CALSTRS
HOW WILL YOU SPEND YOUR FUTURE?

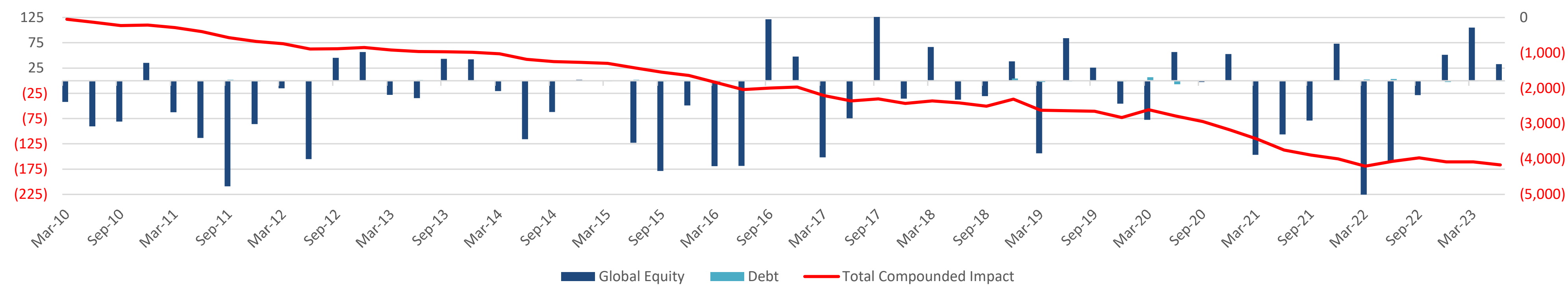
Portfolio Restrictions Cost Analysis

As of June 30, 2023

CalSTRS firmly believes that active and direct engagement is the best way to drive long-term value creation. CalSTRS' commitment to engagement with companies rather than divestment is based on several considerations: (i) divestment would eliminate our standing and rights as a shareowner and foreclose further engagement; (ii) divestment would be likely to have negligible impact on portfolio companies or the market; (iii) divestment could result in increased costs; and (iv) divestment could compromise CalSTRS' investment strategies and negatively affect investment performance.

Total Restriction Impact[1]	
Tobacco *prior to* 2010	Divestment Policy
(5,309,705,991)	(4,167,759,542)
(9,477,465,533)	

Quarterly Restrictions Gain/Loss ($MM)



		Quarter		6 Months		1 Year		Restriction Period (Inception)		
Program Impact	*Inception*	$ (MM)[2]	%	$ (MM)[2]	%	$ (MM)[2]	%	$ (MM)[2]	Cumulative	Annualized
Total Fund Restrictions[3]		**(82.30)**	**0.010%**	**(87.68)**	**0.044%**	**(98.33)**	**0.049%**	**(4,167.76)**	**-1.137%**	**-0.085%**
Global Equity G/L	Jan-10	(80.30)	0.029%	(83.86)	0.125%	(91.56)	0.154%	(4,135.56)	-2.004%	-0.150%
Fixed Income G/L	Jan-10	(2.00)	-0.004%	(3.82)	-0.007%	(6.77)	-0.016%	(32.20)	-0.080%	-0.006%
Tobacco[4]	Jan-10	(58.45)	0.022%	(105.31)	0.049%	(119.92)	0.057%	(3,300.71)	-1.116%	-0.083%
Firearms[5]	May-13	(16.19)	-0.003%	(8.71)	0.015%	(9.57)	0.019%	(460.03)	-0.325%	-0.049%
Geo Risk[4]	Oct-22	(1.33)	-0.002%	20.44	0.018%	36.03		36.03	0.033%	0.044%
Thermal Coal	Jul-17	(6.33)	0.005%	5.90	0.027%	(4.86)	0.023%	(443.06)	-0.267%	-0.045%

[1] Total Restriction Impact includes the impacts of the Divestment Policy as of January 2010 and the Benchmark Modification Program (passive strategy divestment) as of March 2000 - reinvested at the return of the Total Fund

[2] Assumes gains and losses would have earned the return of the Total Fund

[3] Return impact is estimated using average market values for each period

[4] Tobacco and Geopolitical Risk programs are merged under tobacco from January 2010 until October 2022, due to the unavailability of segregated information.
Geo Risk corresponds to the divestment of Iran and other U.S. sanctioned countries. It also includes the divestment from U.S. Prisons as of January 2019.

[5] Segregated restriction data available as of December 2016

CalSTRS' Portfolio Restriction Cost Analysis

Background:

*This cost analysis tracks the **estimated** gains and losses associated with CalSTRS' two divestment related programs: The Legacy Benchmark Modification program (2000 - 2009) and The Divestment Policy Program beginning in 2010. CalSTRS has divested from several companies, beginning in 2006, when certain companies were excluded due to geopolitical risk concerns, but for the purposes of this analysis the cost of The Divestment Policy Program is calculated as of January 2010.*

Prior to 2010, CalSTRS passive strategies excluded all tobacco companies, when they were removed from CalSTRS benchmarks "Benchmark Modification" (Equity as of September 2000 and Debt as of July 2002). During this time there was not a policy requiring restriction for active managers.

The divestment policy outlines six current divestment-related actions that are tracked in this analysis based on their implementation dates: tobacco companies (January 2010), firearms companies (May 2013), thermal coal companies (U.S. and Non-U.S. as of July 2017), U.S private prison companies (January 2019) and geopolitical risk (as of January 2010).

Geopolitical Risk corresponds to the divestment of Iran and other U.S. sanctioned countries. Included in the exclusion cost calculation is the divestment of Sudan from October 2008 until restrictions were lifted in February 2021. Additionally, in 2018, MSCI added Saudi Arabia to their benchmarks, but CalSTRS chose not to include Saudi Arabia in the custom benchmarks - therefore the cost of excluding Saudi Arabia is captured in the Total Exclusion Impact, but is not tracked separately.

The cost of portfolio restriction is reported at The CalSTRS' Board's request, as a policy requirement.

Methodology:

*This cost analysis is a best efforts historical **estimate,** based on available information. The gain or loss (potential cost) associated with restriction is captured at the Total Plan level, major asset class (Global Equity and Debt), and by program.*

To calculate a gain/loss at the Total Plan and asset class level, a return difference is calculated by comparing the monthly return of each asset class levels fully inclusive benchmark versus the CalSTRS' custom version which excludes divested assets. This return difference is applied to the levels beginning balance to understand that months gain or loss. The cumulative gain or loss is then compounded each month at the Total Fund's return, net of manager fees.

The program levels use custom indices which exclude only the divested assets for each program individually. The difference from the standard index is used to estimate each program's ownership percentage of the gain or loss calculated at the Total Plan level.

The Total Fund return serves as the discount rate: the rate of return we would expect had the gain been available to invest, or the return we would have lost had the loss reduced the Total Fund's value. Using a discount / re-investment rate is required to estimate the true value gained or lost over the period and is consistent with industry standard cash flow modeling.

The total divestment impact is captured in terms of two components:
1) The Legacy Benchmark Modification Program (the removal of tobacco companies from the CalSTRS' benchmarks -passive strategy divestment), which ran from March 2000 to December 2009, compounded through the present period.
2) The Divestment Policy Program, captured as of January 2010, compounded through the present period.