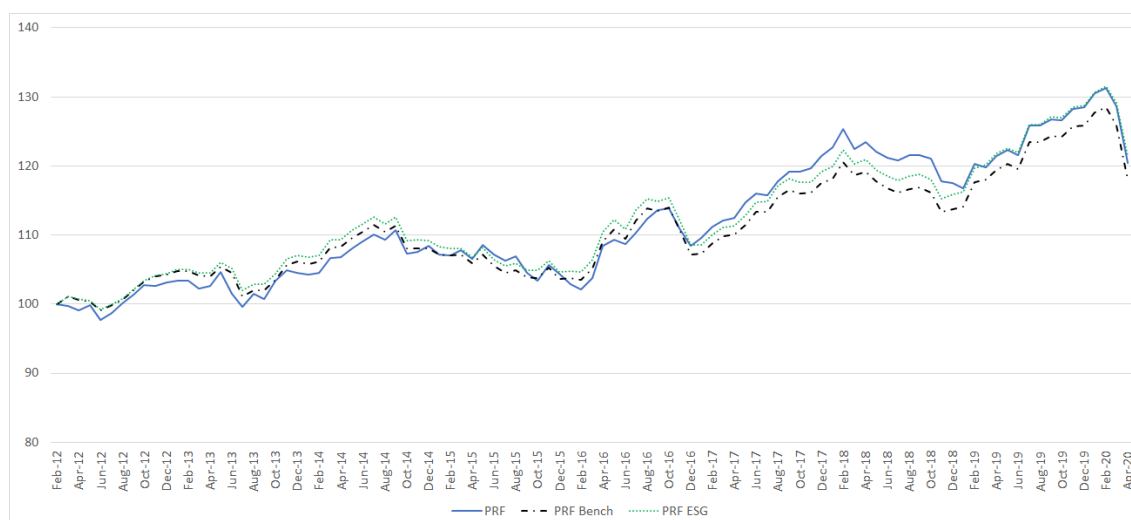
¹⁷Ministry of Finance, Chile. Market Value. www.hacienda.cl/english/sovereign-wealth-funds/pension-reserve-fund/financial-situation/market-value.html

¹⁸MSCI. MSCI ACWI ESG Leaders Index (USD). 2019. www.msci.com/documents/10199/9a760a3b-4dc0-4059-b33e-fe67eae92460

representative 100 US Dollars in the fund over time.

Full Sample

Figure 3: Cumulative Returns of the Pension Reserve Fund



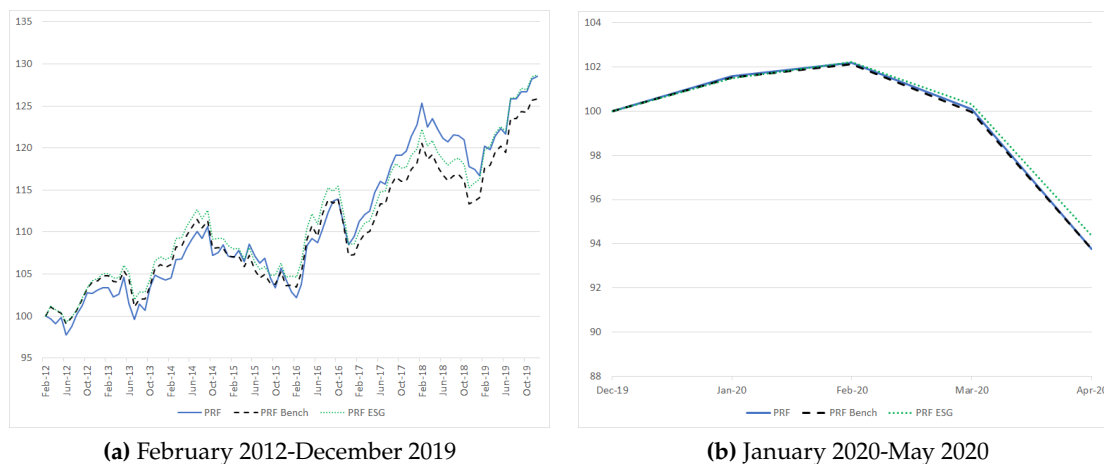
Source: IDB staff calculations based on Chile's Ministry of Finance and Bloomberg data.

Figure 3 shows that the cumulative returns of the counterfactual PRF benchmark fund and the counterfactual PRF ESG counterpart fund closely track each other. Over the period of the counterfactual exercise, the observed cumulative return of the PRF was 20.47%, the cumulative return of the counterfactual using the current benchmarks was 17.98%, and the cumulative return of the counterfactual using the ESG benchmarks was 21.46%. The PRF has outperformed its benchmarks during some periods of our analysis, particularly during 2018. The observed difference in performance over a period of almost 7 years is not substantial, indicating that there would have been no significant financial gain or loss from using ESG benchmarks and, more generally, investing with sustainable principles.

Split Sample

As above, we repeat the counterfactual exercise with the sample split at January 1, 2020. The first sample includes February 2012 to December 2019 and the second sample includes January 2020 to May 2020. Figure 4 shows both counterfactual exercises. In the first sample, the counterfactual constructed with conventional benchmarks under-performs both the PRF and the counterfactual with ESG benchmarks, which closely track each other. In the second sample, the ESG counterfactual differentiates itself with approximately 0.5% lower cumulative losses in just 4 months. Similar to the case above, ESG strategies had no negative effect on financial performance and provided relative out-performance during turbulent times.

Figure 4: Cumulative Returns of the Pension Reserve Fund and Counterfactuals



The Pension System

We conduct similar exercises for the averages of Pension Funds A to E as reported by the “Superintendencia de Pensiones,” which constitute the formal pension fund system in Chile. The funds have different levels of risk determined by different upper and lower limits on allocations in equities and fixed income, as shown in Table 1. Contributions to the Pension Funds are compulsory for employees.¹⁹ As of April 30, 2020, the Pension Funds manage a total of 155,540,228 million pesos or approximately \$185,915 million USD²⁰.

The Pension Funds are managed by private firms (AFPs) according to regulations and guidelines (Barr and Diamond (2016)). The average holdings per asset class across AFPs for each of the five types of fund over 2019 is summarized in Table 2. Using the average allocations of each fund, we construct an ESG portfolio with the same allocations. Thus, our analysis does not reflect the performance of any particular AFP, but rather the performance of the system as a whole.

For this analysis, we use ESG investment returns for two asset classes. The reports for the funds mention global MSCI equity indexes so we use the MSCI World Index and the MSCI Emerging Markets Index - and their respective ESG counterparts - to construct a hybrid index to serve as a benchmark and a hybrid ESG counterpart. Our hybrid index matches the asset allocation of the pension funds within the foreign equities asset class, with approximately 58.6% in developed markets and 41.4% in emerging markets. In contrast, the ACWI has more than 80% allocated to developed markets. We use the constructed hybrids as foreign equities counterfactuals. We use the Bloomberg Barclays MSCI Global Aggregate ESG Index as the foreign fixed income index because this index includes both sovereign and corporate fixed income. For the remaining asset classes, we use the actual fund returns in the analysis.

¹⁹AFP Modelo. Multifondos. <https://www.afpmodelo.cl/AFP/Sistema-de-pensiones/Multifondos.aspx>

²⁰Superintendencia de Pensiones. Ficha Estadística Previsional. https://www.spensiones.cl/portal/institucional/594/articles-13968_recurso_1.pdf

Table 1: Regulatory Constraints on Asset Allocation

Fund	Maximum % of assets invested in equities	Minimum % of assets invested in equities
A	80%	40%
B	60%	25%
C	40%	15%
D	20%	5%
E	5%	0%

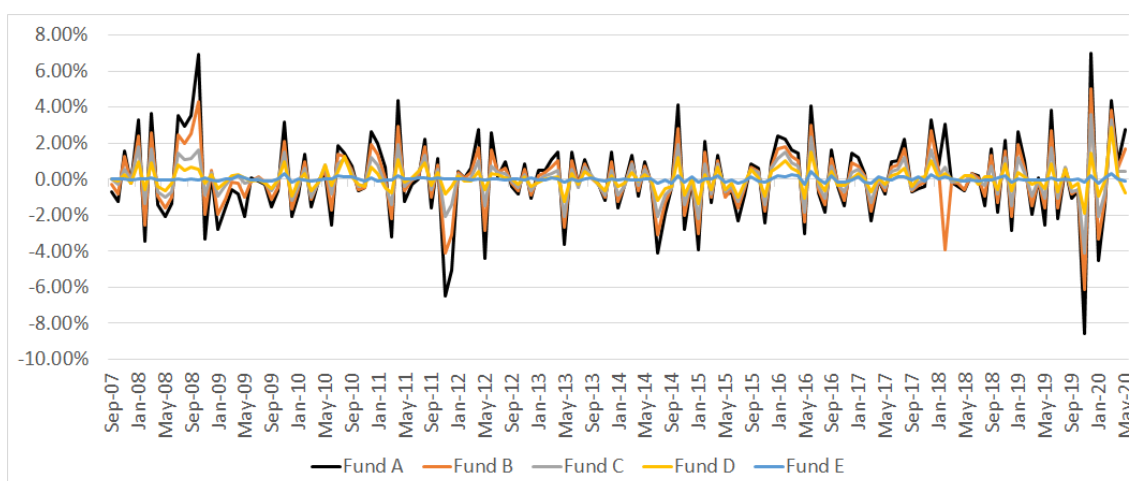
Source: Superintendencia de Pensiones, Government of Chile.

Table 2: Average Allocation of Assets across Classes for Funds of Types A-E

	National Equities	National Fixed Income	National Derivatives	National Other	International Equities	International Fixed Income	International Derivatives	International Others
Fund A	17.61%	4.28%	0.33%	0.00%	61.77%	16.41%	0.08%	0.16%
Fund B	14.90%	23.81%	0.42%	0.00%	44.31%	17.17%	0.09%	0.10%
Fund C	10.79%	44.63%	0.35%	0.08%	28.52%	16.12%	0.07%	0.10%
Fund D	4.85%	68.48%	0.34%	0.01%	13.97%	12.86%	0.11%	0.05%
Fund E	2.50%	92.26%	0.12%	0.01%	2.00%	3.26%	0.06%	0.03%

Source: IDB staff calculations based on data from Superintendencia de Pensiones, Government of Chile

Figure 5: Excess Returns of Constructed ESG Portfolio Relative to Actual Performance for Pension Funds A-E



Source: IDB staff calculations based on data from Superintendencia de Pensiones, Government of Chile.

The Pension Funds were launched in this form in 2002, but we begin the analysis in early 2007, when monthly data on the funds' allocation of investment across asset classes are first available.²¹ Figure 5 shows the excess returns of each fund type's constructed ESG portfolio relative to the average performance of each fund type. The variation in the excess returns increases as the percentage

²¹Chile's Government. Aprobada la Creación de Multifondos en el Sistema de AFP. January, 2002. <https://www.spensiones.cl/portal/institucional/594/articles-3182.pdf>

of the fund invested in equities increases, but it is clear from the figure that ESG investment does not systematically decrease financial returns relative to actual performance. Further, Table 3 shows that over the full sample the constructed ESG portfolios outperform the average performance for all the fund types.

We show the results using the full time period available and also splitting the sample at January 1, 2020. Similar to our findings in the counterfactual exercises with Chile’s sovereign wealth funds, the ESG constructed portfolios show even greater out-performance during the turbulent market during the Covid-19 pandemic.

Table 3: Cumulative Returns for Funds A-E, Actual and Constructed ESG Portfolios

Panel A: Full Sample					
	Fund				
	A	B	C	D	E
Actual	39.48%	45.73%	57.59%	60.52%	62.01%
ESG Counterfactual	46.46%	49.13%	58.94%	62.87%	62.39%

Panel B: September 2007 - December 2019					
	Fund				
	A	B	C	D	E
Actual	55.72%	56.44%	61.53%	59.23%	55.93%
ESG Counterfactual	62.17%	58.81%	61.70%	59.70%	56.33%

Panel C: January 2020-May 2020					
	Fund				
	A	B	C	D	E
Actual	-10.43%	-6.85%	-2.44%	0.81%	3.90%
ESG Counterfactual	-9.69%	-6.10%	-1.70%	1.99%	3.87%

Source: IDB staff calculations based on data from Superintendencia de Pensiones, Government of Chile.

5 The Broader Evidence

In this section, we demonstrate that the results of the previous section are likely to be seen more broadly. We show that the result that ESG investing does not significantly negatively impact financial performance is not an artefact of the time period under consideration or the choice of benchmark index used in the counterfactual exercises.

We restrict our consideration to global equity and fixed income indexes that have an ESG counterpart. Therefore, in addition to the MSCI ACWI, the Bloomberg Barclays Global Treasury Unhedged Index, the Bloomberg Barclays Global Aggregate-Corporate Unhedged Index, and

Table 4: Financial Returns of Global Equity and Fixed Income ESG Indexes Relative to Conventional Counterparts

Panel A: Full Sample							
	MSCI World	MSCI ACWI	Stoxx Global	SP GLOBAL	BB Global Treasury TR	BB Global Agg Corp TR	BB Global Agg TR
Number of weeks	663	295	429	528	336	697	697
% weeks ESG outperforms	47.96%	61.69%	55.24%	49.24%	49.11%	48.21%	47.06%
Cumulative returns	72.03%	30.12%	141.42%	132.48%	13.88%	78.76%	62.67%
Cumulative returns ESG	74.34%	48.25%	145.56%	134.77%	12.42%	74.16%	47.43%
Panel B: Beginning of shared lifetime - December 2019							
	MSCI World	MSCI ACWI	Stoxx Global	SP GLOBAL	BB Global Treasury TR	BB Global Agg Corp TR	BB Global Agg TR
Number of weeks	639	271	405	504	312	673	673
% weeks ESG outperforms	47.42%	61.25%	54.81%	48.81%	48.40%	48.74%	46.95%
Cumulative returns	86.32%	42.78%	161.80%	152.09%	9.95%	75.18%	57.86%
Cumulative returns ESG	87.20%	59.68%	164.22%	153.04%	8.29%	70.38%	42.76%
Panel C: January 2020 - June 2020							
	MSCI World	MSCI ACWI	Stoxx Global	SP GLOBAL	BB Global Treasury TR	BB Global Agg Corp TR	BB Global Agg TR
Number of weeks	24	24	24	24	24	24	24
% weeks ESG outperforms	62.50%	66.67%	62.50%	58.33%	58.33%	33.33%	50.00%
Cumulative returns	-14.20%	-3.75%	-20.24%	-19.32%	3.16%	2.90%	3.96%
Cumulative returns ESG	-12.28%	6.48%	-18.42%	-18.01%	3.36%	3.11%	3.86%

Source: IDB staff calculations based on data from Bloomberg.

Table 5: Number of Large Price Drops Over Shared Lifetime

	MSCI World		MSCI ACWI		S&P Global 1200		BB Global Aggregate Treasuries	
	MSCI World	MSCI World ESG Leaders	MSCI ACWI	MSCI ACWI ESG	S&P Global 1200	S&P Global 1200 ESG	BB Global Agg Treasuries	BB MSCI Global Treasury ESG
Daily	57	59	11	11	23	23	0	1
Weekly	49	51	18	16	31	33	2	4
Monthly	25	25	9	9	16	16	3	3

the Bloomberg-Barclays Global Aggregate Index used as benchmarks in the analysis above, we consider three global equity indexes and their ESG counterparts, the MSCI World Index (the MSCI World ESG Leaders Index), the Stoxx Global 1800 Index (the Stoxx 1800 ESG-X Index), and the S&P Global 1200 Index (the S&P Global 1200 ESG Index).

The first row of table 4 shows the number of weeks since the launch of each of the ESG counterpart indexes. This is the number of weeks for which we compare each index to its ESG counterpart. Rows 3 and 4 of the table display the cumulative returns of the conventional indexes and the ESG indexes over this time period. All four of the ESG equity indexes outperform their conventional counterpart in terms of cumulative returns over their lifetime. The three fixed income indexes have slightly lower cumulative returns than their conventional counterparts over their lifetimes. Overall, the ESG indexes have cumulative returns that are very similar to those of their conventional counterparts.

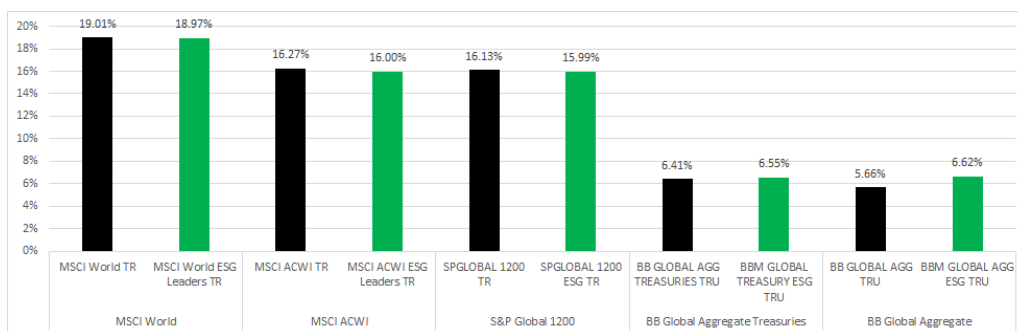
It is important to understand whether the strong financial returns of the ESG indexes is driven by a small number of weeks in which they greatly outperform their conventional counterparts. The ESG indexes outperform their conventional counterparts in approximately 50% of the weeks since their introduction. The second row of the table 4 shows the percentage of weeks in which the ESG indexes outperformed their conventional counterpart.

These relationships also generally hold in the split samples (panels B and C of Table 4), indicating that these results are not solely due to an out-performance of ESG funds observed during the volatile markets caused by the Covid-19 pandemic.

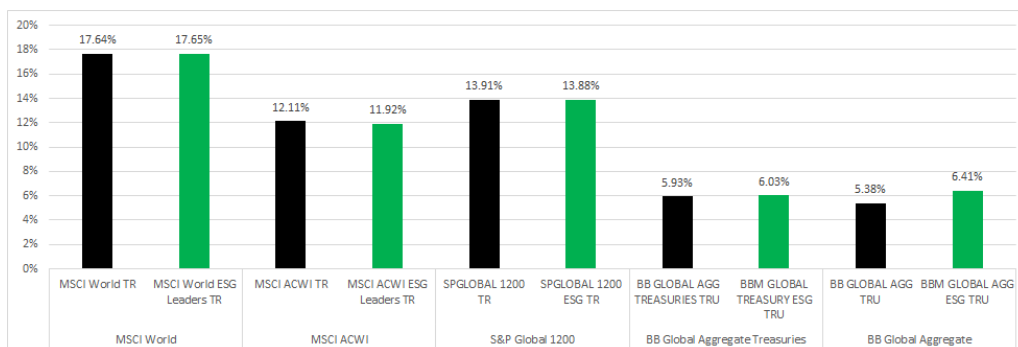
Moreover, Table 5 shows that ESG indexes are not substantially more likely to suffer large drops relative to their conventional counterpart. For this exercise, we define a large drop to be a one-period drop of over 3%, although the results are robust to the use of other thresholds.

Table 5 displays the counts for three different frequencies: daily, weekly, and monthly. Figure 6 provides additional support by showing that ESG indexes are not substantially more volatile than their conventional counterparts by showing that there is no substantial difference in annualized volatility between conventional indices and their ESG counterparts. Together these results indicate that there would not be an increase in risk exposure as a result of switching from a conventional index to its ESG equivalent.

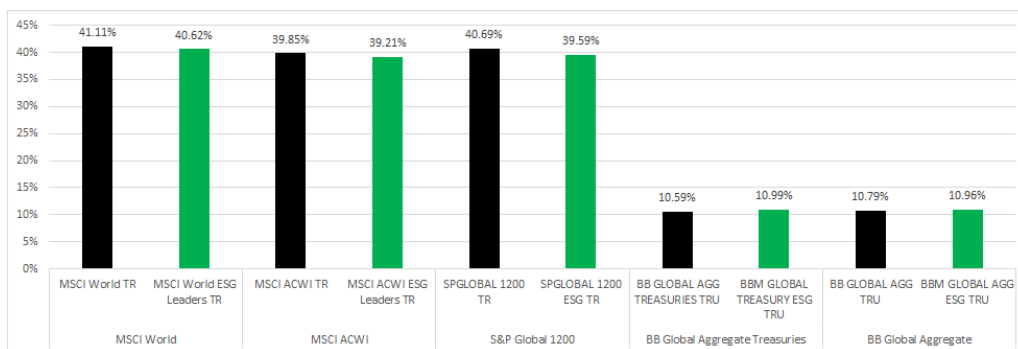
Figure 6: Annualized Volatility



(a) Full Sample



(b) Beginning of Shared Lifetime - December 2019



(c) January 2020 - June 2020

Source: IDB staff calculations based on data from Bloomberg

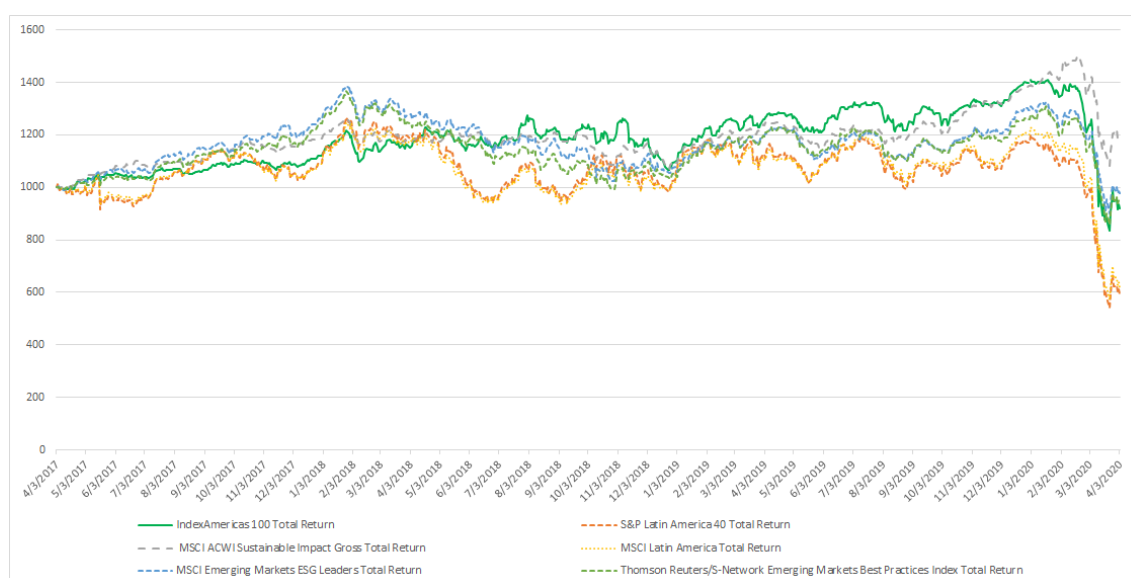
6 A Sustainability Index for Latin America and the Caribbean

The IDB launched the first corporate sustainability index created by a multilateral development bank, IndexAmericas, in 2017. IndexAmericas is a family of corporate sustainability indexes that evaluates companies with a footprint in Latin America and the Caribbean (LAC) based on their sustainability performance. Company performance is evaluated based on criteria in four categories: environment, social, and corporate governance (traditionally referred to as ESG), with a fourth, unique component focused on socio-economic development. Relative to indexes based solely on ESG factors, the inclusion of criteria to measure development performance seeks to evaluate how companies contribute to the elimination of poverty, for example by generating employment, improving inclusion, and serving vulnerable communities. This development factor incorporates an evaluation of the alignment between the IDB's own sustainable development agenda and company activities, processes, and policies. Overall, the four factors together provide a more complete picture of a company's performance as a corporate citizen.

IndexAmericas' Top 100 Index showcases the 100 global, publicly traded companies operating in LAC with the highest sustainability scores. The leading 10 companies from each of the 10 economic sectors are included in the Top 100 Index.

Since its launch in 2017, IndexAmericas Top 100 has outperformed numerous Latin American and emerging markets indexes, including ESG indexes, for long periods of time. Figure 7 shows the cumulative returns of IndexAmericas Top 100 compared to the S&P Latin America 40 Index, MSCI ACWI Sustainable Impact Index, MSCI Latin America Index, MSCI Emerging Markets ESG Leaders Index, and the Thomson Reuters/S-Network Emerging Markets Best Practices Index.

Figure 7: Cumulative Return of Index Americas Top 100 Relative to Benchmarks



Source: IDB staff calculations based on data from Bloomberg, Thomson Reuters Datastream, and S-Network Global Indexes.

The success of IndexAmericas has driven efforts to develop national sustainability indexes. In 2018, the IDB and the Argentine stock exchange, *Bolsas y Mercados Argentinos* (BYMA), launched a sustainability index for companies listed on the Argentine stock exchange (Bose et al., 2019).

7 Non-Pecuniary Benefits and Avoided Costs

ESG investing has significant non-pecuniary impacts. To quantify these non-pecuniary benefits, we compare the environmental, social, and governance differences between the MSCI ACWI and the MSCI ACWI ESG Leaders measured by the Bloomberg ESG disclosure score, whether firms are signatories of the UN’s Global Compact, water use intensity, greenhouse gas intensity, and energy intensity, among other indicators, using data from Bloomberg. In our comparison, we weight each firm’s ESG indicators according to its weight in the index.²² The indicators from Bloomberg are updated annually and the data are as of November 15, 2019.

First, we demonstrate that firms in the MSCI ACWI ESG Leaders publicly report more ESG data than those in the MSCI ACWI. Specifically, Figure 8 illustrates that the Bloomberg ESG disclosure score of the MSCI ESG Leaders exceeds that of the MSCI ACWI. The ESG disclosure score is a proprietary metric developed by Bloomberg to measure the extent of a firm’s ESG disclosure. Therefore, the score reflects the amount of ESG data that a company publicly reports, not the ESG performance of the firm. The score is tailored to industry sectors and is composed of multiple indicators weighted according to a measure of importance, with Greenhouse Gas Emissions given the greatest weight. The score takes a value in the range from 0 to 100.

Figure 8: Bloomberg ESG Disclosure Score for MSCI ACWI and MSCI ACWI ESG Leaders



Source: IDB staff calculations based on data from Bloomberg.

Second, we show that a greater percentage of firms in the MSCI ACWI ESG Leaders are signatories of the UN Principles of Responsible Investing (PRI). Figure 9, shows that almost 38% of firms in the MSCI ACWI ESG Leaders are signatories, compared to just over 34% of firms in the MSCI ACWI.

²²We accessed the data, which were available on a two-month delay, on November 14, 2019.

Figure 9: Percent of Firms in MSCI ACWI and MSCI ACWI ESG Leaders That Are UN Global Compact Signatories



Source: IDB staff calculations based on data from Bloomberg.

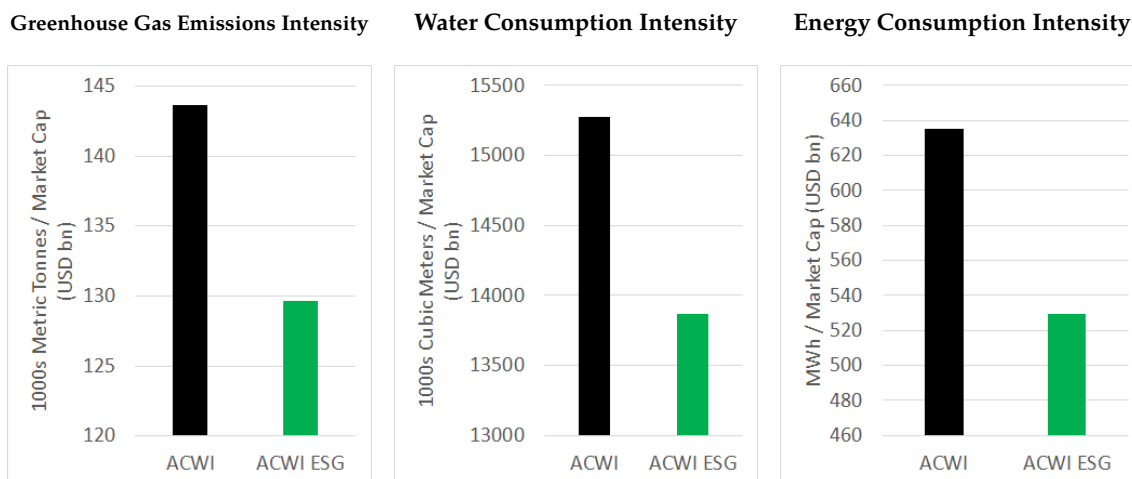
Third, we show that the firms in the MSCI ACWI ESG Leaders use resources more efficiently than firms in the MSCI ACWI. Specifically, Figure 10 shows that the MSCI ACWI ESG Leaders emit substantially less greenhouse gases and consume substantially less water and energy. In order to create comparable metrics across firms, we divide resource consumption and greenhouse gas production by a company’s market capitalization prior to aggregating each metric into one measure for each index. In Figure 10, the measure of greenhouse gas emissions is defined as gases that contribute to the trapping of heat in the Earth’s atmosphere, such as carbon dioxide, methane, and nitrous oxide, and includes scope 1 and scope 2 emissions but excludes scope 3 emissions.²³ The measure of water consumption includes all water used by a company to support operational processes. The measure of energy consumption includes electricity consumption as well as combustion through vehicles, boilers, furnaces, and chemical production processes.

Fourth, in Figure 11 we demonstrate that the MSCI ACWI ESG Leaders have greater coverage of supplier ESG disclosure, health and safety policies, and human rights policies. Supplier ESG disclosure indicates whether a supplier’s guidelines, encompassing ESG factors, are publicly disclosed. Health and Safety Policy indicates that a company has identified its risks and responsibilities related to the health and safety of employees and is making an effort to improve the management of these risks and responsibilities. Human Rights Policy indicates whether the company has a policy of ensuring the rights of all people with whom it works.

Together these four figures and eight metrics paint a clear picture that ESG investing provides societal benefits relative to conventional investment. Other reports have found similar results. As one striking example, Nordea Bank’s sustainable finance team estimates that moving personal

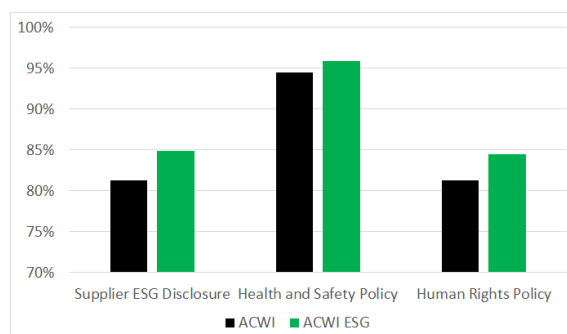
²³Scope 1, Scope 2, and Scope 3 emissions refer to emissions responsibility as defined by the GHG Protocol, a private sector initiative. ‘Scope 1’ indicates direct greenhouse gas (GHG) emissions that are from sources owned or controlled by the reporting entity. ‘Scope 2’ indicates indirect GHG emissions associated with the production of electricity, heat, or steam purchased by the reporting entity. ‘Scope 3’ indicates all other indirect emissions, i.e., emissions associated with the extraction and production of purchased materials, fuels, and services, including transport in vehicles not owned or controlled by the reporting entity, outsourced activities, waste disposal, etc. See: https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_annex-i.pdf

Figure 10: Greenhouse Gas Emissions, Water Consumption, and Energy Consumption for MSCI ACWI and MSCI ACWI ESG Leaders



Source: IDB staff calculations based on data from Bloomberg.

Figure 11: Supplier ESG Disclosure, Health and Safety Policies, and Human Rights Policies by MSCI ACWI and MSCI ACWI ESG Leaders



Source: IDB staff calculations based on data from Bloomberg.

savings to sustainable funds can be 27 times more effective at improving an individual’s carbon footprint than eating less meat, using public transportation, and reducing water use and air travel combined.²⁴

ESG investing can also avoid large financial and reputational costs. Better management of ESG risks often implies better management. Firms with good ESG practices are better able to avoid potential disasters and are better positioned to recover when disasters do occur. The literature has found consistent evidence pointing towards significant loss of market value following ESG events. Capelle-Blancard and Laguna (2010) examine the stock market reaction to industrial disasters and find an average loss of market value of 1.3% over the two days following the event. Klassen and Mclaughlin (1996) find that negative ESG events lead to an average loss of market value of 1.5%

²⁴Nordea Bank. Nordea’s illustrative analysis on carbon footprint from savings. November, 2015. www.nordea.com/en/sustainability/sustainability-news/nordeas-illustrative-analysis-on-carbon-footprint-from-savings.html

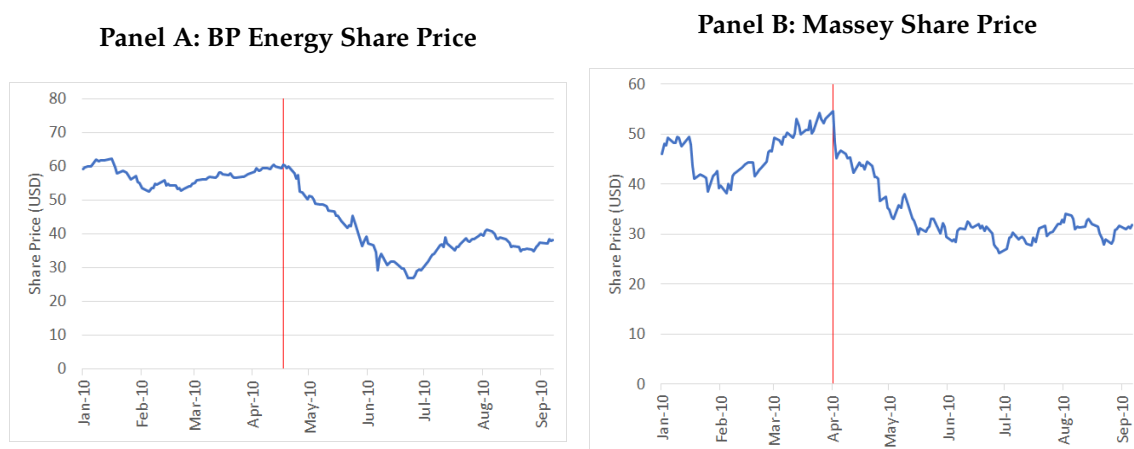
and positive events lead to an average gain of market value of 0.82%. The following two examples, both stemming from events in April 2010, demonstrate that poor corporate management of ESG factors can have significant financial repercussions.

In a well-known and catastrophic instance, on April 20th 2010, BP's Deepwater Horizon drilling rig exploded approximately 40 miles off the coast of Louisiana. The oil rig continued burning until it sank on April 22, 2010.²⁵ The oil spill that followed is the largest marine oil spill in history;²⁶ The U.S. Federal Government (Flow Rate Technical Group, created for this purpose) estimated 4.9 million barrels of oil spilled into the ocean (NRT (2011)).

Internal documents reveal that poor ESG management contributed to the disaster. As early as 2009, BP engineers voiced concerns that the metal casing that BP used for the well might collapse under pressure.²⁷ Furthermore, rig survivors later claimed that colleagues had previously been fired for raising concerns that might delay drilling.²⁸

In the aftermath of the disaster BP faced \$65 billion USD in cleanups costs, charges and penalties. As shown in panel A of Figure 12, over the 40 days that followed the explosion, BP's share price fell from \$60.57 on April 20, 2010 to \$29.20 on June 9, 2010.

Figure 12: Share Price Reactions to ESG Events: BP and Massey Energy



Source: Bloomberg.

In another famous and calamitous episode, on April 5, 2010, an underground explosion at Massey Energy's Upper Big Branch killed 29 miners.²⁹ At the time, Massey Energy was the fourth-largest coal producer in the United States (McAteer et al. (2011)). An investigation into

²⁵Bruce Nichols, Anna Driver. *Reuters*. Rig sinks in Gulf of Mexico, oil spill risk looms. April, 2010. www.reuters.com/article/us-explosion-transocean-bp/rig-sinks-in-gulf-of-mexico-oil-spill-risk-looms-idUSTRE63L4UG20100422

²⁶Campbell, Robertson and Clifford, Kraussaug. *The New York Times*. Gulf Spill Is the Largest of Its Kind, Scientists Say. August, 2010. www.nytimes.com/2010/08/03/us/03spill.html?mtrref=en.wikipedia.org&assetType=REGIWALL

²⁷Urbina, Ian. *The New York Times*. Documents Show Early Worries About Safety of Rig. May, 2010. www.nytimes.com/2010/05/30/us/30rig.html?mtrref=en.wikipedia.org&gwh=30D00057DE1EFB033FF691B05824DF14

²⁸Bronstein, Scott and Drash, Wayne. *CNN*. Rig Survivors: BP Ordered Shortcut on Day of Blast. June, 2010. <http://www.cnn.com/2010/US/06/08/oil.rig.warning.signs/index.html>

²⁹Urbina, Ian. *The New York Times*. No Survivors Found After West Virginia Mine Disaster. April, 2010. <https://www.nytimes.com/2010/04/10/us/10westvirginia.html>

the explosion conducted by the Mine Safety and Health Administration (MSHA) concluded that flagrant safety violations by Massey Energy contributed to the explosion (Page et al. (2010)).

The company was charged \$219.8 million USD in penalties,³⁰ which included restitution payments, fines, the creation of a health and safety research fund, and safety improvements. In addition, approximately \$62 million USD of equipment was damaged during the explosion.³¹ As shown in panel B of Figure 12, following the ESG event the financial situation of the company deteriorated rapidly, ultimately leading to a buyout in early 2011.

8 Conclusion

Many have noted that the current coronavirus crisis and the climate crisis share many similar features, with the exception that the climate crisis is occurring over a longer time period and with graver consequences (Hepburn et al., 2020). Governments have expanded their roles (Helm, 2020) and public support for climate change policies remains high. This provides an opportunity to implement policies to mitigate and adapt to climate change and low-cost policies that increase ESG investment are good candidates.

The literature indicates that sustainable investing, particularly ESG indexes, performs similarly to or even better than conventional investments. We use Chile's sovereign wealth funds and pension fund system as a case study. Utilizing ESG indexes as benchmarks in Chile's sovereign wealth funds and in Chile's pension fund system would not have systematically and substantially changed the financial returns over the time period under consideration. Sovereign wealth funds and pension funds control a very significant fraction of worldwide assets. Therefore, they have the power to shift the standards towards sustainable investment through minor and low-cost changes such as replacing conventional benchmarks with ESG equivalents.

To optimally incorporate ESG factors into investment decisions and to allow prices to fully reflect ESG performance, investors need more transparency. The investment community needs to agree on a standardized set of ESG metrics that can be applied uniformly as well as agree on a transparent reporting system. The number of firms reporting ESG information has increased greatly over the past two decades, from 20 in the early 1990s to more than 8,500 in 2014 (Serafeim and Grewal, 2016), but this information can be convoluted and difficult for investors to analyze.

The lack of standardized ESG data reporting and ESG rating metrics impacts both investors and firms. Companies are responding to increased interest from investors by publishing ESG information in company reports, filings, and websites, but this information is difficult for investors to utilize since there is no standardization in what data are reported or how they are reported.

³⁰The United States Department of Justice. Alpha Natural Resources Inc. and Department of Justice Reach \$209 Million Agreement Related to Upper Big Branch Mine Explosion. December, 2011. <https://www.justice.gov/opa/pr/alpha-natural-resources-inc-and-department-justice-reach-209-million-agreement-related-upper>

³¹Koehler, Dinah A. and Hespenheide, Eric J. *Deloitte*. Finding the Value in Environmental, Social, and Governance Performance. January, 2013. www.deloitte.com/us/en/insights/deloitte-review/issue-12/finding-the-value-in-environmental-social-and-governance-performance.html

This makes it difficult for investors to compare ESG performance across companies or years.

Furthermore, companies have strikingly different ESG ratings from different third-party rating agencies. The ESG ratings of firms can vary greatly across the main rating agencies (Chatterji et al., 2009, 2016; Semenova and Hassel, 2015; Dorfleitner et al., 2015; Delmas and Doctore Blass, 2010 and Berg et al., 2019). To demonstrate the magnitude of the problem, the correlation in ESG ratings among five prominent agencies (KLD, Sustainalytics, Video-Eiris, Asset4, and RobecoSAM) is 0.61 on average, compared to a correlation between credit ratings from Moody's and Standard and Poor's of 0.99 (Berg et al., 2019). Berg et al. (2019) separate this divergence into three distinct sources: i) the scope of factors and attributes considered diverges between ratings agencies, ii) the weight placed on different factors and attributes diverges between ratings agencies, and iii) the indicators or metrics used to measure or to proxy attributes and factors diverge among ratings agencies. The authors find that all three sources play an important role and that approximately one-half of the divergence stems from differences in measurement or proxies of different factors and attributes. This implies that ESG performance is difficult for investors to evaluate and that equity and fixed income prices may not fully incorporate ESG performance.

The wide variety of ESG rating methodologies reduces firms' incentive to invest in improvements in ESG performance. Firms are uncertain of which actions will improve their ESG ratings or which ESG certifications will be valued by the market. Given the relatively low correlation among ESG ratings, firms could use one high ESG rating to detract from their poor ESG performance and other low ESG ratings.

There is some progress toward standardization. The Sustainability Accounting Standards Board, for example, has developed 77 industry-specific accounting standards to measure financially material sustainability issues.³² These standards have been adopted by about a dozen multinational firms.³² The Global Reporting Initiative developed standards that are utilized by 75% of the world's 250 largest companies.³² But at the same time that these developments represent progress, they also exacerbate the problem by providing yet another set of information for investors to analyze and for companies to report. For ESG information to be actionable, standards need to be simple and intuitive for investors (Hartzmark and Sussman, 2018).

The trend toward greater consideration of ESG performance in investment decisions is not a fad. It is part of a broader re-definition of the role of firms. Corporations can no longer consider maximization of shareholder value to be their sole objective. Recently, business leaders formally adopted the broader objective of stakeholder value creation. In August 2019, 181 CEOs, leaders of some of the world's largest companies, signed a statement from Business Roundtable redefining the purpose of a corporation from a narrow focus on profit maximization to the creation of a broader set of benefits accruing to employees, customers, suppliers, and communities, in addition

³²*Bloomberg Professional Services*. As demand for ESG investing grows, so too does the need for high-quality data. April, 2019. www.bloomberg.com/professional/blog/demand-esg-investing-grows-need-high-quality-data/

to shareholders.³³ In this new paradigm, ESG values will likely form part of the ordinary course of investment decision-making.

Historically, Europe has been the forefront of sustainable investing, but sustainable investing is gaining momentum in Latin America. Given the importance of sustainable investing for Latin America, we plan to expand our research agenda in this area.

³³*Business Roundtable*. Business Roundtable Redefines the Purpose of a Corporation to Promote 'An Economy That Serves All Americans'. August, 2019. www.businessroundtable.org/business-roundtable-redefines-the-purpose-of-a-corporation-to-promote-an-economy-that-serves-all-americans

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