Financing the Nigerian Blue Economy

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Objective

What funding options exist to realistically fund a sustainable ocean economy (SOE) in Nigeria?

Outline

- Nigeria's Resource Trap
- Rationale for Blue Economy
- What sectors require blue financing?
- Innovative Blue Financing
- Blue economy financial instruments

The Resource Trap

- Nigeria has a huge infrastructural deficit and requires up to $3 trillion over the next 30 years to bridge this gap.
- In perspective, the Federal government would need to spend the entire 2021 budget of ₦13.58 trillion continuously over the next century on capital expenditure to meet the target.
- The fact that less than ₦3 trillion was appropriated for capital expenditure reflects the urgency to increase infrastructure spending. Sadly, the dire fiscal position of the Federal Government of Nigeria (FGN) has left little room for investments in infrastructure, a vital expenditure for an emerging economy like Nigeria. With a dwindling revenue base projected at ₦8 trillion and a widening budget deficit of over ₦6 trillion, according to the 2021 budget, conversations around optimizing the country's underutilized assets are germane.
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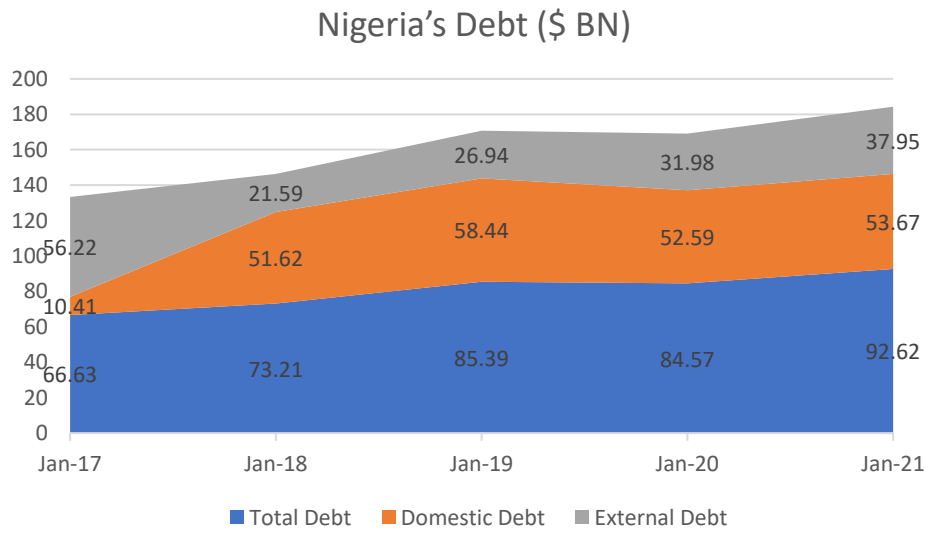
Debt Profile

- Debt Statistics (Sept '21)
  - Total: $92.62 bn
  - Debt/GDP: 19.91% (Threshold – 40%)
  - Debt/Export: 119.8%



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State of the Economy

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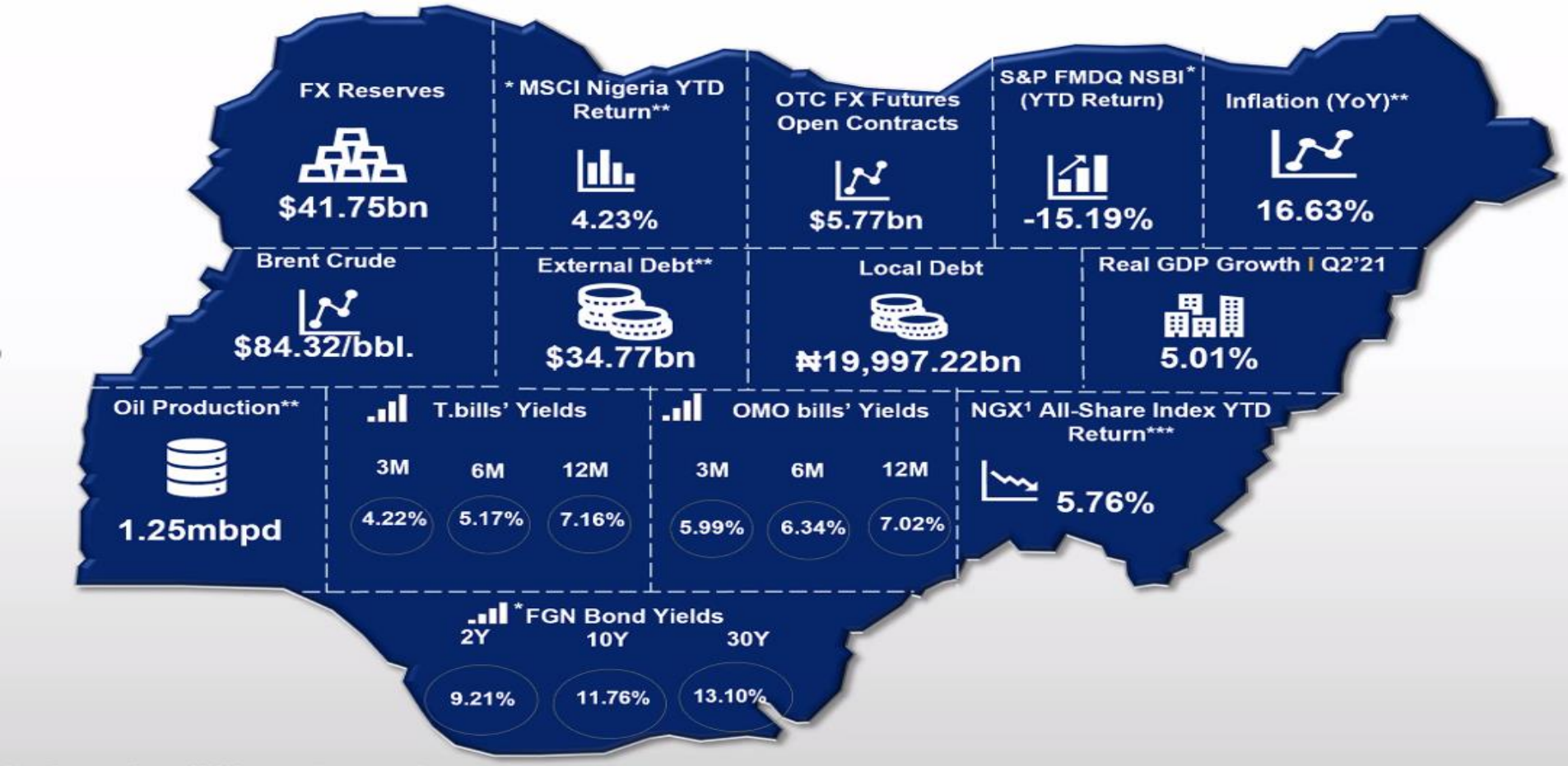

Note: *Data as at, October 29, 2021, unless otherwise stated*
MSCI – Morgan Stanley Composite Index; **NSBI – Nigerian Sovereign Bond Index; FGN – Federal Government of Nigeria*
M – Month; 1 – Nigerian Exchange Limited; 2 – as at Q2 2021
*** Data as at September 30, 2021*
**** Data as at October 27, 2021*

Sources: *Bloomberg, CBN, FMDQ Exchange, MSCI, National Bureau of Statistics, Nigerian Exchange (NGX), Organisation of Petroleum Exporting Countries*

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The Misery Country

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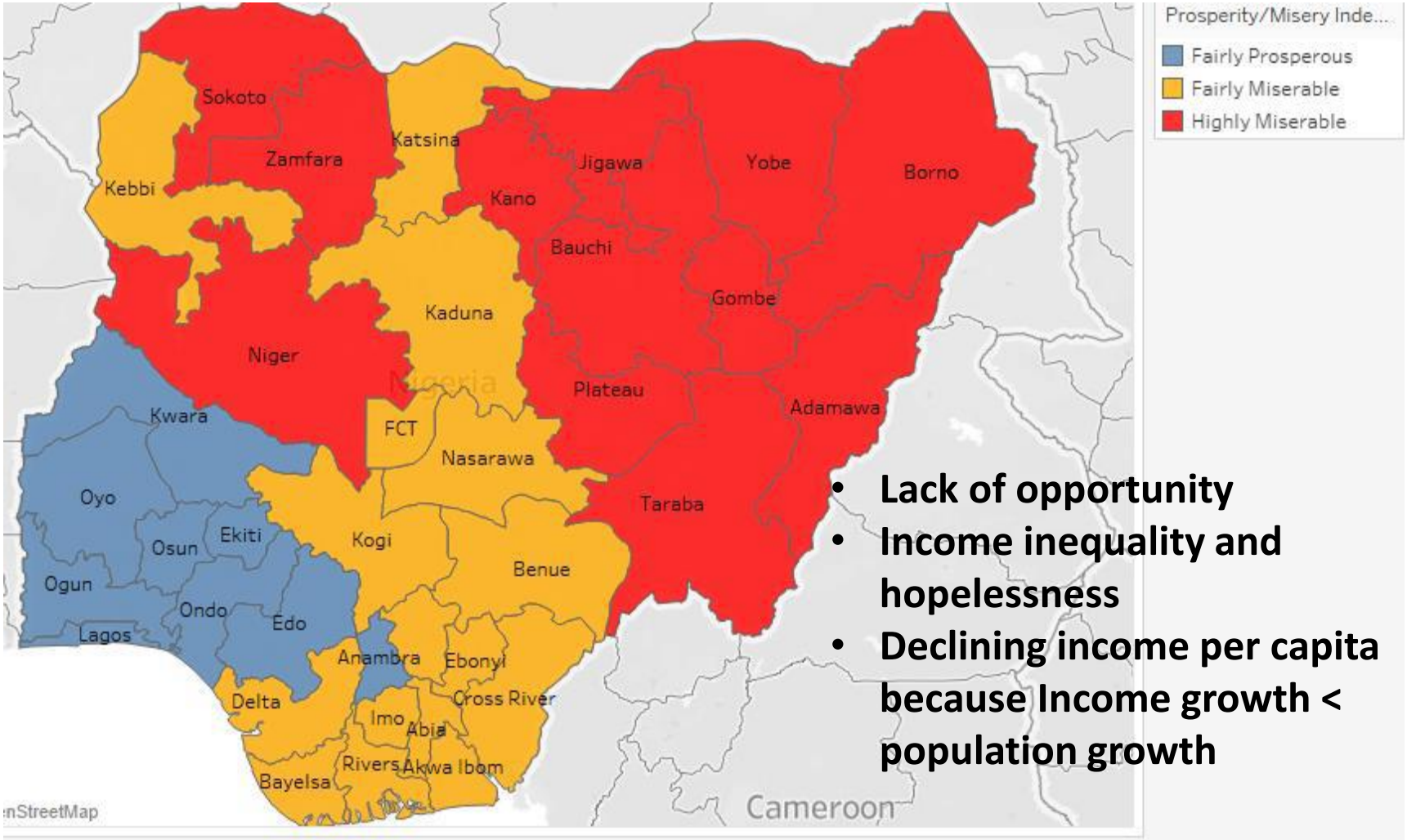


- **Lack of opportunity**
- **Income inequality and hopelessness**
- **Declining income per capita because Income growth < population growth**

Rationale for Blue Finance

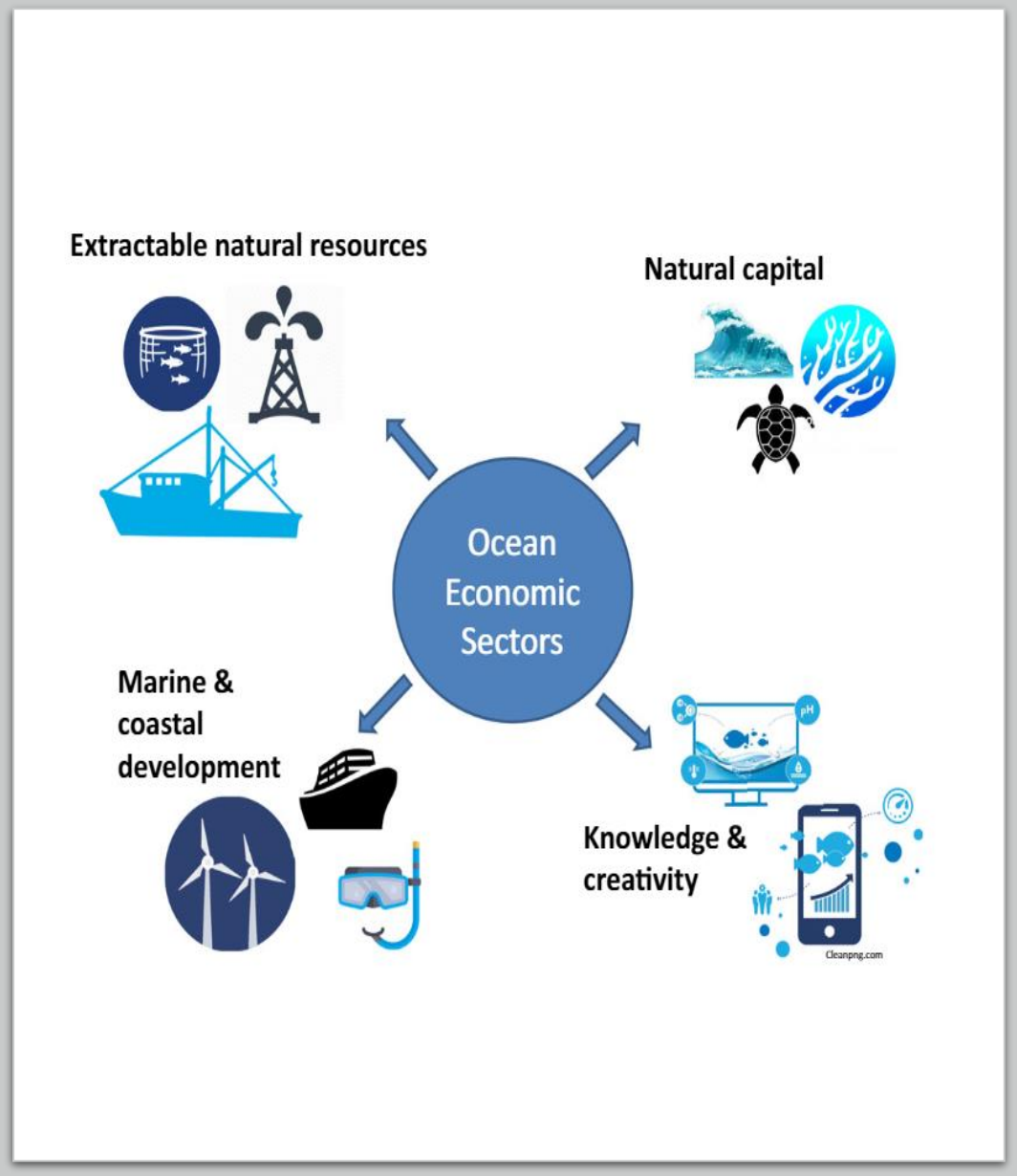
- Unsustainable use of oceans and their resources has led to the depletion of fish stocks and biodiversity, and increased pollution and habitat damage, among other negative impacts.

Why is Ocean (Blue) Finance Needed?

- Blue finance can play a vital role in supporting sustainable development of the ocean economy by directing investments to activities, policies and actions that minimize ocean risks and maximize social equity and environmental sustainability.
- Some of the needed investments in a sustainable ocean economy (SOE) are likely to generate competitive market returns and thus able to attract private finance, whereas other investments area capable of generating positive but below market returns. For these investments to be attractive to the private sector, the viability gap must be met by some form of public or philanthropic co-financing or blended finance.

What Sectors Require Blue Financing?

- Financing a SOE involves investments in the various mature and emerging sectors that make up the ocean economy



Examples of Established and Emerging Sectors in the Blue Economy

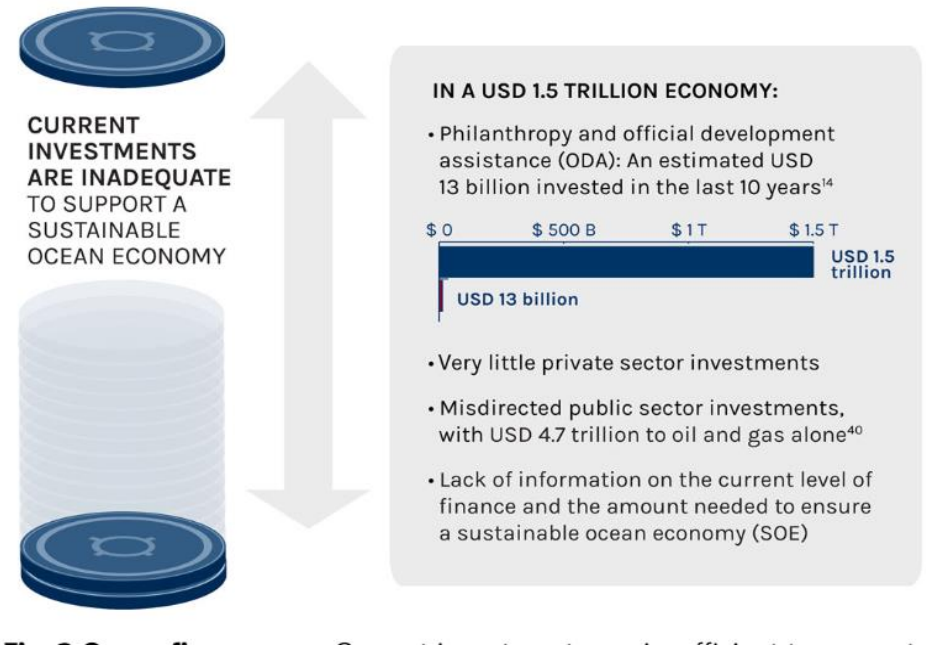
Established Sectors	Emerging Sectors
Capture fisheries	Marine aquaculture
Seafood processing	Deep and ultra-deep water oil and gas
Shipping	Offshore wind energy
Ports	Ocean renewable energy
Shipbuilding and repair	Marine and seabed mining
Offshore oil and gas	Maritime safety and surveillance
Marine manufacturing and construction	Marine biotechnology
Maritime and coastal tourism	High-tech marine products and services
Marine business services	
Marine research and development and education	
Dredging	
Source: OECD	

Examples of types and scales of investment in the four ocean sectors

Ocean Sector type	Example Investments
Natural Capital: Development and investment flows area directed to the natural assets that underpin ecosystem services, e.g. conservation and restoration of natural systems, and do not involve the creation of built structures. Perceived investment risks in this sector are relatively high as natural capital is not a conventional investment	Natural infrastructure: Proposed restoration of Louisiana wetland ecosystems for flood defense (Project Scale: <US100 million)
Extractable natural resource: Involves human activities that remove or produce a physical good from the ocean. These sectors, such as fisheries, have received extensive investment for many years. As such, sustainable development of these sectors involve redirecting existing investment towards sustainable pathways, while simultaneously generating new sources of capital.	Wild-caught marine fisheries (small scale): Development of aggregated fish processing site, sourcing from multiple small-scale fisheries (Project scale: Us$1 million). Sustainable aquaculture: Indian Ocean fish farm expansion (Project Scale: <$10 million Marine bioprospecting: Early-stage investment in bioprospecting firm (Project scale: <$10 million
Marine and Coastal development: Creation of new, fixed, physical assets at sea and along the coast. These include sectors, such as shipping, that occur physically on the ocean (e.g. maritime transportation, ocean-based renewable energy), or land-based sectors that have a clear maritime impact, e.g. marine ecotourism, port, harbour, and boat construction, waste management. Sectors such as shipping have been invested in for many years, and will require redirecting capital towards sustainability, whereas newer sectors such as marine ecotourism will need new sources of capital.	Nature-based infrastructure: Public investment in nature-based generation of new beaches, North Sea Coast (Project Scale: < $100 m) Maritime transportation: Fleet-wide vessel retrofitting for fuel efficiency and lower emissions (Project Scale: > $100 m)
Knowledge and creative sector: includes academic, non-academic, professional, and public sector services that conduct research and development activities to create new knowledge and innovation for a sustainable ocean economy. Some of these emerging sectors, e.g. ocean technology development, may be perceived as high risk, and require new sources of high-risk high-reward capital.	Academic research: Ongoing establishment of a new Blue economy institute at the University of Nairobi (Project Scale: > $100 m).

Why the Blue Financing Gap?

- Non excludable but shareable, open access resource that makes governance challenging
- Market failure
- Slow progress in understanding how to value the ocean.[1]
- Slow adoption of science-based integrated ocean planning other instruments that could correct market failures and incentivize conservation behaviour and compliance.
- Low capacity for ocean policy making
- Huge initial public sector investment (UNEP/GEF's Catalyzing Ocean Finance estimates that reducing and, in some cases, arresting the degradation of coastal and ocean resources would require an initial public investment of about US$5 billion over the next 10-20 years.)
- Slow development and uptake of risk mitigation tools like political risk insurance.
- Lack of seed investment for deal origination and investment pre-feasibility work necessary to structure bankable blue projects.



1. Recent GEF estimate indicates that the ocean generates at least $200 billion per year.

Innovative Financing for Blue Economy

- Innovative finance describes a set of financial solutions that create scalable and effective ways of channeling private money, from global financial markets towards solving pressing global problems (Madsbjerg, 2016).
- Private funders require clear structures, predictable cash flows and transparent ways to assess risks and returns.
- Innovative finance approach identifies avenues to deliver such clarity and is deployed in development finance and climate finance.

Blue (Ocean) Finance

- Ocean finance deals with the demand for, and supply of financial capital for investing in ocean-related economic activities and governance. For this to be sustainable, it must be adequate, and sustainability oriented in both use and governance of the ocean.
- Key elements include generating, investing, aligning, and accounting for financial capital which encompasses both local, national, and international level financial instruments that are provided by, and/or accessed by individuals, public and private companies, governments, and other non-governmental/inter-governmental institutions.

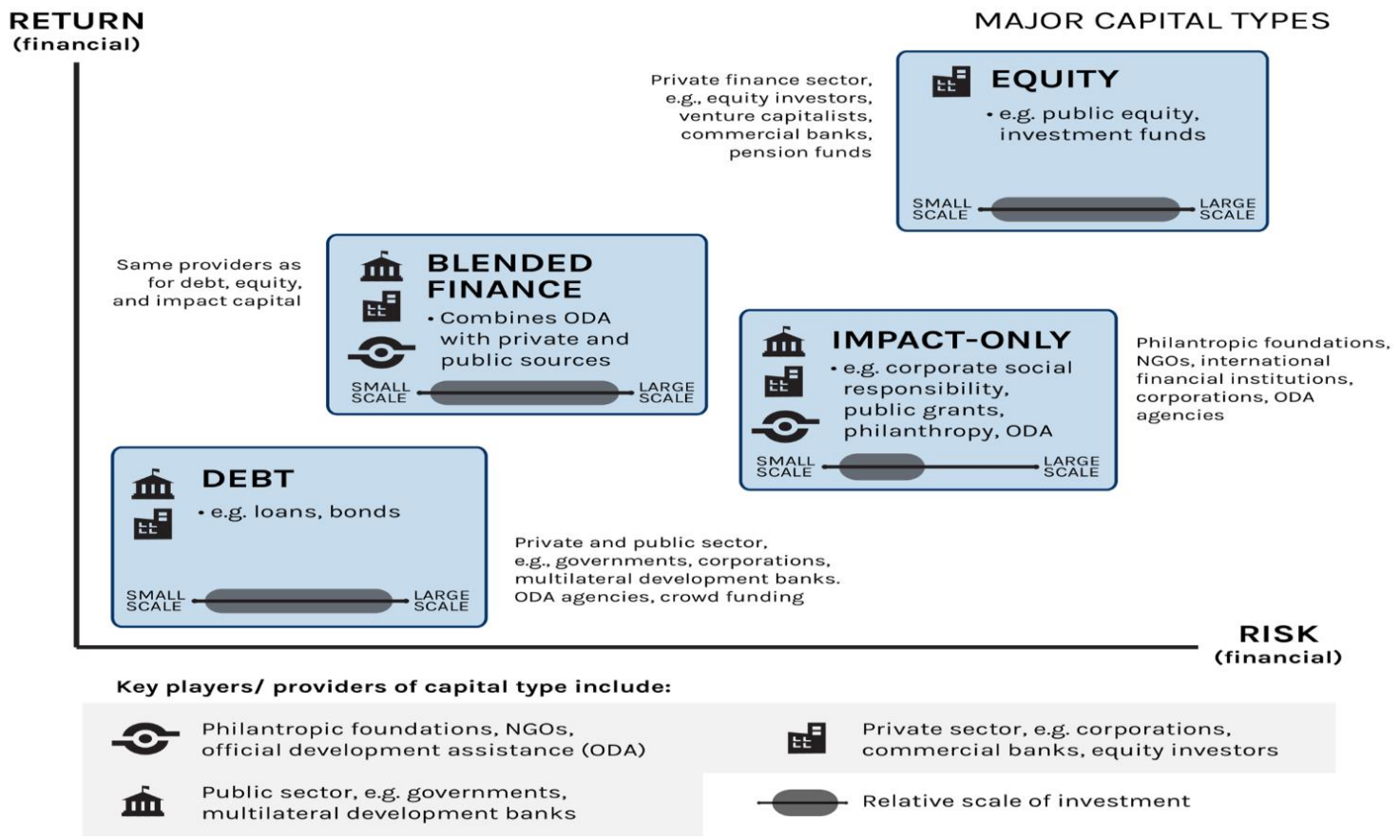
Blue (Ocean) Finance

- Firms may use capital to finance development of more sustainable products, technology, and gain access to new sustainability friendly-markets.
- Governments and non-governmental organizations (NGOs) may use funds for implementing conservation policies or investing in strengthening the enabling environment for the private sector to finance and insure sustainable ocean economic activities.
- Individuals can invest in public equity, i.e. buying shares in publicly traded companies that partake in environmental standards and principles. The more established ocean economic sectors like shipping, tourism, industrial fishing, and energy, can and are often publicly traded to raise funds.

Blue Economy Financial Instruments

- Financial instruments used to finance a sustainable ocean economy, or as a basis for generating new financial capital for promoting sustainable ocean resource use include traditional loans and grants, carbon markets, and insurance instruments.
- The deployment of these different capital types depends on the expected returns from the investment, which in turn, depends on the risk-return equations faced by investors as in the next slide.

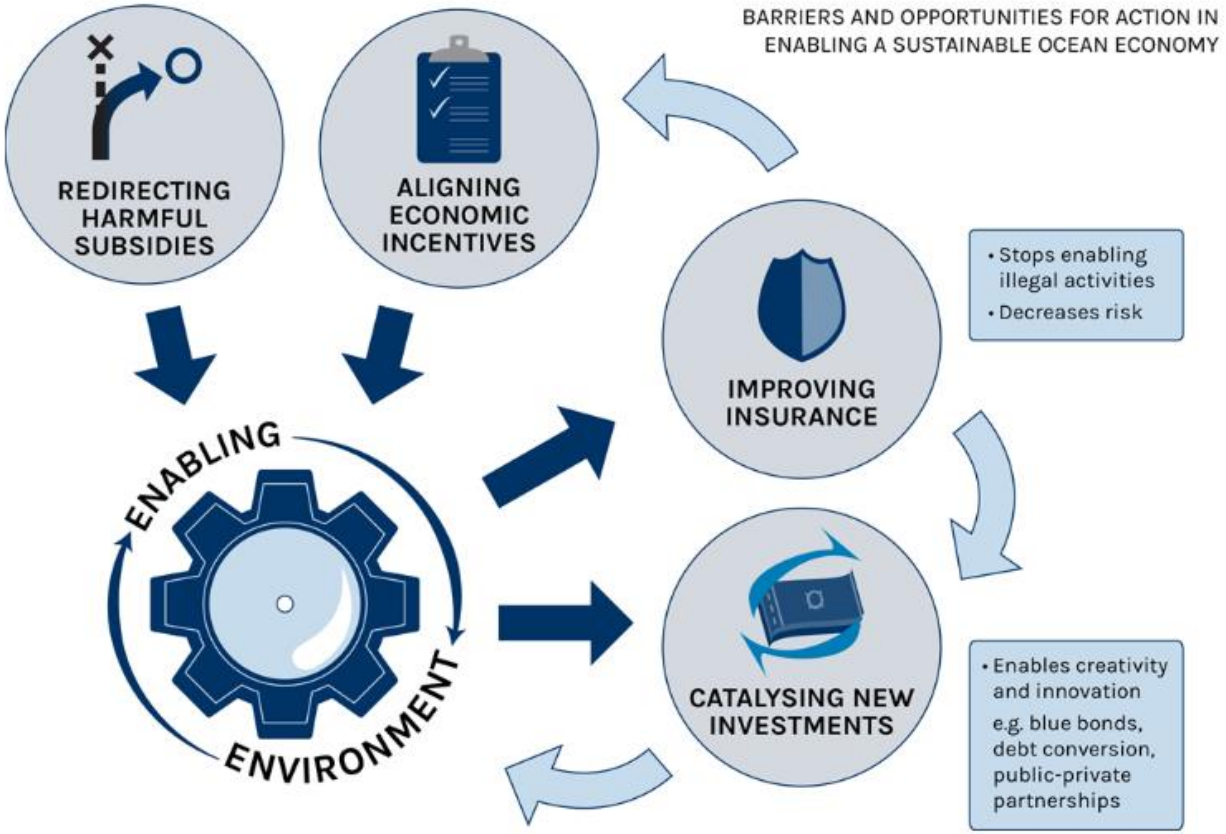
Characteristics of major blue finance capital types, level of risk vs. returns, and they key providers.



Major Capital Types and Key Providers

Capital type	Description	Key players/providers
Impact-only		
Corpoate Social Responsibility investment Public grants Philanthropic grants Public financing Official development assistance	This is usually long term, but small scale in comparison to larger types of commercial finance. Expected rates of return are usually below market rates	Philantropic foundations, NGOs, international financial institutions, corporations, official development assistance (ODA) agencies
Debt		
Loans Bonds	Low-risk, low-reward types of capital that offer low or market rates of return. They are variable in scale, ranging from micro-finance to large-scale corporate loans	Private and public sector, e.g. governments, corporations, multilateral development banks. ODA agencies, crowd funding
Equity		
Public equity Equity investment (investment funds)	Equity involves taking an ownership stake in an investment. Some types of equity are high risk, high-reward and can offer greater than market return. The scale of equity is very variable, ranging from micro-finance to multi-million dollar investments	Private finance secctor, e.g. equity investors, venture capitalists, commercial banks, pension funds
Blended finance	Combines official development assistance with other private or public resources, in order to 'leverage' additional funds from other actors. It generally provides below market rates of return	Same providers as for debt, equity, and impact capital
Subsidies	Financial aid, commonly provided by governments, to an economic sector in order to promote economic and social policy	Public sector (governments)

Barriers to Financing SOE



Enabling Environment

- Effective and stable regulatory and policy environments to attract investment and funding are lacking.
- Information and knowledge about the ocean and its economic, social and, environmental value is missing or inadequate but is now growing.[2]
- Market distortions undermine SOE financing. Unsustainable activities such as fossil fuel and non-green fishing still receive huge subsidies and crowd out SOE financing
- Beneficiaries and impactors of the ocean do not consistently nor adequately pay for access, use, or management of ocean resources.
- Access to ocean finance and resources is limited and not equitably distributed.

It is now estimated that that global gross marine product (GMP) is about 2.5 trillion USD.
If the oceans were a current, it would be the 7th largest economy in the world.

Finance and Investment

- There is a lack of high quality, investible projects with appropriate deal size and risk-return ratios to match available capital.
- While there is no shortage of investment capital available globally, the immediate lack of high quality investible projects that would contribute to a SOE is a substantial challenge. Many ocean interventions require grant capital that generate very low, or no financial returns at all.
- Those that do benefit the ocean and generate some financial returns are either too small to be commercially viable once the costs of due diligence are considered or too high in risk-return profile due to the relatively more unpredictable conditions that ocean economic sectors operate under compared to those on land.

Swimsol Case Study

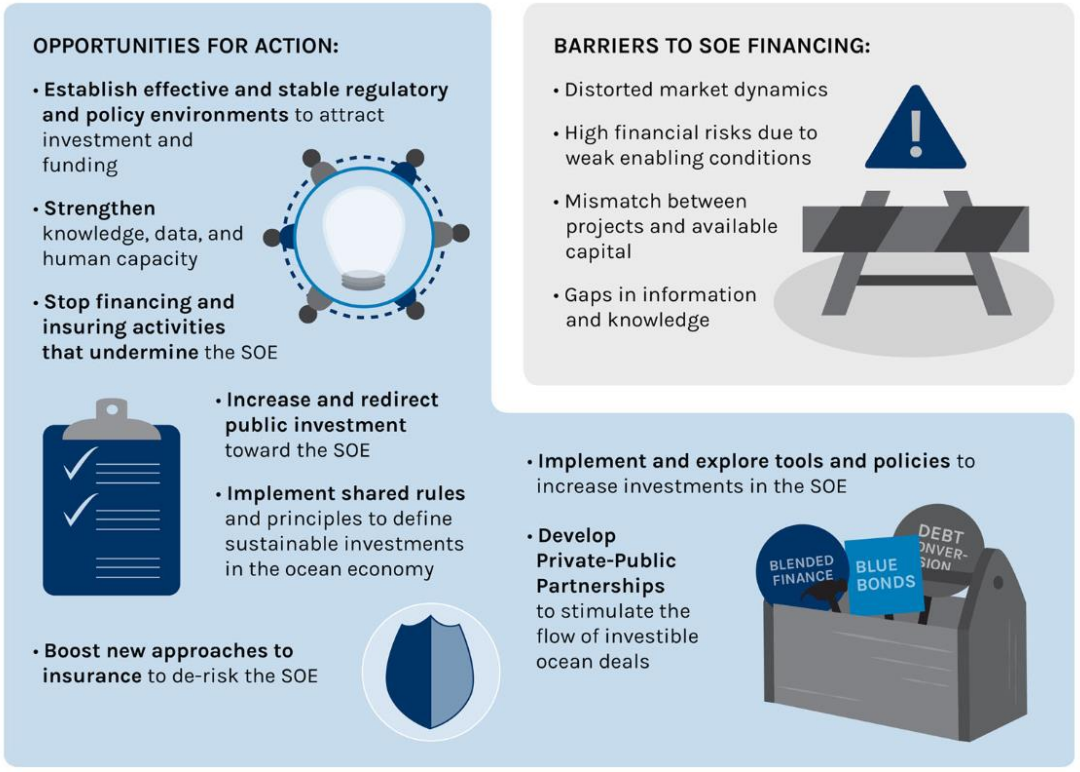
Swimsol, a European based company, set up the first floating solar panels in the Maldives. It achieves a 3-8% rate of return from its investment by engaging in a long-term power purchase agreement with its client, usually a hotel or utility company. Both parties benefit from the agreement as Swimsol's solar power is 10-50% cheaper compared to its client's current power generation costs, which is based on diesel generators.

Insurance and Risk Mitigation

- Overcoming the higher risk profile associated with the ocean sector will require addressing a number of challenging enabling conditions in order to attract investments and new forms of finance.
  - Human capital constraints
  - Higher risks of operation
  - Structural challenges related to the ocean that make scale and replication more complex than in more familiar, terrestrial sectors (related to tenure, ownership, monitoring, and enforcement).
- While marine insurance is a strategy for managing commercial risks for shipping, aquaculture, fishing, and other offshore industrial activities, it does not cover all risk to the ocean economy especially, those connected with blue carbon and nature-based infrastructure investments.

Addressing the Barriers to Financing SOE

Barriers and Opportunities for SOE Financing



- Policy reforms and creation of regulations that strengthen the sustainable management of natural capital and that facilitate and incentivize social enterprise and new forms of capital.
- This might include policies that secure tenure and establish robust enforcement mechanisms in the fishing sector, or that support technology transfer and incentivize renewable energy.
- Invest in data infrastructure to increase transparency, grow knowledge, and build effective human capital.
- Correct market distortions through taxation, pricing services and re-purposing of harmful subsidies, fees and taxes) and non-fiscal (tradeable permits and social norms) incentives should be deployed to ensure that the effects of negative externality are eliminated while those of positive externality are promoted.

Enabling Environment

Conclusion

- Innovative financing tools – sustainability bonds which are debt securities that can be listed on a social stock exchange
- Use Green/Blues/Climate bonds that meet investment criteria and accountability requirements (e.g. Green Bond Principles, ESG criteria) and certification to qualify for such labels and ensure the integrity of markets in the investment community (the Climate Bonds Initiative www.climatebonds.net has a number of sector criteria, including for marine energy and water utilities.
- Develop PPPs to stimulate the flow of investible ocean deals needed to overcome the initial short-term capital costs required for investments.
- Pension funds, SWFs and large institutional investors need to be partners in this effort.