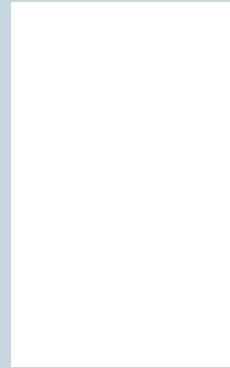
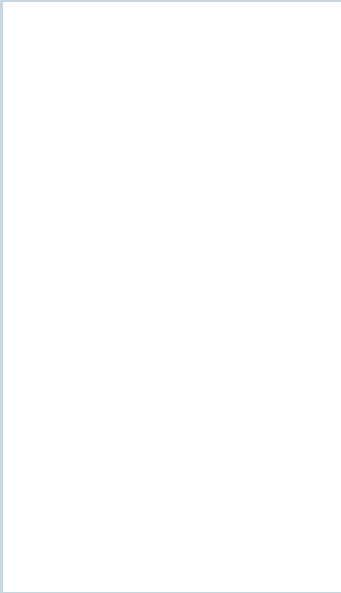


Sustainability and ESG

CalPERS and the world's leading asset owners

Roger Urwin | Slides for CalPERS Offsite – 19 January 2016



Sustainability in investing involves making these three connections

Connecting the short- and long-term

- A strategy with good sustainability is expected to perform well in the short and long term
- A strategy with poor sustainability might have good short-term performance at the expense of long-term performance

Connecting the financial and the extra-financial

- Financial factors intrinsically affect the risk return mix – short term and long term
- Extra-financial factors, like ESG, lie outside the usual spectrum of financial variables but can influence long-term performance and wider stakeholder considerations

Integrating risk and uncertainty

- Risk is the part of the unpredictability of the future outcomes that can be measured using a probability distribution
- Uncertainty is the part of the unpredictability of the future outcomes that cannot be measured

What is done currently on sustainability: Top 20

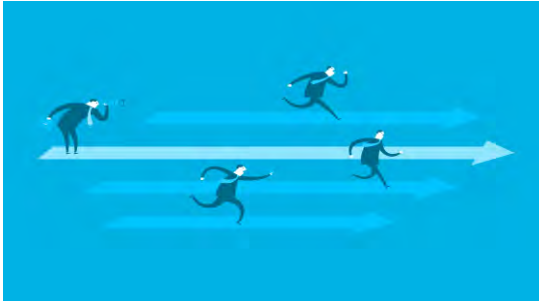
- The composition of the sample selected for this study as a Top 20 Reference group ('Top 20') reflects a combination of their size, transparency and quality of governance model adding up to \$8tn of assets (7 North American funds, 7 EMEA funds, 6 Asia-Pacific funds)
- Top 20 global AO reference group have a wide spectrum of sustainability policies...

4 funds	No explicit policies on ESG/ engagement/stewardship	10 funds	Integrated ESG + Engagement	6* funds	Integrated ESG + Engagement + Targeted policies
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- ...but more limited range of effective sustainability practices

State of sustainability across Top 20	Benchmarking data from Top 20 Study	
Shallow beliefs on sustainability	2*/20 funds	have strong beliefs on sustainability as a return driver
Low commitment to long-horizon investing	1/20 funds	have deep commitment to long-horizon investing
Mixed quality of governance	2/20 funds	have explicitly benchmarked themselves vs global best practice
Fiduciary duty regulation is unclear and/or unsettled in relation to sustainability	0/20 funds	operate with clear framing of fiduciary duty applied to extra-financial factors
Moderate commitment to PRI 'package'	12*/20 funds	are signatories to the PRI
Mixed commitment to policies	6*/20 funds 6*/20 funds 8*/20 funds	do significant company engagement do tilting or targeted mandates do collaboration and advocacy

What could be done on sustainability?

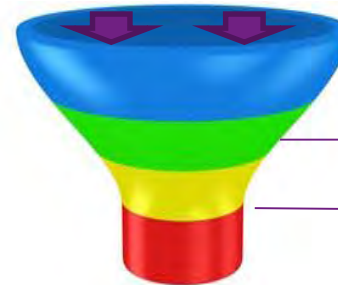


Position sustainability as a part of long-horizon investing and something of critical significance to universal investors



Address sustainability as a complex change process with technical and people elements

Funnel in beliefs and benchmarking to derive policies and roadmap



BELIEFS
BENCHMARKING
POLICIES + ROADMAP

CalPERS and sustainability

- CalPERS benchmarks very well in the area ESG/sustainability relative to the other funds in the Top 20
- But this benchmarking study demonstrates how these leading funds as a group have so far struggled to develop coherent sustainability practices
- The strong belief system at CalPERS provides foundations to effective practice in ESG/sustainability; in particular, they provide valuable alignment in the organization and help its continuity as the staff and board undergo change
- The CalPERS investment beliefs hang together well as a whole with some creative tension between different ideas competing for priorities
- But as noted in the investment beliefs review the beliefs most relevant to ESG (IB2 Horizon, IB3 Stakeholders and IB4 Three Forms of Capital) have proved challenging to work with
- The investment beliefs are guides for decisions and do not provide exact specification for investment practice; some sustainability issues are unsettled at CalPERS despite strong beliefs
- CalPERS has taken the early steps in a longer journey to successfully incorporate sustainability principles at the heart of its investment arrangements
- We envisage a number of actions for CalPERS to take to continue this evolution ; these actions will be time consuming but we see the risks and opportunities involved as worthy of attention
- What should this evolution look like? Essentially we see it as a change process by which the sustainability principles (extra-financial factors, time horizon and risk/uncertainty) connect with deeper investment beliefs, clearer portfolio priorities and sharper investment edge to deliver a highly successful set of outcomes

What should be done on sustainability?



- (1) Beliefs; (2) Benchmarking; (3) Policy choices and Roadmap
- Sustainability is a difficult challenge requiring change processes
- Beliefs and benchmarking provide foundations as inputs to this change process
- Policies are the key outputs in the implementation of change; policies must function over time through the 'Roadmap'

1. Beliefs

- Build fuller understanding of transformational change – geopolitical, social, technological, energy, food, water, etc.
- Use convene, curate, create structure to build understanding
- Clarify co-impacts/win-wins

2. Benchmarking

- Compare each fund with Top 20 reference group
- Build comparison of each fund on policies and performances; inputs and outputs; processes
- Develop gap analysis to suggest possible improvements

3. Policies and Roadmap

- Separation of Integrated, Stewardship/Governance & Targeted SI policies
- Decide policy mix based on return on mission considerations
- Build roadmap to cover ways of adapting to new conditions

What should be done on sustainable/ESG policies?

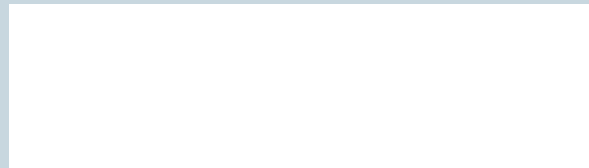
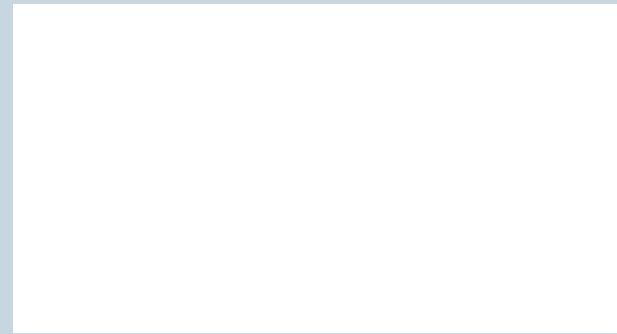


- Positioning of SI/ESG policies on 'mission/beliefs grid'
- The grid is part of benchmarking and peer pressure
- Recognition of direction of travel of peer institutions/Top 20

Targeted SI Beliefs - ESG mispricing opportunities - ESG mandates considered			
Integrated SI Beliefs - ESG risks need management - Ownership needs management	Tilted & Targeted ESG Collaboration + Advocacy Active ownership & Engagement		
Traditional Beliefs - ESG risks unspecified - Ownership unspecified		Integrated ESG	
Investment Beliefs/ Strategy Mission/ Values/ Goals	Traditional Mission	Responsible Business-case Mission	Responsible Wider Impact Mission
	- Goals exclusively financial	- Goals financial but extra-financial factors considered	- Goals predominantly financial but extra-financial goals added
	- Pure finance driven; non-financial factors not considered	- Considers wider stakeholder extra-financial factors but with no performance downside	- Considers wider stakeholder extra-financial factors but with limited performance downside
	- Benchmark and monitor short term vs other funds	- Benchmark and monitor relative to longer-term mission	- Benchmark and monitor relative to longer-term mission

Sustainability

In support



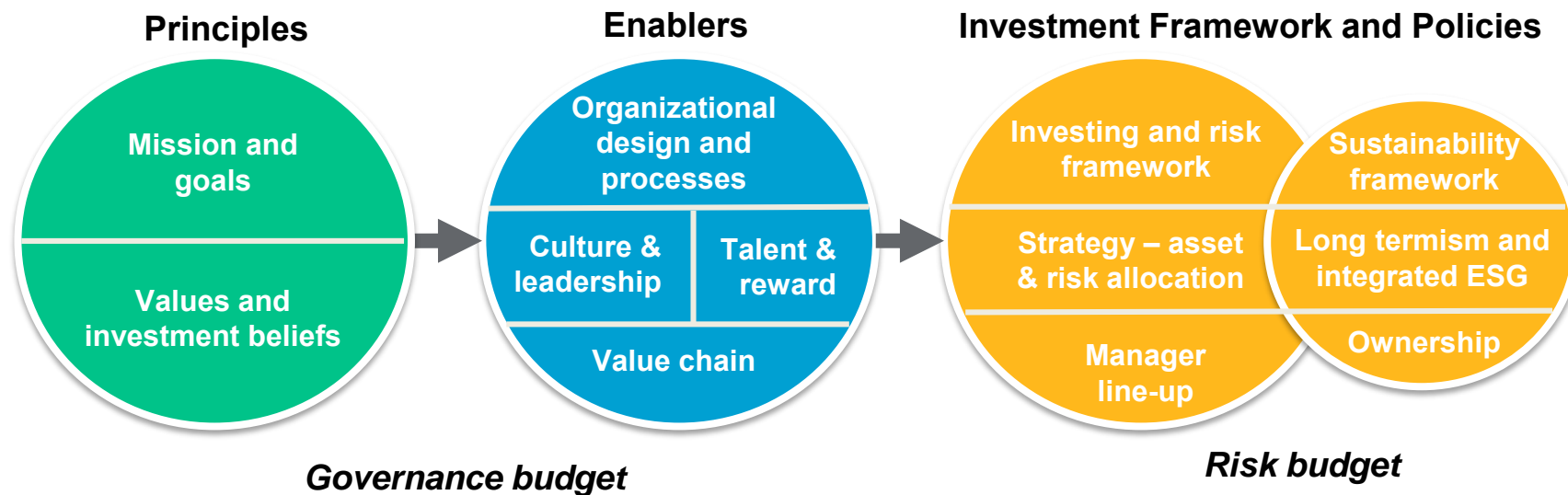
What should be done on sustainability? Governance

Strong investment governance and effective organizational design

- An investment organization needs to align the Investment Framework and Policies with the Enablers in the organization and its strategic Principles
- Currently the Top 20 are weak in both Principles and Enablers; the direction of travel needs to involve a strengthening of these activities

Sustainable practices

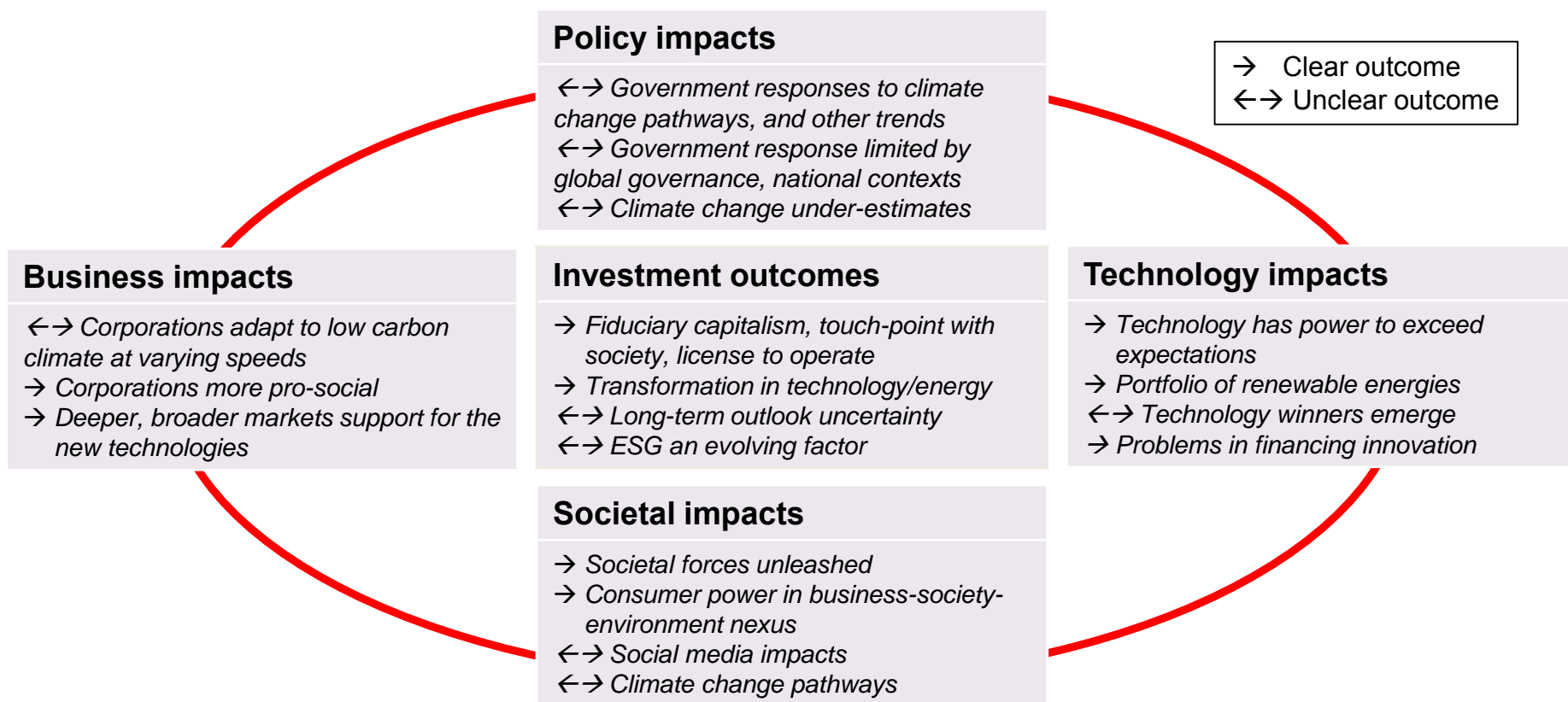
- The sustainable framework of the Top 20 is still an adjunct to the mainstream Investment Framework, with ESG separated from sustainable practice and having limited connection to mainstream practice
- The 'could be' future should integrate the sustainability disc with the mainstream disc in Investment Framework and Policies



What should be done on sustainability? Investment beliefs



- Inter-connectedness | Including sustainability impacts from the business-society-government-environment nexus on the investment landscape – **below**
- Long term | Look further out into the future, allowing for uncertainty – **below**
- Reflexivity | Understanding how the fundamentals affect and are affected by the investors' actions – **below**
- The structure for developing beliefs | Convene, curate, create



Deep domain 'strawmen' beliefs

Strawman = Beliefs put forward, for discussion and ultimately rejection, acceptance and/or improvement

- Long-term investors are well-placed to exploit factors that crystallise slowly such as demographic trends, emerging market/emerging wealth dynamics, and resource degradation where longer-term considerations are unlikely to be fully captured in current pricing
- Capital allocations to companies with significant externalities should be explicitly managed recognising the risks that these will be internalised over time and the impacts of externalities on the portfolio as a whole
- Environment factors (climate, water, food, commodities, land, etc.) will increasingly constrain sustainable development and by association the investment returns of universal owners unless major adaptation occurs
- Those seeking empirical proof on the effectiveness of RI have an unrealistically high hurdle
- Financial and non-financial factors are mutually dependent, and managing the non-financial outputs and outcomes can have positive impacts on longer-term financial outcomes
- Asset owners should consider their responsibilities with respect to ESG factors (do no harm, do positive good, manage reputation, do what beneficiaries want) and its connection to license to operate
- The fund can legitimately make decisions based on non-financial factors provided:
 - they have good reason to think that Scheme members share their concern; and
 - there is no evident and significant financial detriment to the fund
- Investors are over-sensitive to short-term factors and not sensitive enough to long-term factors
- Investment decisions are significantly and adversely affected by human behaviours such as herding, reductive bias, career risk, confirmation bias, cognitive dissonance
- Issues that manifest over long time frames are very difficult for asset owners and asset managers to measure and manage
- Various companies with significant carbon reserves may find some of their assets stranded – the remaining fossil fuel never generates the value corporations and investors currently ascribe to them
- The investment case to underweight stranded assets reflects the anticipation of corporations finding adaptation difficult and the market discovery process evolving

What should be done on sustainability? Benchmarking



- The Top 20 study provides the obvious benchmarking route for large funds
- Peer pressure is a motivating force for better practice
- Benchmarking is both 'soft' and 'hard'

Checklist of 'core' factors in sustainability

Enablers	✓	1. Deep beliefs on sustainability	Policies	✓	5. Have adopted PRI
	✓	2. Deeply embedded commitments to long-horizon investing		✓	6. Have significant active ownership/engagement program
	✓	3. Strong benchmarking framework for governance vs global best practice		✓	7. Invest with tilted and/or targeted ESG allocations/strategies
	✓	4. Operate with explicit stakeholder model or CSR equivalents		✓	8. Operate collaboration and advocacy policies

Checklist of additional 'soft' factors in sustainability

9. Capabilities/ Competencies	✓	Extreme clarity on mission and goals, fiduciary responsibility and sustainability
	✓	Significant domain knowledge required of board/exec on sustainability impacts and co-impacts
	✓	Good self-understanding and understanding of peers; applies comparative advantage
	✓	Well-resourced in CIO-ship strategic skills, understanding all parts of the fast-moving landscape
	✓	Integration of specialist with generalised skills – low silo orientation with strong macro skills
10. Collective culture	✓	Incorporation of inclusive/wider stakeholder aspects of strategy, reputational capital, responsibility
	✓	Diversity of thinking applied to views/theses/decisions; includes significant culture of collaboration
	✓	Desire to align the organization to its stakeholders; allows it to be highly mission-driven
	✓	Works to a culture which encourages change and challenges the commonplace assumptions

Glossary

Sustainability	The principle of making sure that short-term actions do not compromise long-term outcomes Integrating the realities of the present with the possibilities of the future
Responsible investing (RI)	Responsible investing is investing in a manner consistent with broader values of fiduciary responsibility; this includes considerations like 'do no harm', preserve reputation, uphold stakeholder wishes. Such considerations are integrated with the pure financial values. RI is often considered through the specific UN-sponsored Principles of Responsible Investing (PRI)
Sustainable investing (SI)	Sustainable investing is long-term investing that is efficient and intergenerationally fair to beneficiaries and stakeholders. It combines the integrated ESG and active ownership elements of RI with the concepts of efficient long-term investing and intergenerational fairness
ESG – environmental, social and corporate governance factors	Environmental, social and corporate governance issues are the key extra-financial factors that influence corporate performance over time; such factors can be responsible for both risks and costs being born internally or externally transferred from one entity to another (externalities)
Active ownership	The voting of company shares and/or engagement with corporate managers or Boards in dialogue on key strategic issues including ESG, pursued with the goal of reducing risk and/ or improving performance
Non-financial factors	Factors that are associated with values that cannot be ascribed any explicit financial value
Extra-financial factors	Factors that lie outside the usual spectrum of financial variables appearing in financial statements that are used for investment decision-taking that, while difficult to measure and codify, can influence financial performance over time; ESG factors are the principal extra-financial factors
Integrated ESG mandates	Mandates that employ the analysis of ESG risks and opportunities alongside mainstream financial analysis
Targeted ESG mandates	Mandates that invest in a restricted opportunity set in the ESG area (e.g. carbon tilted, or covering energy efficiency, water, waste, environmental services, clean technologies)
Tilted strategies	Allocating capital to factors that are expected to produce above the market performance allowing or risk

Methodology and limitations

References	
We need a bigger boat	<i>Towers Watson 2013</i>
Top 20 Funds	http://www.thinkingaheadinstitute
Top 1000 Funds – AO Challenges	http://www.top1000funds.com/opinion/2014/05/23/challenges-facing-the-worlds-biggest-funds/

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