Sovereign Wealth Funds and Climate Change

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Plan of Presentation

At the general level:

- Definitions of SWFs
- Climate Crisis: the Context
- Limits of Tradicional Finance:

    Tragedy of Horizon

    Stranded Assets

Financial Instruments and Mechanism Investment

Divestment from fossil fuel

Sustainable Finance

Chile´s SWFs

Dilemmas

Different Definitions of SWFs (more academic)

- Sovereign Wealth Funds (SWFs) are state-owned investment vehicles from resource-rich or surplus economies. They are becoming global financial actors but still lag in addressing climate change.
- IMF (2007). “A Sovereign Wealth Fund (SWF) is a special investment fund created by the government to hold foreign assets for long-term purposes.”
- Kotter & Lel (2011). “SWFs are government-owned investment vehicles with no explicit liabilities to their owners, significant exposure to high-risk foreign assets, and a long-term investment horizon
- Helleiner (2009). “State-owned or state-controlled pools of capital that are actively invested, at least partially, outside the country.”
- Bahoo et al. (2020). “SWFs are strategic investors—not just profit-maximizers—often created to serve national policy objectives, including stabilization, savings, and development.”

Context: Climate Crisis and The Urgency

- IPCC reports warn that half of humanity is vulnerable. Immediate action is needed to halve emissions by 2030. Climate finance is essential for the transition.

- It examines how SWFs can contribute to mitigating climate change, analyzing their role in capital markets, the key sectors and instruments for climate investment, relevant governance frameworks, as well as the challenges they face.

Climate Finance Gap

- IEA (2023): $1.7T in clean energy investments vs $1.05T in fossil fuels.
- Needed by 2030: $4.6T/year to reach net-zero by 2050.

- To hit net-zero emissions by 2050, the world needs to spend $4.6 trillion every single year by 2030.

- **That’s almost triple what we’re currently investing in clean energy.**

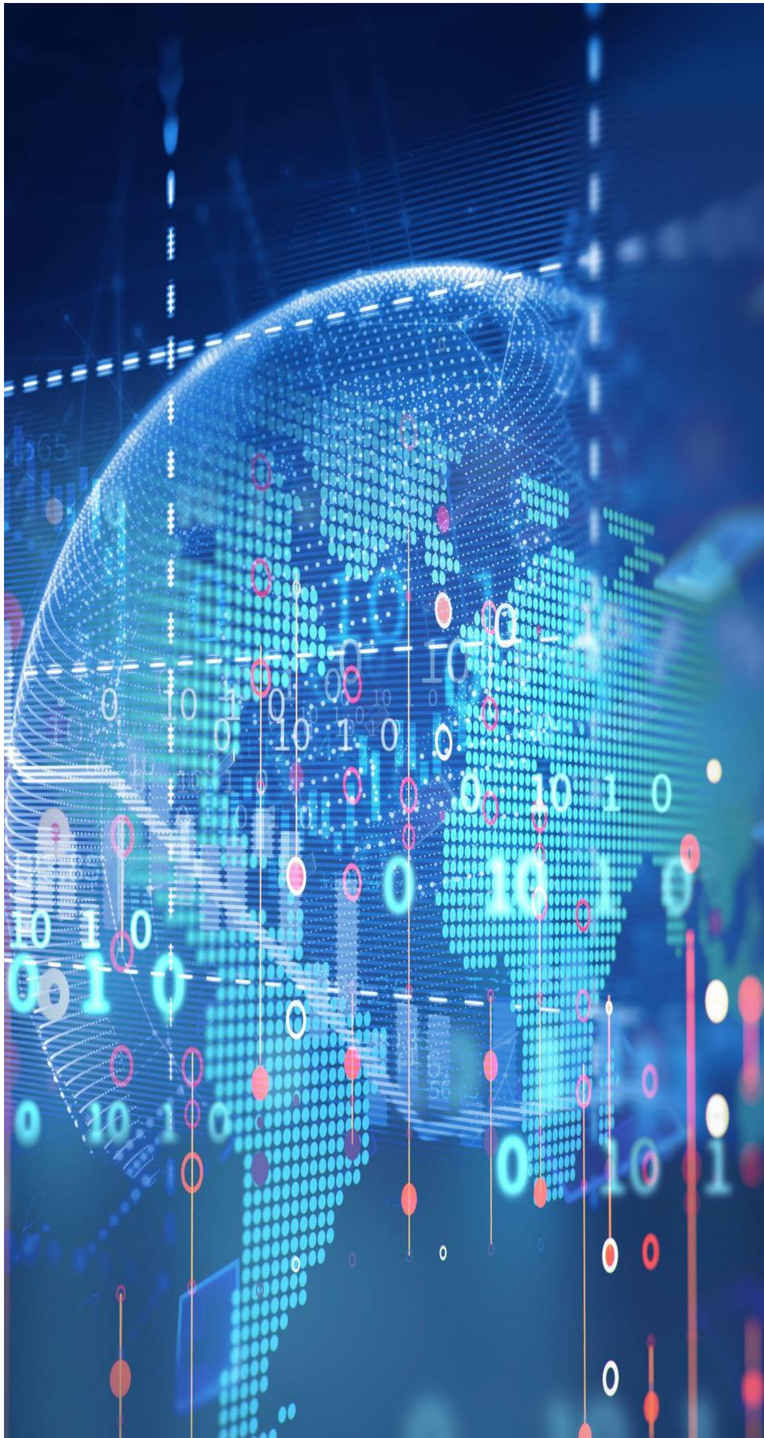
What is the problem with SWF in a developing country?

This WP examines how SWFs can contribute to mitigating climate change, analyzing their role in capital markets

Basic and fundamental QUESTION in a developing country

If investments in T-Bill have low return (yield, 3-4% a year), why not allocate resources to other objectives (education, health and…i.e mitigate the negative impacts of the climate change). Each US$ spent in education is more profitable in the long term that invest in risk free assets (T-bills) even in a diversified portfolio…

The fiscal rules constraints the making decision process. Always? When?



Traditional Finance Limits

SHORT-TERMISM DOMINATES MARKETS.

INVESTMENT IN LONG-TERM GREEN INFRASTRUCTURE IS UNDERFUNDED.

CLIMATE CHANGE DEMANDS A SHIFT IN FINANCIAL MODELS.

: INTEREST RATE SUBSIDIES?

The “Tragedy of the Horizon”

- Coined by Mark Carney (2015), it reflects the mismatch between climate risks and short-term financial decision-making.

Neoliberal Dominance

- SWFs often prioritize return on investment over social/environmental impacts.

The Role and Financial Scale of SWFs in Global Markets

- SWFs have become powerful actors in global capital markets. There are about 100 SWFs worldwide (ranging from large oil-funded vehicles to smaller strategic funds)

- This concentration of capital gives SWFs enormous leverage. They own significant equity stakes in corporations, provide credit to governments, and invest in a wide range of assets (from stocks and bonds to real estate and private equity).

- The principal SWFs are based in resource-rich and export-surplus countries – notably in the Middle East (e.g. UAE, Saudi Arabia, Qatar, Kuwait) and Asia (e.g. Singapore, China) – and many were capitalized from oil & gas revenues.

- SWFs has begun to **expand to include sustainable goals, such as climate change mitigation**

- Key players in financing the transition to a low-carbon economy

Climate Risks & Stranded Assets

Climate change poses physical and transitional risks to investors.

Stranded fossil fuel assets challenge SWFs' long-term returns (Arabic countries, Norway)

Stranded: obsolete assets may rise (by fall of oil price, regulations, etc), reducing value of investments and expected return

Why Are Stranded Assets a Problem for SWFs?

1. **Large Exposure to Fossil Fuels**
   Many SWFs—especially those from oil-rich countries like **Saudi Arabia, UAE, Kuwait, Qatar, and Norway**—have:

- Direct stakes in oil & gas companies
- Infrastructure tied to fossil fuels
- Bonds or stocks in carbon-intensive industries (e.g., utilities, airlines)

If these assets lose value due to the energy transition, **SWFs could suffer major financial losses**.

2. **Long-Term Investment Horizon = Higher Risk**
   SWFs are long-term investors by design. This means:

- They hold assets for decades.
- Climate risks (which materialize slowly) are **exactly the kind of risk they are exposed to**.

- If they fail to act today, **their future portfolios may be full of stranded assets**.

Holding stranded assets **contradicts** those goals, because:

Future returns are at risk

Environmental degradation threatens national stability (**ironically undermining the purpose of the fund**)

3. **Pressure from Stakeholders & Rating Agencies**

Citizens and civil society

- ESG-conscious rating agencies

Financial Instruments and Investment Mechanisms for Climate Action

Sovereign wealth funds can utilize various financial instruments and collaborative mechanisms. These tools can help structure investments in ways that meet SWFs' risk-return requirements while maximizing climate impact. Key instruments and approaches include:

- **Green Bonds**
- **Blended Finance**
- **Coinvestment Funds (consortium)**
- **PPP**
- **ESG-Aligned Indexes and Thematic Investing**

Rise of Sustainable Finance

- Sustainable finance integrates social, environmental, and long-term economic goals. It challenges the dominant profit-maximization model.

- SWFs must evolve from short-term stabilizers to long-term agents for sustainable transformation.

Governance and Transparency

SWF transparency depends on quality of democracy.

Public interest may not always guide international investment choices.

Divestment from Fossil Fuels

- Many SWFs (e.g., Norway, Saudi Arabia) are shifting toward green portfolios. Fossil fuel share dropped from 75% (2016–2020) to 25% in 2021.

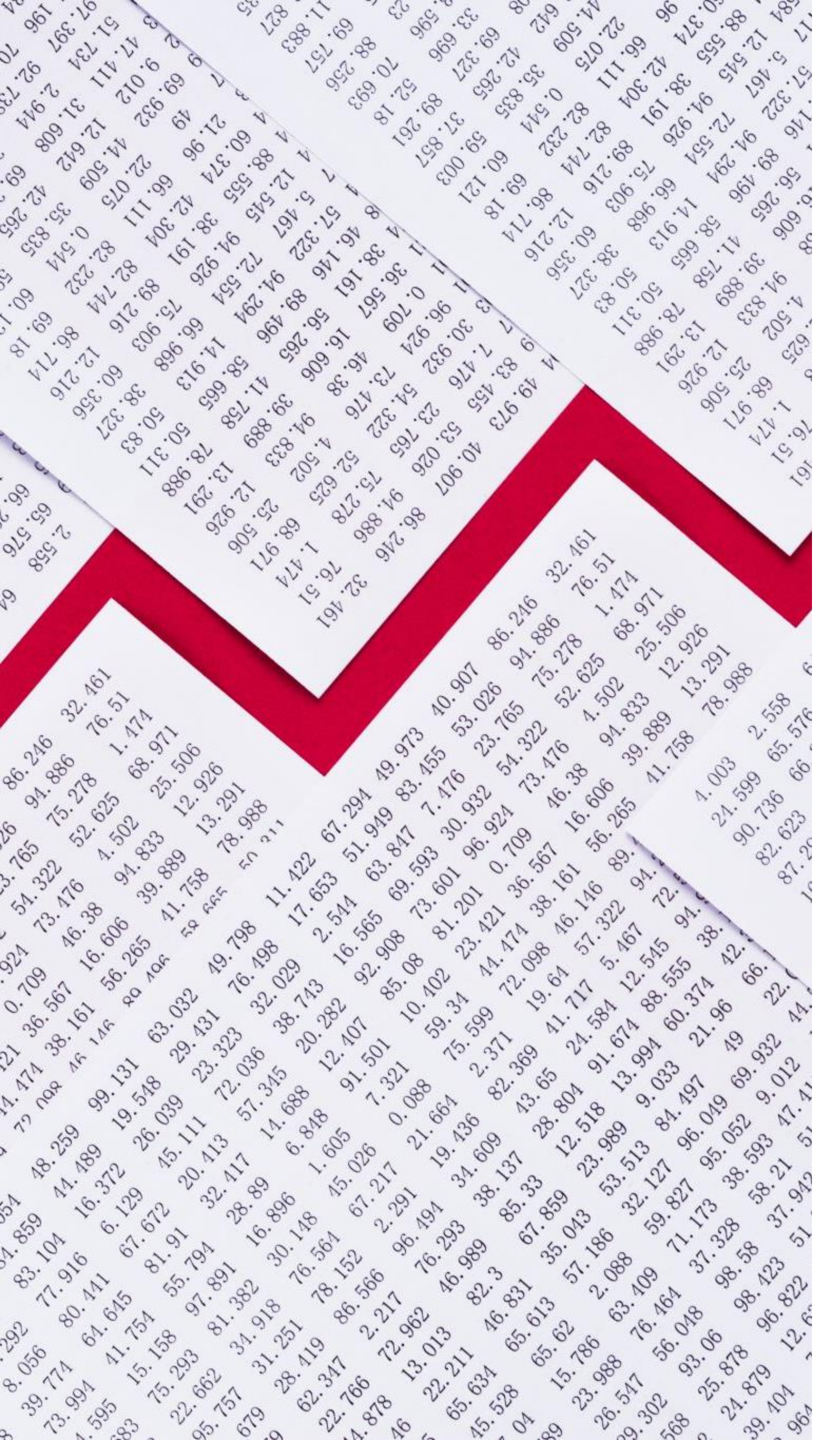
Sovereign Wealth Funds– According to IMF Classifications

According to the International Monetary Fund (IMF), **Sovereign Wealth Funds (SWFs)** can be classified based on their investment objectives as follows:

1. **Stabilization Funds** – aimed at shielding the national budget and economy from external shocks and commodity price volatility.
2. **Savings Funds** – intended for future generations, transforming non-renewable resource wealth into diversified financial portfolios.
3. **Reserve Investment Corporations** – which manage a portion of a country's foreign reserves to enhance returns.
4. **Development Funds** – supporting socio-economic infrastructure or industrial policy goals.
5. **Pension Reserve Funds** – used to finance future pension liabilities not reflected on the government's balance sheet.

Latin America: Overview

- Six operating SWFs: Chile, Mexico, Peru, Colombia, Panama, Guyana.
- Most focus on macro-stabilization, not climate or development.



Chile and Peru

- Chile’s two funds (ESSF, PRF) total $14B in 2018.
- But now, it is 3,5B in 2024

(fiscal restrictions, pandemic)

IMF recommends 5% of GDP (now it is 1,2% of GDP)

- Peru’s FEF supports infrastructure.
- Conservative strategies, low returns, limited green focus.

Chile's Sovereign Wealth Funds

Chile operates two sovereign wealth funds, both established under the **Fiscal Responsibility Law (Law 20.128)** in 2006:

1. Economic and Social Stabilization Fund (FEES)

- **Classification:** Stabilization Fund
- **Purpose:** To cover infrequent and large-scale fiscal deficits, particularly during major economic crises or when public debt levels are high.
- **Investment Profile:** Conservative and highly liquid instruments, such as:
  - Nominal and inflation-indexed sovereign bonds
  - U.S. agency mortgage-backed securities (MBS)
- **Reason for Liquidity Focus:** Funds must be readily available for immediate fiscal use during economic downturns.

Key Events:

- **2008 Global Financial Crisis:** US$9.2 billion withdrawn
- **COVID-19 Pandemic:** Over US$10 billion withdrawn
- **2021 Withdrawal:** Approximately US$6.2 billion to support pandemic recovery

2. Pension Reserve Fund (FRP)

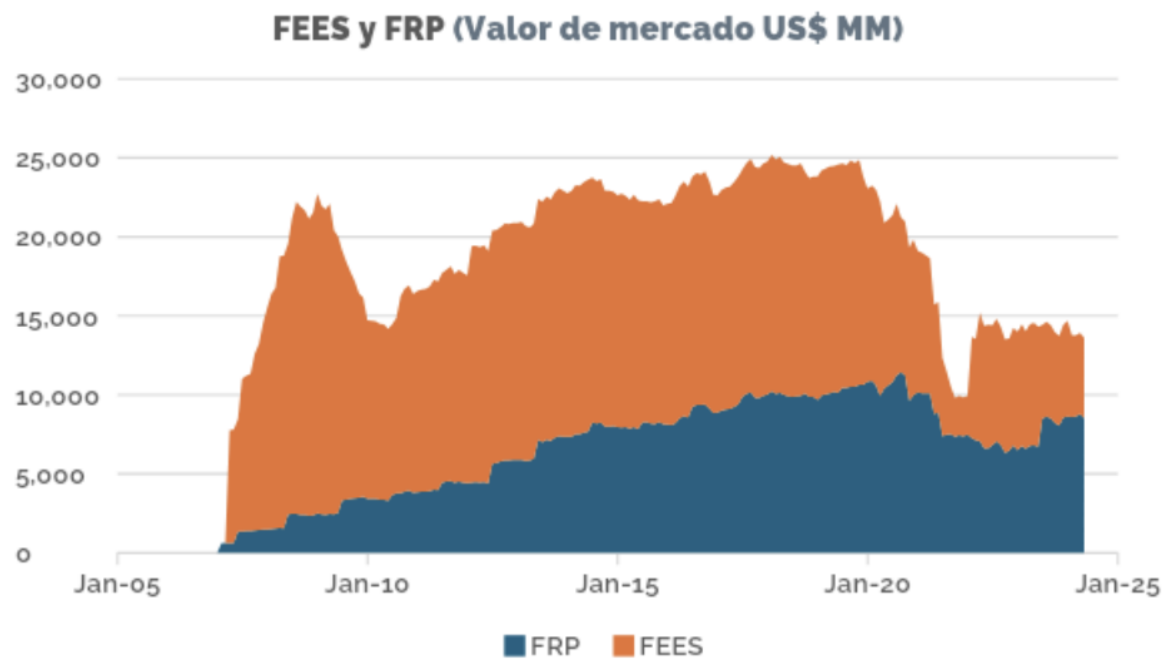
- **Classification:** Pension Reserve Fund
- **Purpose:** To help finance future pension liabilities and secure the long-term sustainability of Chile's pension system.
- **Current Role:** Supports the fiscal cost of:
  - The **Universal Guaranteed Pension (PGU)**
  - The **basic disability pension**
  - The **solidarity pension contributions**

- **Investment Profile:** Globally diversified, mixed-asset portfolio, including:
  - Fixed income
  - Equities (higher risk tolerance than FEES)

- **Objective:** Maximize long-term returns given the long-term nature of pension liabilities.

Evolution of SWFs - Chile

SWFs and the Structural Fiscal Surplus or Structural Fiscal Deficit



Conclusions - Chile

Chile's SWFs do not currently have an explicit climate focus

Their governance structure and investment strategies could evolve to incorporate environmental sustainability.

The FRP's global equity exposure could integrate ESG criteria or align partially with climate-friendly benchmarks.

Likewise, diversifying FEES assets into green bonds could maintain liquidity while supporting low-carbon infrastructure.

Missed Opportunities in LATAM

- Latin American SWFs lack investment in climate mitigation in a significant way.
- There is potential for co-investments in renewable infrastructure.

Policy Recommendations and Strategic Actions for SWFs

- Incorporate Climate Goals into SWF Mandates (AGENCY COST)
- SWF managers will have the clarity and authority to pursue green investments.
- Empowering the fund to push portfolio companies to decarbonize
- Set Portfolio Emissions Reduction Targets: SWFs should establish clear portfolio decarbonization targets and timelines
- While SWFs differ in portfolio composition, even oil-funded ones can start with modest goals (e.g., exclude coal power)
- Scale Up Green Investment Allocation: It is imperative for SWFs to earmark a larger portion of new investments for climate-related sectors
- Gradually divest or reduce exposure to high-carbon investments
- **AMONG OTHERS**

Final Thoughts

SWFs can play a key role in filling the green investment gap.

But alignment with climate goals remains insufficient.

SWFs have the power to support the green transition, but they're not fully using it yet.

However, Dilemmas emerge (I)

Trump Trade War: trend to higher fiscal déficit? Finance the climate change? Trade-off

Fiscal restrictions in developing and developed countries

Reduction of resources managed by SWFs due to financing of fiscal deficit.

However, Dilemmas emerge (II)

Climate Change affects the State´s equity and the equity of companies (shifting the assessment models of fair value of assets) / cangy value, risks and collateral

Climate change therefore, is affecting the taxation of the economy (less productivity in the agriculture, less worth of properties, among others)

The sovereign funds are invested in T-Bills (low rate of returns, but safe, except in global crisis). Conservative. Just fiscal stabilization.

Return on education: more than 7%-8% a year.

Education certificates of children are not "depreciated" por global crisis. Investments in T-Bill if are depreciated by global crisis.

The same reasoning for investment in climate change

Call to Action

- SWFs must realign portfolios toward a low-carbon economy.

- Responsible investing means leaving fossil fuels behind.