

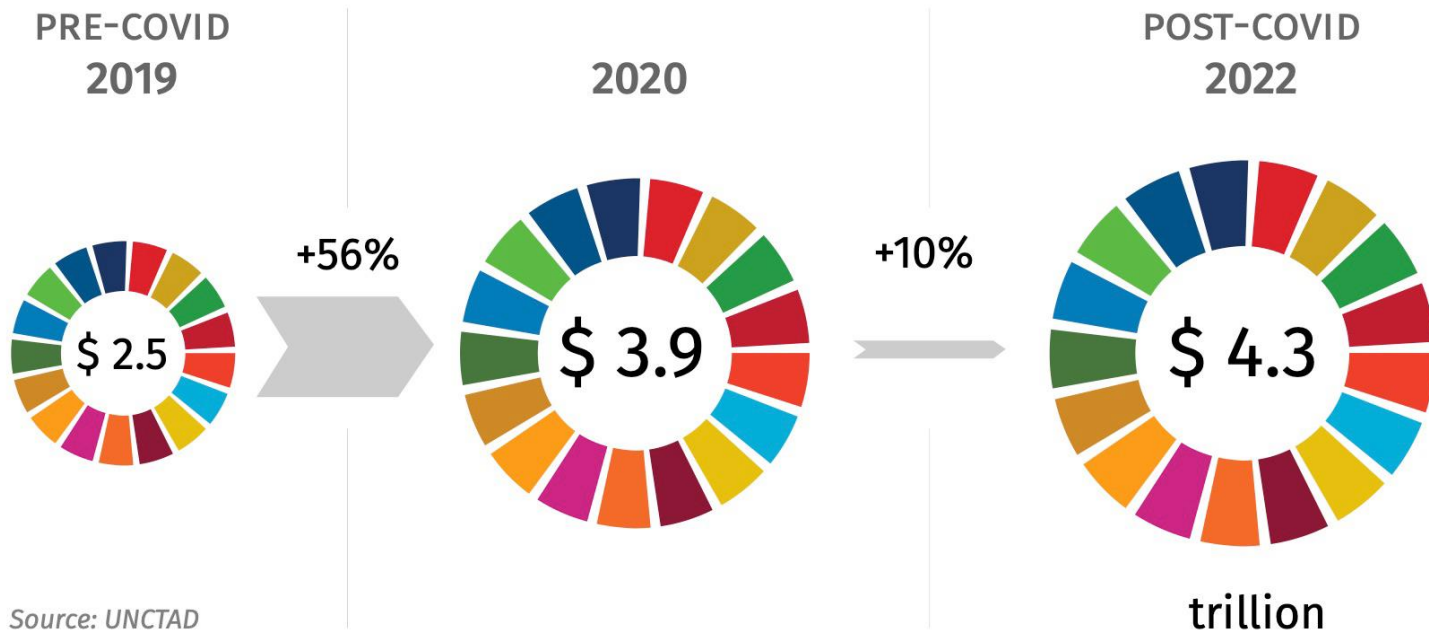
# Tracking Sovereign Wealth Funds' Sustainable Investing

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SIL, Bocconi University, and TIL, NYUAD

IFSWF-SIL Workshop *The Sustainability Footprint of SWFs: Impact, Progress, and Challenges*  
Milan, Gallerie d'Italia, May 26, 2023



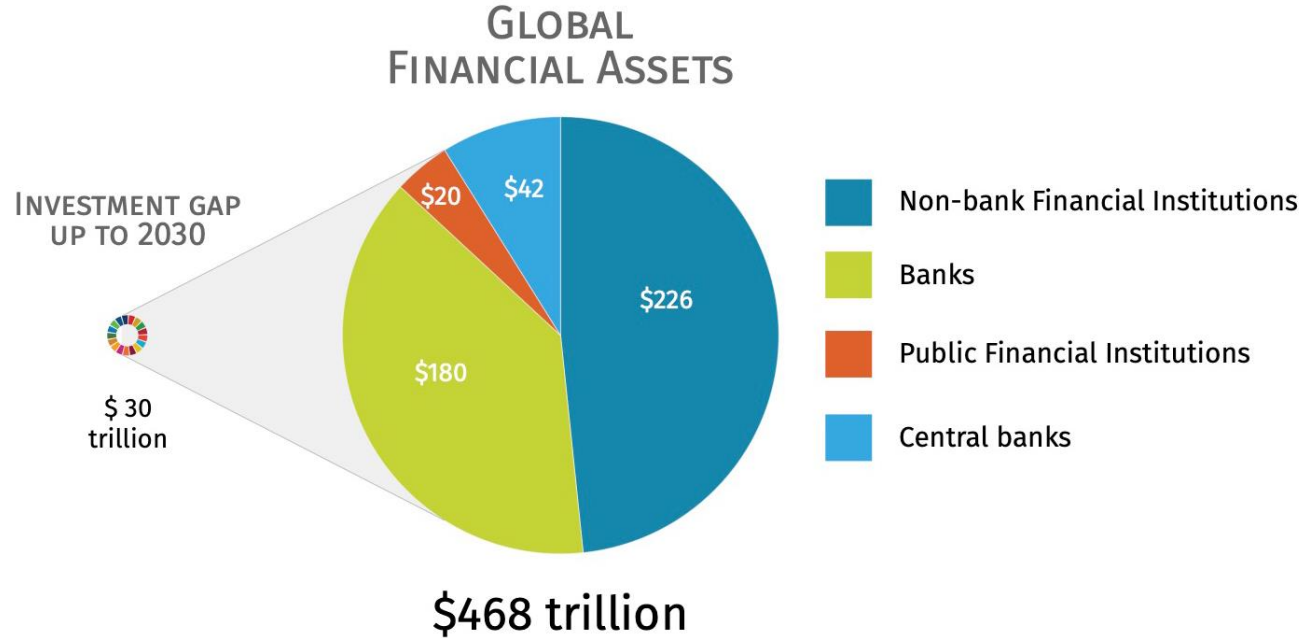
# THE “POLYCRISIS” AND THE INVESTMENT GAP



Source: UNCTAD



# THE GAP AND GLOBAL FINANCIAL WEALTH



Source: Financial Stability Board, 2022



# SWF KEY ATTRIBUTES IN SDG INVESTING



SWFs represent only 2% of GFA, but they are uniquely placed to mobilize capital and deliver on the SDGs:

- **Inter-generational**, universal investors assessing the materiality of long-term risks
- **State-sponsored**, legitimized to address market failures in their investment strategies
- **Large shareholders**, capable to drive the transition across the investment cycle through active and responsible ownership
- **Catalytic**, crowding in institutional capital thanks to collaborative investment strategies, domain expertise and market access



# SWF: A RELUCTANT SDG INVESTOR?



- UNCTAD 2022 Survey: 70 per cent of the SWFs in the sample do not report on ESG integration (43 per cent of the public pension funds in the sample).
- State Street Global Advisors 2019 Survey: 52% of SWF do not include ESG considerations in their investment approach, 38% of SWFs checked upon by boards and beneficiaries on SDGs, underperforming relative to peers.
- IFSWF 2023 Climate Change Report
  - 74% of respondents said addressing climate change was actively part of their mandate
  - 60% of respondents believe that taking climate change into account will improve their long-term returns



# MOTIVATION



- Against anecdotal evidence, setting the record straight about sustainable investment by global SWFs.
- A “revealed preference”, data-driven approach: study SWF orientation towards sustainable investment (or lack thereof) by analyzing the long-term evolution of their investments.
- Joint-research project with IFSWF
- *Caveat*: a preliminary, descriptive analysis to foster a fact-based discussion



# DATA



- Time frame: 2000-2022
- 77 SWFs tracked
- Listed/unlisted direct equity investments
- 4,111 deals worth \$1,004+bn
- Definition of SDG investment: target's attribution to one of the 17 IRIS+ categories, plus "Other" category.
- Sources: SIL (2000-2019), IFSWF (2020-22)

## The IRIS+ Taxonomy



### Agriculture

Food Security  
Smallholder Agriculture  
Sustainable Agriculture



### Health

Access to Quality Health Care  
Nutrition



### Air

Clean Air



### Infrastructure

Resilient Infrastructure



### Biodiversity & Ecosystems

Biodiversity & Ecosystem Conservation



### Land

Natural Resources Conservation  
Sustainable Land Management  
Sustainable Forestry



### Climate

Climate Change Mitigation  
Climate Resilience and Adaptation



### Oceans and Coastal Zones

Marine Resources Conservation & Management



### Diversity & Inclusion

Gender Lens  
Racial Equity



### Pollution

Pollution Prevention



### Education

Access to Quality Education



### Real Estate

Affordable Quality Housing  
Green Buildings



### Employment

Quality Jobs



### Energy

Clean Energy  
Energy Access  
Energy Efficiency



### Waste

Waste Management



### Financial Services

Financial Inclusion



### Water

Sustainable Water Management  
Water, Sanitation, and Hygiene (WASH)



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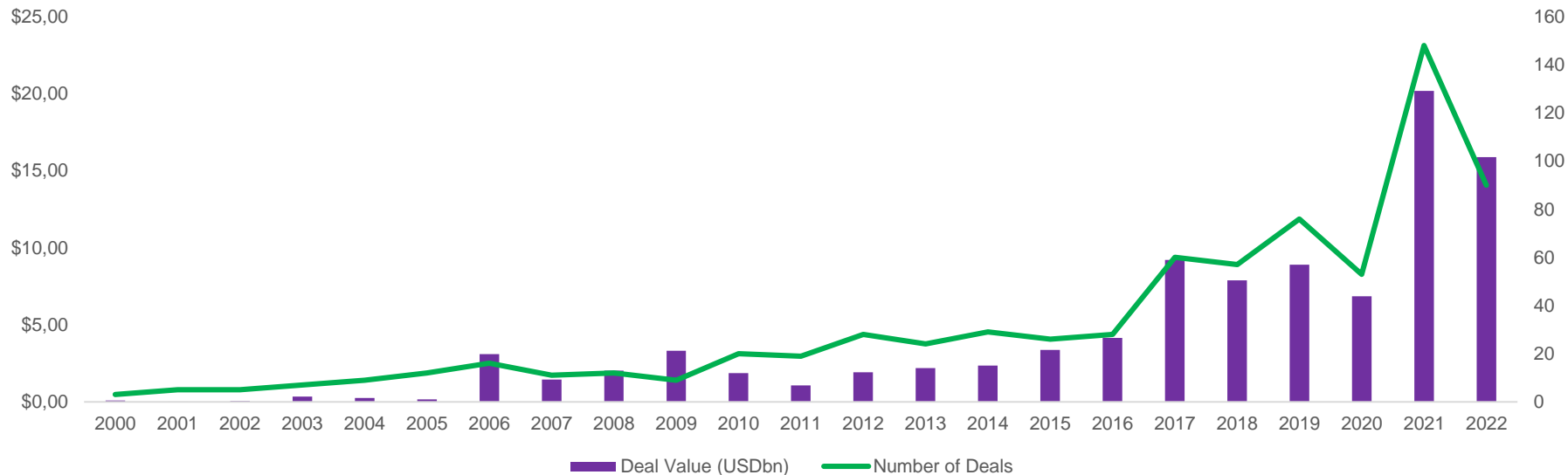


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# THE TIMES ARE THEY A-CHANGING...



## SWFs SDG Investments (746 deals, USD96bn investment value)



Source: IFSWF-TIL and SIL Database



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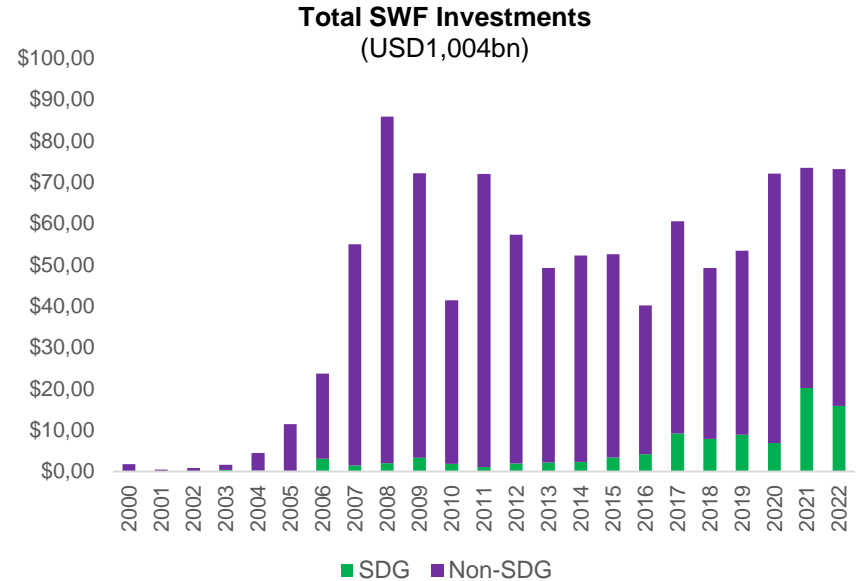
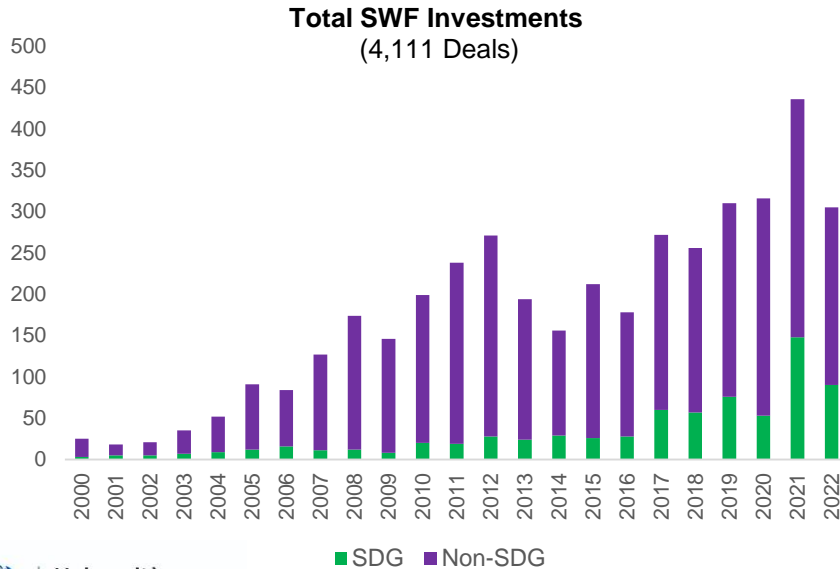
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# ... BUT NON SDG INVESTMENT STILL PREVAILS



- Even if trend is clearly picking up, SDG represents 18% and 10% of total deals and value, respectively



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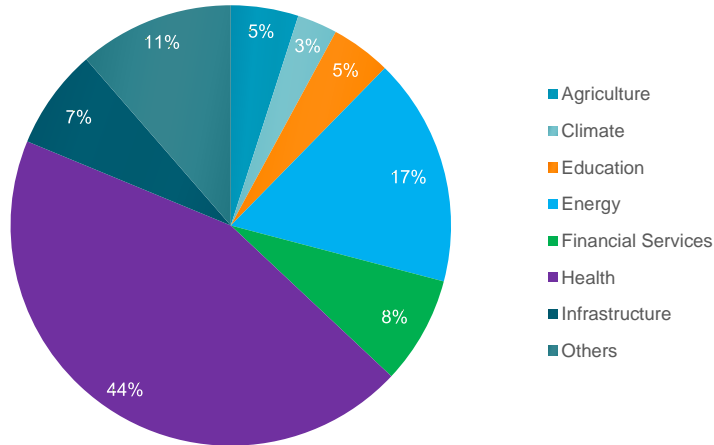
Source: IFSWF-TIL and SIL Database

# SECTOR BREAKDOWN (IRIS+)

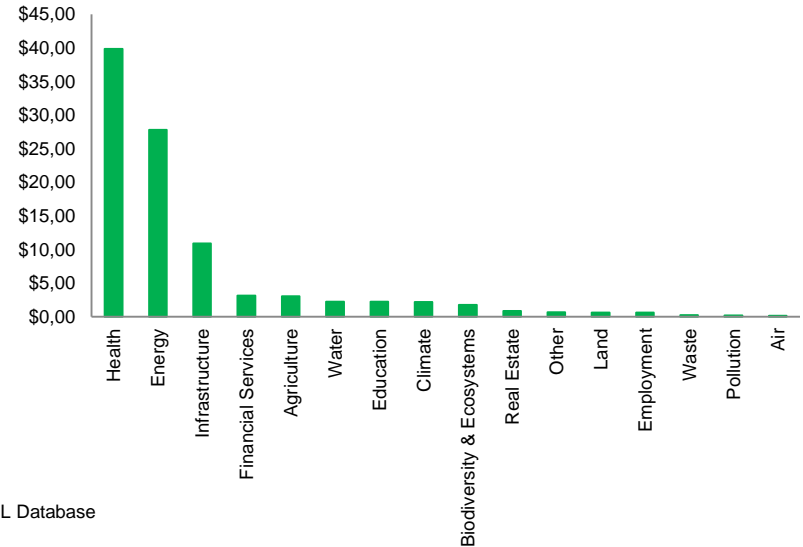


- Well-tested, highly investable business have been sectors of choice. Impressive concentration in healthcare, climate action under the radar screen

SDG Deal Count by IRIS+ Category (2000-2022)



SDG Deal Value by IRIS+ Category (2000-2022)



Source: IFSWF-TIL and SIL Database



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# SWF INVESTMENT AGAINST COVID-19



Investor	Target Company	Deal Value (USD, mm)	Country of the Target Company	Year	Covid Classification
Mubadala Investment Co PJSC	PCI Pharma Services	599	USA	2020	Vaccine Distribution
Mubadala Investment Co PJSC	Evotec SE	236	Germany	2020	Research
Temasek Holdings Pte Ltd	BenevolentLtd	90	UK	2019	Treatment
GIC Pte Ltd	Ascletic's Pharma INC.	75	China	2018	Treatment
Temasek Holdings Pte Ltd	BioNTech SE	70	Germany	2020	Vaccine Production & Development
Abu Dhabi Investment Authority (ADIA)	Moderna Therapeutics Inc	50	USA	2018	Vaccine Production & Development
China Investment Corporation (CIC)	Oxford Nanopore Technologies Ltd	47	UK	2018	Research
GIC Pte Ltd	Oxford Nanopore Technologies Ltd	47	UK	2018	Research
Qatar Investment Authority	Curevac AG	42	Germany	2020	Vaccine Production & Development
GIC Pte Ltd	I-MAB Biopharma CO., LTD	38	Cayman Islands	2020	Treatment
Temasek Holdings Pte Ltd	Helix Opco LLC	29	USA	2018	Testing
GIC Pte Ltd	Harbour Biomed (Shanghai) Co., Ltd	17	China	2018	Research
Temasek Holdings Pte Ltd	Harbour Biomed (shanghai) co., Ltd	17	China	2018	Research
GIC Pte Ltd	Antengene Corporation	16	China	2020	Treatment
Abu Dhabi Investment Authority (ADIA)	Kaleido Biosciences Inc	14	USA	2018	Treatment
Public Investment Fund	Atomwise Inc	14	USA	2020	Research
Mubadala Investment Co PJSC	Recursion Pharmaceuticals Inc	12	USA	2020	Research
Temasek Holdings Pte Ltd	Viela Bio	11	USA	2019	Treatment
GIC Pte Ltd	Harbour Biomed (Shanghai) Co., Ltd	9	China	2020	Research
Mubadala Investment Co PJSC	Owkin Inc	9	USA	2020	Research
Temasek Holdings Pte Ltd	Akili Interactive Labs Inc	8	USA	2018	Treatment
Temasek Holdings Pte Ltd	Innovent Biologics Inc.	8	China	2018	Research
Temasek Holdings Pte Ltd	Lucence Diagnostics Pte Ltd	4	Singapore	2019	Testing
Mubadala Investment Co PJSC	Science 37 Inc	4	USA	2020	Research
Temasek Holdings Pte Ltd	Insilico Medicine	-	USA	2018	Research
China Investment Corporation (CIC)	Alium	-	Russia	2019	Vaccine Production & Development
Public Investment Fund	Alium	-	Russia	2019	Vaccine Production & Development
Russian Direct Investment Fund	Alium	-	Russia	2019	Vaccine Production & Development
Mubadala Investment Co PJSC	Group 42	-	UAE	2020	Vaccine Production & Development
Temasek Holdings Pte Ltd	Lumere Inc	-	USA	2020	Research
ADQ Holding Company PJSC	Rafed	-	UAE	2020	Vaccine Distribution



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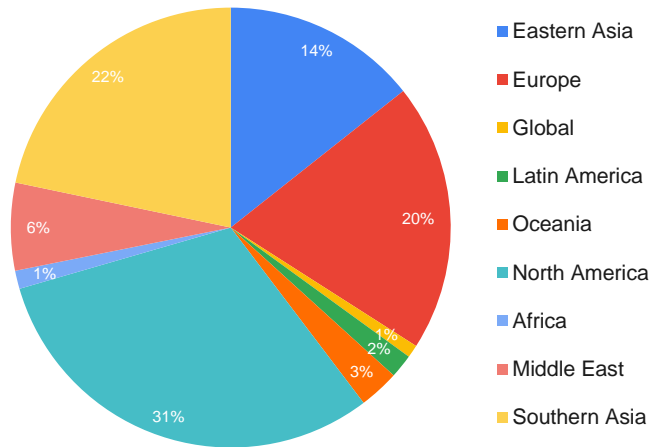
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# BREAKDOWN BY TARGET REGION



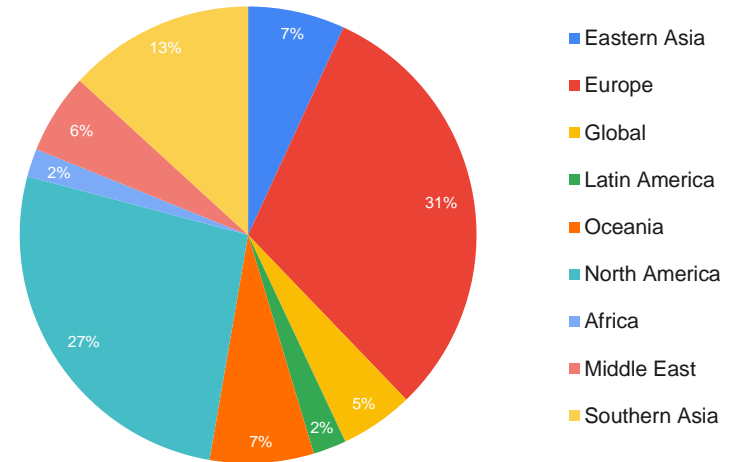
- Developed markets in the sustainability driving seat, EM and lower-income countries (notably Africa) lagging behind

SDG Deal Count by Target Region (2000-2022)



Source: IFSWF-TIL and SIL Database

SDG Deal Value by Target Region (2000-2022)



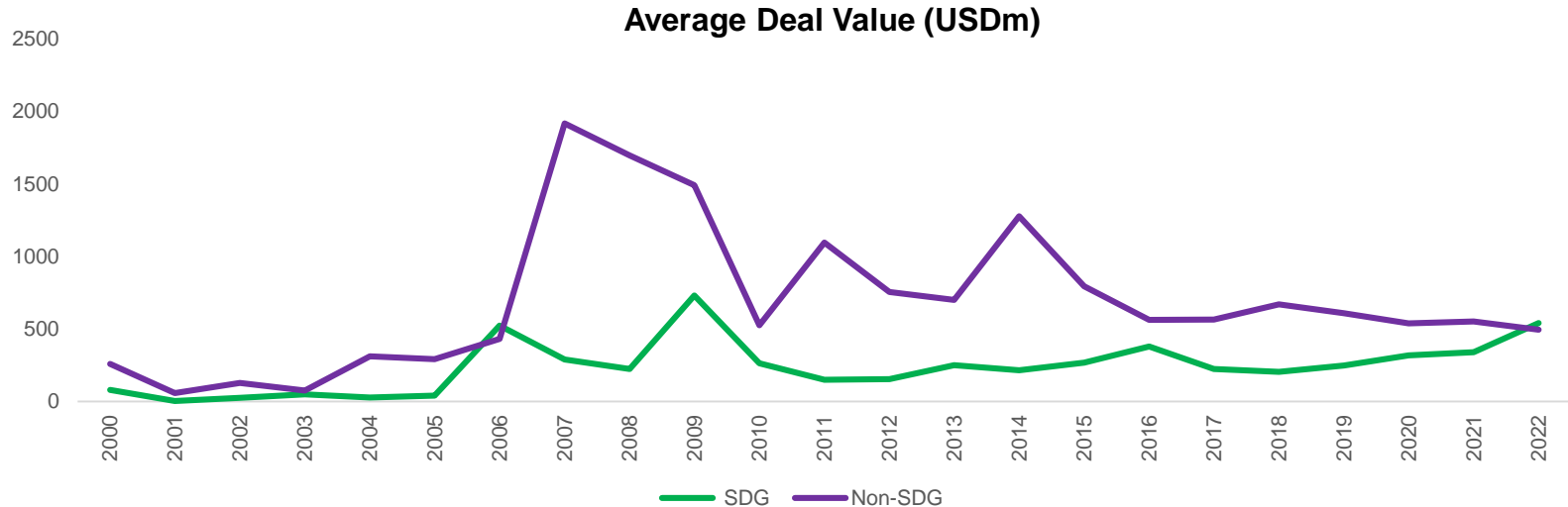
Source: IFSWF-TIL and SIL Database



# SIZE EFFECTS IN SDG INVESTING



- Ticket size in SDG deals is significantly smaller than conventional investments, even if we are observing convergence in the last 5 years.



Source: IFSWF-TIL and SIL Database

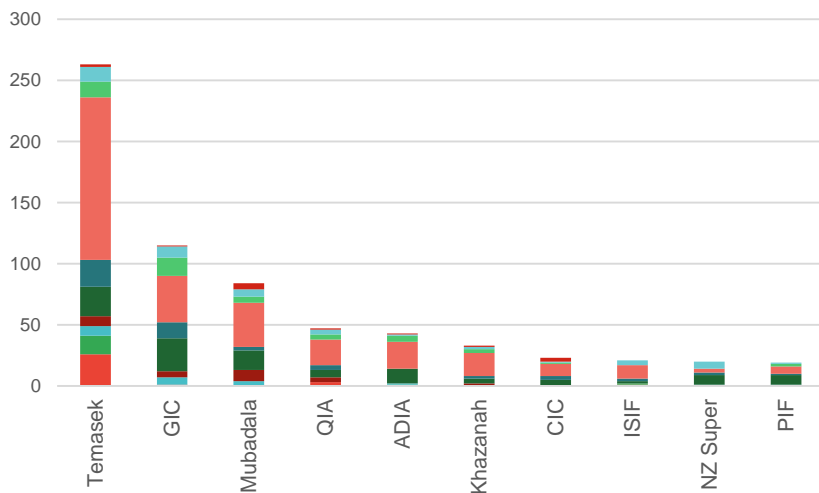


# THE TOP 10 SWF AS SDG INVESTOR

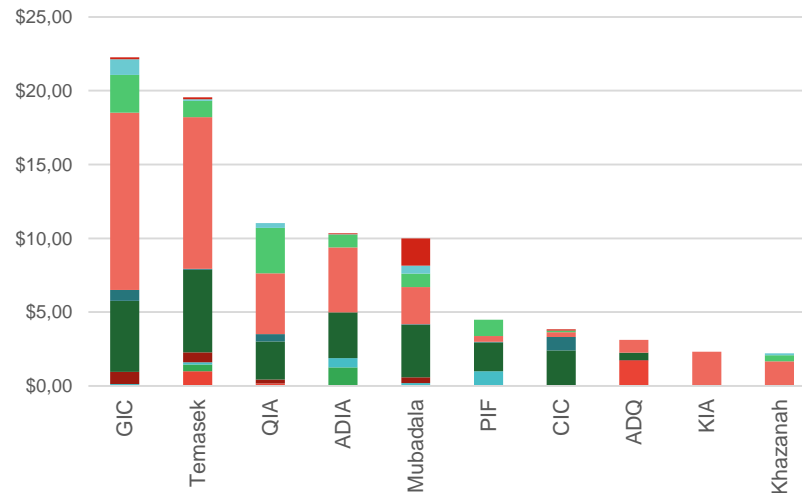


- Singaporean funds get the lion's share (50% of deals and 44% value). Intentionality matters more AUM size...

Top 10 SWFs Deal Count by IRIS+ Category (2000-2022)



Top 10 SWFs Deal Value by IRIS+ Category (2000-2022)



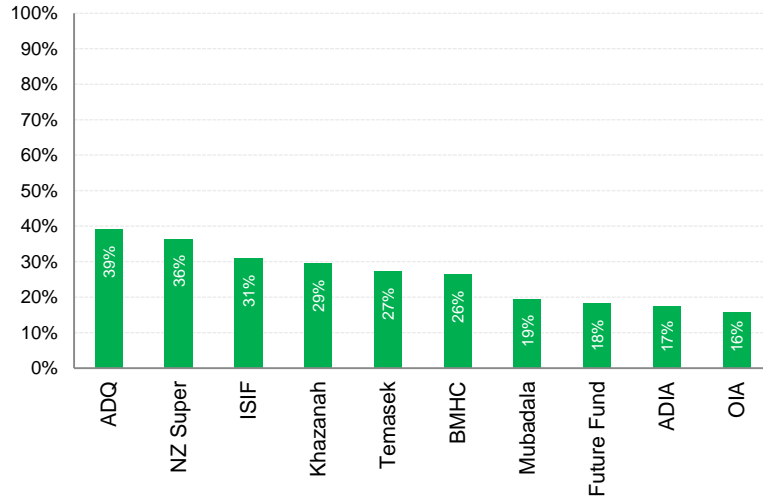
■ Agriculture 
 ■ Biodiversity & Ecosystems 
 ■ Climate 
 ■ Education 
 ■ Energy 
 ■ Financial Services 
 ■ Health 
 ■ Infrastructure 
 ■ Other 
 ■ Water



# THE TOP 10 SDG-DRIVEN SWFS

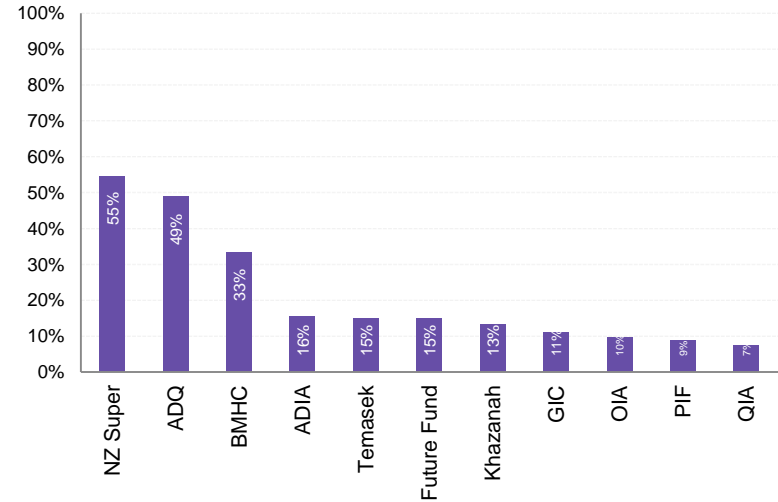


### SDG Deal Count (%)



Source: IFSWF-TIL and SIL Database

### SDG Deal Value (%)



Source: IFSWF-TIL and SIL Database

*Note: The ranking includes SWFs with a total investment value above USD500m over the sample period*



# DISCUSSION: SWF ROADBLOCKS TO SDG INVESTING



- Santiago curse: strict interpretation of fiduciary duty and commerciality of foreign investments enshrined in the Principles discourages the pursuit of broader “social goals”. Santiago 2.0?
- The ticket size effect: SDG investment opportunities are often too small to enter the radar screen of larger funds. Fund-of-funds structures?
- The MEASA underweight: SDG challenges are concentrated in frontier markets with high country and political risks, thwarting major allocations in the region. Partnerships with local/regional SWFs with domain expertise and market access?
- Climate (in)action: a climate investment accord amongst SWFs at COP28?







Thank you



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