

# **5**

## **How development co-operation can help re-orient private finance and investments towards a more sustainable ocean economy**

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This chapter focuses on how development co-operation can support scaling up private finance for sustainable ocean economies and scale down and re-orient finance that now flows to ocean practices and activities that are harmful and unsustainable. It starts by quantifying the private finance mobilised for the sustainable ocean economy by official development assistance through leveraging instruments such as guarantees, co-financing schemes, etc. It then identifies a range of new financial instruments – including blue bonds, debt-for-nature swaps, new blue carbon schemes and ocean risks management tools – developed with the support of the development co-operation community. It discusses the current market size of these new instruments, as well as main challenges and opportunities for replicating them and scaling them up. The chapter closes with a set of suggestions for re-focusing financial flows away from unsustainable ocean activities and streamline investment sustainability.

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## The need to increase resources goes hand-in-hand with the need to re-orient private finance away from harmful activities

The systemic, transformational and urgent changes needed to achieve sustainable ocean economies require action by all actors, public and private. The private sector is essential to this transition – both for increasing the scale of sustainable investments for healthy and productive oceans and for crafting new, more environmentally and socially sustainable business models and products in ocean-based sectors. But this change will not happen on its own. Public policies and financing need to be proactive (Kattel et al., 2018<sup>[1]</sup>), consistent and commensurate with the need to align private finance to the sustainability imperative of the global ocean economy, and actively co-creating markets and tilting the playing field in the direction of sustainability for shared prosperity.

In the same vein, development co-operation can be used to directly fund sustainable investments (as explored in Chapter 4) and to help re-direct private finance towards sustainable businesses and activities. Development co-operation can help increase the availability of finance for sustainable investments through support towards innovative financial instruments and other leveraging instruments that can mobilise a broader array of public and private resources for the sustainable ocean economy. However, these flows may be a drop in the ocean without greater efforts to curb and re-orient the financial flows currently fuelling destructive practices that often have the largest impacts on developing countries' fish populations, coasts and tourism, food security, and livelihoods. Therefore, development partners have a critical role in supporting policies, regulations and financial levers to divert finance from harmful and unsustainable practices and to ensure that sustainability is integrated in traditional financial services and investments, in financial markets (e.g. stocks and bonds), and in credit markets (e.g. loans or bonds).

Blended finance can help mobilise additional finance towards sustainable ocean economies in developing countries. But not all blended finance is quality blended finance. The OECD posits that the “quality” of blended finance means achieving the core mission of the Sustainable Development Goals to leave no one behind (OECD, 2018<sup>[2]</sup>). Therefore, a proven development contribution is essential. Also critical is the temporal dimension. Blended finance should aim to change the market and achieve scale and so, rather than being a permanent feature in private investments, it should be a time-bound intervention that is part of a broad, ambitious and strategic approach for mobilising additional resources through ODA. Beyond attracting commercial capital in a transaction, the ambition of blended finance is to be catalytic, i.e. to spur the replication of similar projects via demonstration and build sustainable markets and products.

This chapter identifies and discusses the range of ODA leveraging financial instruments – grants, standard loans and guarantees, and syndicated loans – used to mobilise private finance for sustainable ocean economies and quantifies how much private finance has been mobilised through these instruments. It reviews the range of new financial instruments being developed with support from development co-operation for mobilising private capital for sustainable ocean economies, including blue bonds, debt-for-ocean swaps, new blue carbon schemes, and ocean risks management tools such as marine and coral reef insurance. The chapter analyses the current market size of these instruments and discusses challenges and opportunities for replicating them and scaling them up. Finally, the chapter explores how development partners can support the regulations and policy levers that are needed to phase out financing for harmful practices and redirect financing towards sustainable uses while contributing to international policy coherence for sustainable development.

## Quantifying private finance mobilised for the sustainable ocean economy through development finance instruments

In the 2013-17 period<sup>1</sup> development finance mobilised a total of USD 2.92 billion of private finance in support of ocean-related projects, equivalent to USD 585 million on average a year. This includes private finance mobilised for ocean-based industries and ecosystems (USD 1.3 billion, or 43%) as well as private finance mobilised for land-based activities that reduce negative impacts on ocean, such as waste management, sanitation and water treatment (USD 1.7 billion, or 57%) (Figure 5.2). These flows fluctuated significantly through the period and overall, point to a slight downward trend (-11% over the period).

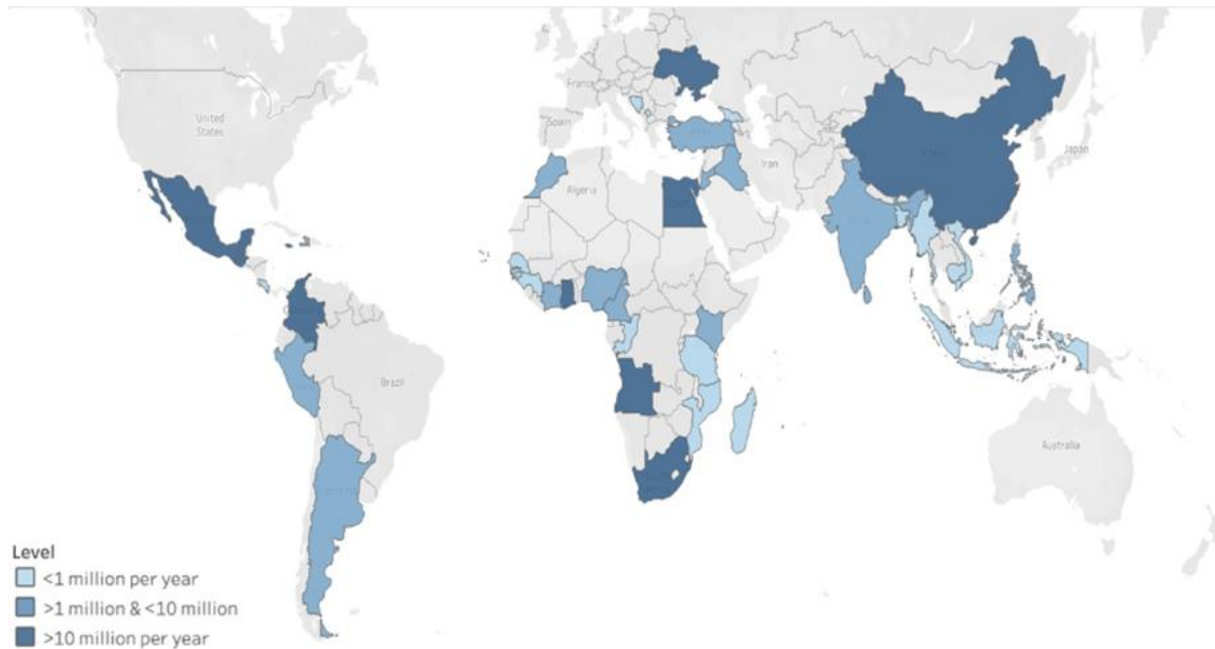
To mobilise private finance for the ocean, development partners employed a number of leveraging official development assistance (ODA) instruments, including standard grants and loans, guarantees, direct investments in companies (i.e. equity), collective investment vehicles, credit lines, syndicated loans, and simple co-financing schemes. Some of these instruments were used to improve the viability of commercial investments and to make projects more attractive by de-risking investments or helping to structure returns through new and emerging blended finance arrangements. Development partners also often provide technical assistance during the project preparation phase, crucial for the overall success of the project.

Providers of development co-operation used these instruments in different contexts and for different ends, showing that these lend themselves to different purposes and that they are not interchangeable. For land-based activities, development finance was able to mobilise the greatest volumes of private finance using guarantees, chiefly employed in support of water and sanitation interventions. In the case of ocean-based industries, the largest amounts of private finance were mobilised through direct investments in companies and special purpose vehicles (SPVs) as well as through syndicated loans. These instruments were used primarily for water transport projects, such as ports. In the fisheries sector, 70% of private finance was mobilised through guarantees, while direct investments and co-financing schemes mobilised smaller amounts (26% and 4%, respectively). For coastal and marine protection, private finance was exclusively mobilised through co-financing schemes.

Globally, upper middle-income countries (UMICs) benefited the most in 2013-17 from the leveraging effect of development finance instruments, receiving 39% of the overall amounts mobilised, mainly in South America (Figure 5.2). However, the picture is different when land-based activities and projects in ocean-based industries and conservation are separated out. For land-based activities alone, the largest volumes of private finance were mobilised in least developed countries (LDCs), primarily through guarantees facilitating water and sanitation projects. Private finance for ocean-based industries and ocean and coastal conservation was mobilised primarily in UMICs, where these investments mainly targeted ocean-based industries (68%), largely for water transport, with the remaining 32% directed to curbing the negative impacts from land-based activities, mainly through investments in sewage and disposal systems.

For LMICs and LDCs, investments in land-based, ocean-related sectors, and particularly for projects on waste management, water supply and sanitation, attracted the vast majority of the mobilised private capital, accounting for 89.8% in LMICs and 99.9% in LDCs. For the two country groups, guarantees were the largest mobilisation tool, 98.8% across LDC countries and 50.5% in LMICs. For LMICs, however, private finance was mobilised through a wider array of financial instruments including direct investments in companies and SPVs, credit lines, resource pooling mechanisms (collective investment vehicles), and simple co-financing arrangements summarises how different leveraging development finance instruments were used to promote the conservation and sustainable use of the ocean across countries. Figure 5.3 provides a summary by leveraging instrument to show how much finance each instrument mobilised, in what countries and for what purposes.

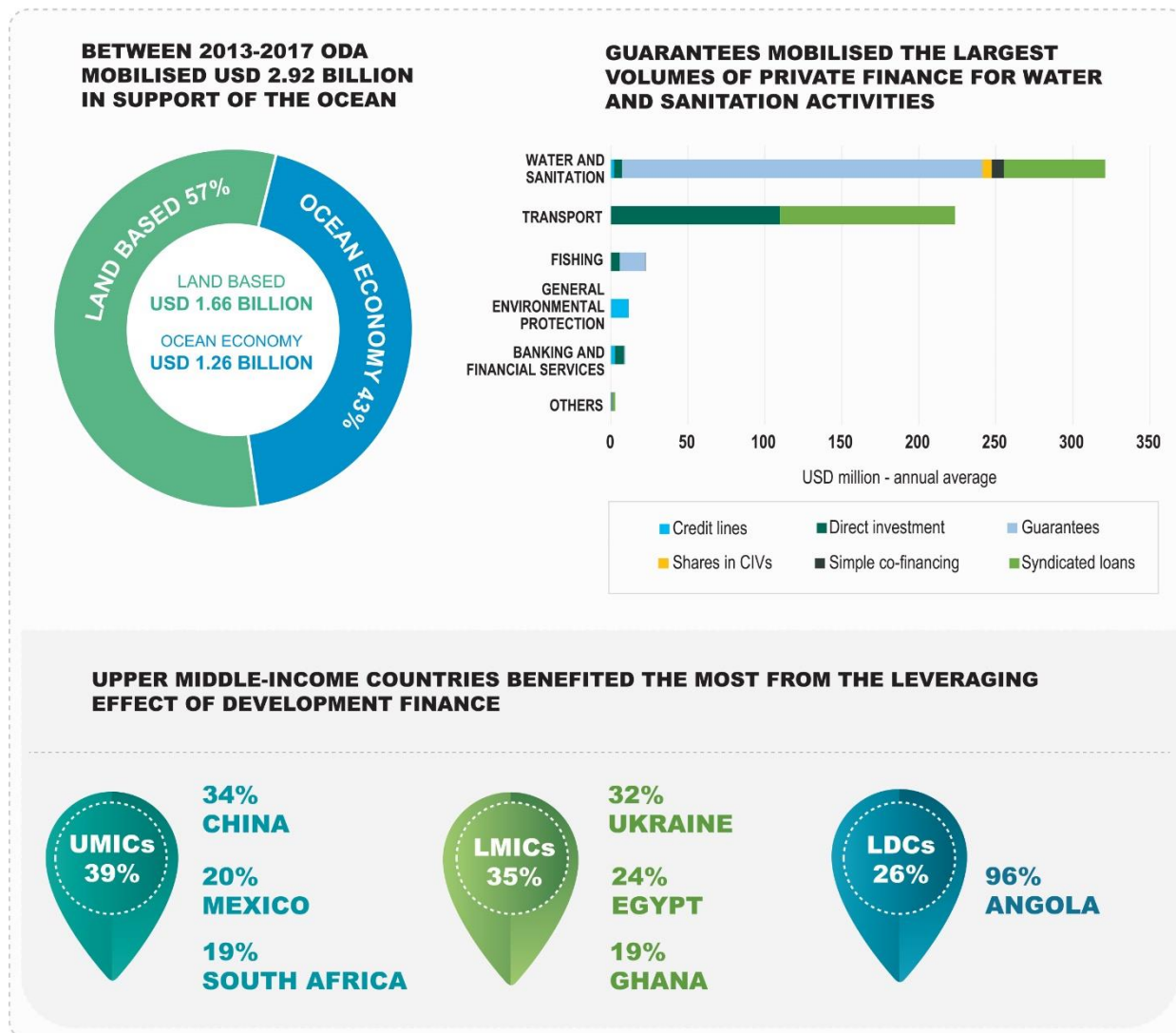
**Figure 5.1. ODA mobilised private finance for the sustainable ocean economy largely in upper-middle income countries**



Source: Authors' calculations based on OECD DAC (2020<sup>[3]</sup>), Amounts mobilised from the private sector for development, <http://www.oecd.org/development/stats/mobilisation.htm>

StatLink  <https://doi.org/10.1787/888934159658>

Figure 5.2. Amounts of private finance mobilised for the ocean through official development assistance










Source: Authors' calculations based on OECD DAC (2020<sub>[3]</sub>), Amounts mobilised from the private sector for development, <http://www.oecd.org/development/stats/mobilisation.htm>


StatLink <https://doi.org/10.1787/888934159677>


**Figure 5.3. Key facts about private finance mobilised for the ocean, by ODA instrument**

Cumulative figures for 2013-17

	Total volume of private finance mobilised (million)	Income groups	Number of transactions	Average size of transaction	Share of private finance mobilised for the ocean economy	Share of private finance mobilised for ocean relevant land based activities	Top sector
<b>Guarantees</b>	USD 1,258.1	LMICs (40%) LDCs (57%), UMICs (3%)	25	USD 50.3 million	7%	93%	
<b>Syndicated Loans</b>	USD 905.3	UMICs (88%), LMICs (11%) LDCs (1%)	12	USD 75.4 million	64%	36%	
<b>Direct Investment</b>	USD 638.2	UMICs (51%) LMICs (48%), LDCs (1%)	31	USD 20 million	96%	4%	
<b>Credit lines</b>	USD 82.6	LMICs (100%)	3	USD 27.5 million	16%	84%	
<b>Cofinancing</b>	USD 42.3	LMICs (47%), LDCs (45%) UMICs (8%)	102	USD 0.1 million	6%	94%	
<b>Share in collective investment vehicles</b>	USD 30.3	LMICs (100%)	3	USD 10 million		100%	

  
Water and sanitation

  
Water transport

  
Ocean related environmental policy

Source: Authors' calculations based on OECD DAC (2020<sub>[3]</sub>), Amounts mobilised from the private sector for development, <http://www.oecd.org/development/stats/mobilisation.htm>

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## Innovative financial instruments for the sustainable ocean economy

In addition to using grants and other established financial instruments to crowd in private finance, development partners are supporting the development of new and innovative financial instruments to attract a broader set of resources for the conservation and sustainable use of the ocean in developing countries. Development partners have supported the creation and implementation of new financial instruments and products in a variety of ways: through technical assistance, by absorbing the costs of the development phase of these new instruments, by supporting the identification of a pipeline of bankable projects, and providing concessional finance to improve the viability and attractiveness of commercial investments by bringing down the risk-adjusted financing rate. The strong leadership and commitment of developing country governments was critical for testing and developing several of these new financial products and approaches, which they saw as opportunities to enhance fiscal space and invest in their ocean resources.

The following sections provide a brief overview of innovative financial instruments and approaches supported by development finance and implemented for financing the conservation and sustainable use of the ocean. They explore the current market size of these new financial instruments, discuss the opportunities and challenges for scaling them up, and highlight how development co-operation providers could support their replication. Innovative financial instruments are clustered in four categories:

- new debt instruments, such as the first sovereign blue bond and the debt-for-ocean swap implemented by the Seychelles
- blue carbon schemes
- risk management tools, such as insurance schemes for marine and coastal resources where donor funding is used to lower the risk premium
- impact investing for the ocean, including through new products and funds such as the Althelia Sustainable Ocean Fund, Encourage Capital and the Meloy Fund.

## **Blue bonds**

### *Current blue bond market*

Blue bonds are a relatively new type of sustainability bonds issued to finance projects relating to the conservation and sustainable use of the ocean and the transition towards a sustainable ocean economy (World Bank, 2018<sup>[4]</sup>). Operating similarly to other debt instruments, blue bonds provide capital to issuers who repay the debt with interest over time. Bond investors are paid a fixed interest rate (coupon) on a fixed schedule and will be returned their initial investment (principal) upon maturity of the bond.

The first blue bond was launched by the government of the Seychelles in October 2018 for USD 15 million with a maturity of 10 years and a coupon (annual interest payment) of 6.5%. In January 2019, the Nordic Investment Bank issued a Swedish kroner (SEK) 2-billion (USD 200 million) blue bond to protect and rehabilitate the Baltic Sea. The proceeds from the Seychelles blue bond are used to support the expansion of marine protected areas, to improve governance of priority fisheries and for the development of the Seychelles' blue economy. Grants and loans for sustainable projects are provided through the Blue Grants Fund and Blue Investment Fund, managed respectively by the Seychelles Conservation and Climate Adaptation Trust (SeyCCAT) and the Development Bank of Seychelles. In its design, the Seychelles blue bond resembles many features of a green bond. However, it was not issued as a green bond, as experts involved in the transaction considered that existing taxonomies of “green projects” do not capture all facets of preserving and protecting marine ecosystems targeted by the blue bond (Roth, Thiele and von Unger, 2019<sup>[5]</sup>). It is true that criteria or definitions of eligible green projects for green bonds mainly revolve around emissions reduction and energy efficiency, while the scope of sustainable ocean-based activities is substantially larger (United Nations Global Compact, 2020<sup>[6]</sup>).

Several green or sustainable bonds also were issued recently that incorporate blue elements. In 2019, the World Bank issued a USD 10-million sustainable development bond, with proceeds focusing on plastic waste reduction in the ocean and the sustainable use of marine resources in developing countries including via scientific research and regulatory reform (Morgan Stanley Institute for Sustainable Investing, 2019<sup>[7]</sup>). In 2017, Fiji was the first developing country to issue a green bond, the Fiji International Finance Corporation Green Bond, comprising elements relating to blue natural capital. The size of this sovereign bond was 100 million Fijian dollars, equivalent to USD 50 million. In March 2018, the government of Indonesia issued the first sovereign Green Sukuk, a green Islamic bond. The issuance attracted conventional, Islamic and green investors and was oversubscribed, signalling the growing demand for sustainable and responsible investment. Proceedings financed a range of projects including the replacement of fossil fuel-derived electricity with solar PV-based batteries for sea navigation facilities such as lighthouses (Indonesia Ministry of Finance, 2019<sup>[8]</sup>). The Climate Bond Initiative also has developed criteria for marine renewable energy to be incorporated in the Climate Bonds Standard and Certification

Scheme, which is a labelling scheme for bonds and loans used globally by bond issuers, governments, investors and the financial markets to prioritise investments that contribute to addressing climate change. The marine renewable energy criteria have been designed to encompass both established and emerging marine renewable energy technologies and can be applied to offshore wind, offshore solar, wave power and tidal power.

Blue bonds are a financing opportunity not only for governments but also for corporations, which could use the blue bond market to leverage resources for investments aligned to the sustainable use of the ocean. While corporate blue bonds are still at the development stage, the United Nations (UN) Global Compact has developed a Blue Note to assess opportunities for using the environmental, social, governance bond market for corporations in search of commercial financing for ocean-related investments. The nine principles defined in the Blue Note identify criteria to ensure ocean health and productivity, ocean governance and engagement, and data and transparency and are a first step towards a taxonomy in this area. Signatory companies commit to being aware of their impact on the ocean, to revise their company strategy accordingly and to disclose their actions (United Nations Global Compact, 2020<sup>[6]</sup>).

### *Opportunities and challenges to scaling up blue bonds*

To investors, blue bonds offer an opportunity to diversify their investment portfolios into products that generate a financial return and deliver environmental and socio-economic benefits linked to the ocean. A bond is a well-known financial instrument to the traditional investor who has not necessarily been active in the conservation or development finance areas and, therefore, it eliminates some of the fears and concerns around trying new or innovative and unproven investments. A bond furthermore comes with the security for investors of an independent credit rating, in a language that investors understand (Fritsch, 2020<sup>[9]</sup>). For issuers, the blue bond helps raise resources with a small interest discount obtained against the commitment to use funds for sustainable ocean-related projects. Blue bonds are therefore attractive financial instruments to both investors and issuers and have the potential to harness capital market resources for marine conservation and sustainable ocean-based activities.

More blue bonds are expected in the coming years as the opportunities from expanding ocean-based industries and the need for building resilience become more apparent (Roth, Thiele and von Unger, 2019<sup>[5]</sup>). Several countries are actively exploring the feasibility of blue bonds, especially small island developing states (SIDS) that have a big stake in a more sustainable ocean economy but where perceived high investment risks and small size of operations significantly constrain investors' appetite. Blue bonds are under consideration by Cabo Verde, Caribbean countries (Caribbean Development Bank, 2018<sup>[10]</sup>) and the Pacific islands through a 'Pacific Ocean Bond (Walsh, 2018<sup>[11]</sup>). Table 5.1 presents an overview of existing and prospective blue bonds as well as bonds with 'blue element'.

The World Bank feasibility study for the issuance of a blue bond in Cabo Verde offers insights on opportunities and challenges that may apply to other countries. In terms of benefits, the study noted that the blue bond would raise the profile of Cabo Verde on the blue economy globally, potentially attracting other sources of financing and partnerships. According to the World Bank, the blue bond also would contribute to building domestic capacities to diversify borrowing sources, a crucial step after Cabo Verde graduated from LDC status and the consequent reduction in its access to concessional lending. While the first sovereign blue bond issued by the Seychelles was strongly focused on sustainable fisheries, the potential exists for investments in a broader range of ocean-based sectors, and the World Bank found that the blue bond of Cabo Verde would contribute to further refining blue bond criteria beyond fisheries.

The feasibility study, however, pointed also to a number of challenges and constraints. For instance, although the blue bond would present credit enhancement features that would lower the cost of a blue bond in comparison to a standard bond through the use of guarantees and other development finance instruments, the bond would still represent a source of financing with a higher interest rate and a shorter maturity than concessional finance. More importantly, the blue bond would further increase the



indebtedness of Cabo Verde, one of the most heavily indebted countries of sub-Saharan Africa. Finally, the World Bank currently has no country programme in Cabo Verde in which to anchor this initiative and, as is the case with other SIDS, Cabo Verde is not a priority country for the development co-operation of several providers. Therefore, the country effectively faces limited access to concessional finance, due to its middle-income status and the high transaction costs associated with providing support to a small country.

Overall, the current interest in issuing blue bonds in various countries suggests they could be a significant source of financing for sustainable ocean economies, but some prerequisites need to be met. These include:

- Countries need a plan. This aspect was crucial to the issuance of the Seychelles blue bond. A plan could be a clear mission-oriented strategy for the sustainable ocean economy based on evidence and adopting a coherent cross-sectoral approach.
- Blue bonds need to be one in an array of financing instruments. Given the current size of blue bonds, they are unlikely to be the main or sole financing instrument for promoting a sustainable ocean economy. Ideally countries would develop a financing strategy aiming to achieve a balanced mix of instruments that takes into consideration the pros and cons of various sources and instruments and maintain the country on a path of debt sustainability.
- A pipeline of blue bond projects is needed. This pipeline of projects needs to be aligned with the national, mission-oriented strategy for the sustainable ocean economy and effectively promote the conservation and sustainable use of the ocean. The development of appropriate projects with identified returns and robust assessments of their positive impacts on marine and coastal ecosystems is identified as a critical gap to date.

*The role of development partners in supporting the scaling up of blue bonds and ensuring they are sustainable*

Support from development co-operation has been key to the emergence of blue bonds, taking several forms. Development co-operation providers extended technical assistance and provided expertise for structuring the financial product. This was critical for the Seychelles Blue Bond, which required sophisticated financial engineering and about 18 months of preparatory work. Support from development co-operation providers also included the provision of concessional finance for credit enhancement. For the Seychelles Blue Bond this consisted of a USD 10-million finance package from the World Bank and the Global Environment Facility (GEF), consisting of a USD 5-million guarantee from the International Bank for Reconstruction and Development (IBRD) and a USD 5-million grant from the GEF. The credit enhancement allowed for a reduction of the price of the bond by partially de-risking the investment for the investors and by reducing the effective interest rate for the Seychelles from 6.5% to 2.8% (World Bank, 2018<sup>[4]</sup>). Too small to be traded on an exchange, the Seychelles Blue Bond was sold in a private placement to three impact investors based in the United States.<sup>2</sup>

Development partners have an important role in further supporting countries to develop and use blue bonds effectively as an innovative financial instrument for the conservation and sustainable use of the ocean. Their contributions can include:

- supporting a clear and coherent strategy for the sustainable ocean economy and a financing plan that blue bonds will be part of
- supporting the development of a pipeline of projects that will help translate the strategy into investments that effectively promote the conservation and sustainable use of the ocean and guard against so-called blue-washing
- contributing to meeting the costs of bonds design and providing technical assistance to enhance domestic capacities to manage complex financial structuring and potential implications, especially

for countries, such as Cabo Verde, that have no or limited experience borrowing in the global capital markets.

**Table 5.1. Overview of blue bonds and other bonds with blue elements**

	Bond	Issuing Institution	Transaction size	Use of proceeds
Blue bonds	Seychelles' Sovereign Blue Bond	Government of Seychelles	USD 15 million	Management of marine protected areas and sustainable fisheries, including the creation of more value for seafood products
	Pacific Ocean Bond	Pacific islands	To be determined	To be determined
Green and sustainable bonds with blue elements	World Bank's Sustainable Development Bond	World Bank	USD 10 million	Plastic waste reduction in oceans sustainable use of marine resources; scientific research; policy and regulatory reform in developing countries
	Fiji Green Bond	Government of Fiji	USD 50 million	Renewable energy; water and energy efficiency; clean transport; wastewater management and sustainable agriculture to reduce fertiliser runoff into the ocean.
	Indonesia Green Sukuk	Government of Indonesia	USD 1.25 billion	Improvement of solid waste management system at city and regional scale; Replacement of aid for sea navigation facilities (e.g. use of renewable energy for lighthouses).

Source: Authors

## **Debt-for-ocean swap**

### *Current debt-for-ocean transactions*

In 2015, the government of Seychelles and its Paris Club<sup>3</sup> creditors implemented a debt-for-nature swap that allowed the country to reduce immediate debt burdens while also increasing resources targeted towards ocean and climate action. Although debt conversion has been used in the past for conservation purposes (Asiedu-Akrofi, 1991<sub>[12]</sub>), the Seychelles debt-for-nature swap was the first to use proceeds for marine conservation and adaptation and the first to include a private philanthropic institution for raising the funds to purchase the sovereign debt (complementing The Nature Conservancy's capital) (Silver and Campbell, 2018<sub>[13]</sub>). The transaction also marks the first time Paris Club creditors have supported a debt buyback designed to benefit the environment, and creditor participation in the agreement is the highest ever achieved in a buyback reached through the Paris Club's market-based window (Convergence, 2017<sub>[14]</sub>).

The debt-for-ocean swap covered a portion of the Seychelles' total debt amounting to USD 20.2 million. The creation of SeyCCAT to be in charge of managing the loan transactions and providing funding for the conservation and adaptation initiatives was a crucial part of the structuring process (Silver and Campbell, 2018<sub>[13]</sub>). SeyCCAT was capitalised by a debt conversion structure put together by The Nature Conservancy comprising USD 5 million in grants and a USD 15.2-million loan from NatureVest. With these resources, SeyCCAT lends the government of Seychelles USD 20.2 million to repay its debt from official creditors at more favourable terms, particularly longer tenors and payments in local currency. In turn, the government issued notes to SeyCCAT committing to pay back USD 15.2 million at a 3% rate over 10 years and USD 6.4 million at a 3% rate over 20 years. SeyCCAT will use the proceeds of these notes to repay the USD 15.2-loan with The Nature Conservancy; fund activities related to marine and coastal conservation

including strategies for ecosystem-based climate adaptation and disaster risk reduction, for a total of USD 5.6 million; and conduct USD 6.6-million capitalisation of the Fund for future programming.

As part of the debt-for-ocean swap, the government of Seychelles has increased its marine protected area to 30% of its territorial waters, and half of this area, equivalent to approximately 2 000 km<sup>2</sup> was defined as a no-take fishing zone. The country will also conduct a marine spatial plan for its entire exclusive economic zone and establish a permanent trust fund for marine conservation and climate adaptation activities (Convergence, 2017<sup>[14]</sup>; The Nature Conservancy, 2020<sup>[15]</sup>).

### *Opportunities and challenges for scaling up debt-for-ocean swaps*

Debt-for-ocean swaps could be a useful tool for highly-indebted countries, especially SIDS with high debt burdens and vast ocean resources to protect and sustainably use. It is no coincidence that Antigua and Barbuda has explored a country-specific debt-for-ocean swap (Fuller et al., 2018<sup>[16]</sup>), as has Grenada, and that proposals for debt-for-ocean swaps of various kinds have been developed for small states and Caribbean SIDS. The World Bank proposed a debt-for-nature and resilience facility for small states; the Commonwealth Secretariat developed a similar proposal for a debt-for climate swap facility for small vulnerable economies (Caribbean Development Bank, 2018<sup>[10]</sup>); and the UN Economic Commission for Latin America and the Caribbean developed a proposal for a mechanism to use climate finance pledges to write down the high debt of Caribbean countries in exchange for investments in climate adaptation and mitigation (UN, 2016<sup>[17]</sup>). Building on the successful experience of the Seychelles, The Nature Conservancy is seeking to finance USD 1-billion of new debt conversions, or blue bonds, around the world.

To date, however, proposals have not translated into new ocean-for-debt swaps or facilities. Overall, debt-for-ocean and debt-for-nature swaps can be fairly complex and lengthy works of financial engineering. They are also often not positively welcomed by development partners on the grounds that they could create perverse incentives and induce moral hazard, favouring the accumulation of debt in view of a later cancellation (IMF, 2016<sup>[18]</sup>). Grenada initially explored a debt-for-ocean swap, but this became a less attractive option due to the improvement in its debt situation following successful debt restructuring efforts.

Convergence (Convergence, 2017<sup>[14]</sup>) points to a number of considerations to take into account for developing debt-for-ocean swaps similar to that of the Seychelles. The study highlights that the strong ownership and leadership of the Government of Seychelles was a critical element for the successful implementation of its debt-for-ocean swap, together with the interest from official creditors willing to sell debt owed by the Seychelles (Convergence, 2017<sup>[14]</sup>). The study points to additional factors that are turned into opportunities for development partner support in the next section.

### *The role of development co-operation in scaling up debt-for-ocean swaps*

Under the Seychelles debt swap mechanism, providers used concessional finance to gradually write down the country's debt stock on the condition that funds otherwise used for debt service payments would be used for climate and ocean investments. To support other countries in structuring debt conversions to enhance financing of their sustainable ocean economies, development co-operation partners can provide the following:

- **Technical assistance:** Debt conversions are complex and require extensive analysis and negotiations. The debt structuring of the Seychelles debt conversion, for instance, took approximately four years.
- **Early funding commitments:** These can have a significant impact on pushing a debt conversion forward. In the case of the Seychelles, an early commitment of USD 1 million by one foundation gave the Seychelles government confidence that there was real funder interest for implementing the debt conversion.

- Creditor consent: Several bilateral development partners are Paris Club creditors, and in the case of the Seychelles, Belgium, France, Italy, Belgium, South Africa and the United Kingdom were among the Paris Club creditors agreeing to the debt conversion.

## **Blue carbon schemes**

### *New carbon schemes approaches: blue carbon schemes*

Because many natural ecosystems have the capacity to act as net carbon sinks, conserving and restoring them has been recognised as an important part of climate change mitigation. The UN Framework Convention on Climate Change (UNFCCC) has adopted policies to allow countries to account for gained and lost carbon emissions through land use change, both by including these emissions in national assessments and by providing mechanisms to fund and incentivise conservation projects to respond to this significant contributing factor of anthropogenic climate change.

More recently, studies have highlighted coastal ecosystems such as mangroves, salt marshes and sea grasses as significant carbon sinks that are able to contribute to climate mitigation. Although these ecosystems make up only 2% of global area, their capacity to sequester carbon dioxide is ten times more effective on a per area basis per year than the capacity of forests (Fourqurean et al., 2012<sup>[19]</sup>) and about twice as effective at storing carbon in their soil and biomass (Murray et al., 2011<sup>[20]</sup>). Restoration of vegetated coastal areas, or coastal blue carbon, contribute to climate change mitigation through increased carbon sequestration and storage of around 0.5% of current global emissions annually (IPCC, 2019<sup>[21]</sup>). Besides carbon sequestration, ocean and coastal ecosystems provide a multitude of other benefits, including storm protection and resilience, water quality, and biodiversity.

Coastal blue carbon ecosystems, however, have degraded at an alarming rate (Pendleton et al., 2012<sup>[22]</sup>): it has been estimated that one third of the totality has been lost over the past decades. Their degradation not only reduces their capacity to store carbon. It actually releases sequestered carbon into the atmosphere. Degradation of blue carbon systems is estimated to cause emissions of between 0.15 and 1.02 billion tonnes of carbon in the atmosphere each year; that is the equivalent of an amount ranging from the annual release from deforestation in the Amazon up to 6 times this annual release (Vanderklift et al., 2019<sup>[23]</sup>). Further, since the 1970s, the ocean has absorbed more than 90% of the excess heat in the climate system as well as excessive CO<sub>2</sub>, resulting in increasing ocean acidification and loss of oxygen, with large environmental and socio-economic consequences (IPCC, 2019<sup>[21]</sup>).

To tackle the negative impacts of blue carbon ecosystems degradation, conservation and restoration projects can be developed to effectively contribute to climate change mitigation in ways that generate new and additional revenue streams for marine and coastal ecosystems. The first coastal blue carbon projects are currently being developed and are testing new approaches, methodologies and financing solutions (Wylie, Sutton-Grier and Moore, 2016<sup>[24]</sup>). Under the policy frameworks and trading allowances schemes between countries created by the UNFCCC, however, credits from coastal blue carbon such as mangroves restoration have hardly been traded (Herr et al., 2018<sup>[25]</sup>). Increasingly, however, stakeholders are turning blue carbon into tradeable assets on voluntary markets, and the international community is evaluating how these systems can be more effectively included in existing policy frameworks, including carbon financing mechanisms such as Reducing Emissions from Deforestation and Forest Degradation (REDD+) and other UNFCCC mechanisms (Herr, Pidgeon and Laffoley, 2012<sup>[26]</sup>).

### *Opportunities and challenges for scaling up blue carbon schemes*

While climate mitigation and ocean-based industries and livelihoods stand to benefit greatly from the conservation and restoration of blue carbon ecosystems, scaling up blue carbon schemes will hinge on addressing some critical challenges and opportunities linked to these schemes. Key opportunities for successful and replicable blue carbon scheme include:

- Incorporating livelihoods aspects: Successful blue carbon projects are those that involve local communities from the very start of the project design and throughout all stages of planning and implementation (Wylie, Sutton-Grier and Moore, 2016<sup>[24]</sup>). These projects incorporate the needs of local communities, identify direct benefits for the community, manage trade-offs and ensure that increased protection in one area does not translate into greater exploitation in another.
- Exploring the potential of blue carbon ecosystems beyond mangroves: Blue carbon projects have so far focused primarily on mangroves, likely because of their abundance in tropical areas where projects have been developed, and because UNFCCC mechanisms, such as REDD+, only include mangrove ecosystems. However, other blue carbon ecosystems, such as marshes and sea grass, present a high rate of carbon sequestration that exceeds that of terrestrial forests. These blue carbon ecosystems could effectively be included in future projects.
- Including carbon stored within the soil: Only few projects account for carbon stored within the soil of blue carbon ecosystems, although this stores 95-99% of total carbon stocks for tidal marshes and sea grasses and 60-80% for mangroves (Murray et al., 2010<sup>[27]</sup>). This suggests that current projects are below their financial potential.
- Incorporating the resilience value of marine and coastal ecosystems besides mitigation value: Coastal wetlands not only contribute to the carbon cycle but also protect coastline by attenuating wave energy and providing protection against storms damage (Spalding et al., 2014<sup>[28]</sup>). Incorporating this value in the design and implementation of the blue carbon would increase the total value of the blue carbon project.
- Adopting the most suitable financing mechanism: So far, voluntary markets and alternative financial mechanisms have proved to be best suited for small, community-based projects, mainly because their costs are lower than those of UNFCCC mechanisms. This may change as the international community gains experience in effectively integrating blue carbon projects into various UNFCCC mechanisms (Wylie, Sutton-Grier and Moore, 2016<sup>[24]</sup>). Further, the new co-operative approach envisioned in the Paris Agreement to achieve climate change pledges allows countries to identify and implement interventions bilaterally, potentially including coastal blue carbon, and this could make blue carbon projects more replicable and able to attract new and larger finance flows (Herr et al., 2018<sup>[25]</sup>).

### *The role of development co-operation in supporting the scaling up of blue carbon schemes*

Most blue carbon projects in developing countries are supported in one way or another by development co-operation providers. They can thus an important role to ensure that the value of these projects for local communities and the environment, as well as their financial value, are maximised. This will mean supporting countries to explore some of the opportunities discussed in this chapter.

Recognising the social, economic and environmental benefits of blue carbon initiatives (also referred to as co-benefits), in 2017 the Australian government launched a USD 6-million allocation to support efforts to protect and manage coastal blue carbon ecosystems in the Pacific, in partnership with Fiji, Papua New Guinea and other Pacific countries, as well as regional and private stakeholders. This funding will strengthen expertise and enhance data availability for conducting blue carbon projects in the Pacific and support their integration into national greenhouse gas accounting and climate policies. It will also encourage public and private sector investment through innovative financing approaches to blue carbon projects.

To explore how to structure a system of credits incorporating a market value for the resilience services provided by marine and coastal ecosystems, in 2019 the Nature Conservancy, with support of the international insurance company AXA XL, launched the “Blue Carbon Resilience Credit” initiative. Considering the resilience value of marine and coastal ecosystems would allow companies to reduce their carbon footprint and to contribute to maintaining the services these ecosystems provide, including

protecting coastal populations from natural hazards, and in this way avoiding the costs of reconstruction. The methodology for determining the value of the resilience services provided by each coastal ecosystem and the structure of the credit system is currently under development.

## ***New ocean-relevant risk management tools***

### *Current market*

Extreme weather events and other natural hazards are expected to increase in the near future (IPCC, 2019<sup>[21]</sup>). These events can wipe out decades of development gains overnight and have devastating and life-changing consequences especially for already vulnerable communities. According to the UN Office for Disaster Risk Reduction, direct economic losses from climate-related disasters rose 151% over the last 20 years. In the last 10 years alone, insurers have paid out around USD 300 billion following storm damage to coastal regions, and the costs to governments and taxpayers have been far higher (UN, 2015<sup>[29]</sup>). By 2050, estimates suggest that the global community will face annual costs of USD 1 trillion from the combined effects of rising sea levels and extreme weather events on coastlines.

It is therefore critical to address ocean risks and close the gap between the level of insurance in place to cover ocean risks and the actual cost to businesses, governments and people of rebuilding and recovering from disasters. To date, two innovative initiatives have emerged: (i) Mexico's parametric coral reef insurance, a country-specific scheme developed with support from The Nature Conservancy, the United Nations Development Programme and other development partners, and (ii) the Ocean Risk and Resilience Action Alliance (ORRAA), established under the auspices of the Canadian Presidency of the G7.

In 2018, the government of the state of Quintana Roo in Mexico purchased a parametric insurance product that would offer up to USD 3.8 million to cover hurricane-related damage to coral reefs. The area is in fact highly vulnerable, as shown by 2005 Hurricane Emily, which generated damages for USD 8 billion in the Cancun and Puerto Morelos areas. The parametric insurance is provided by Mexico-based insurer Afirme Seguros Grupo Financiero SA de CV, and will be triggered if wind speeds above 100 knots are registered within the covered area, with a payout split of 50% for reefs and 50% for beaches (Secretaria de Ecologia y Medio Ambiente Quintana Roo, 2019<sup>[30]</sup>; The Nature Conservancy, 2020<sup>[31]</sup>).

To finance the insurance policy and promote the conservation of coastal areas, the Quintana Roo State government created the Coastal Zone Management Trust, financed by taxes collected from the tourism industry. This shows the close connection between the tourism sector and marine and coastal ecosystems and how tourism sector revenues can be harnessed for the conservation of marine and coastal ecosystems. Reefs sustain the tourism industry of Quintana Roo by providing coastal protection against storms, including by reducing beach erosion, but extreme storms put the reefs at risk. The Trust will direct conservation investments for the maintenance and repair of the reef and beaches while managing the insurance payout and ensuring conservation goals are achieved.

The ORRAA is another example of a new initiative in support of ocean-relevant risk management tools. It was launched in 2019 with support from the government of Canada to foster collaboration among governments, financial institutions, the insurance industry, environmental organisations and other stakeholders with the aim of creating innovative finance solutions that build resilience to ocean risk in the regions that need it the most, including small island states. It is designed to drive USD 500 million of investment into coastal natural capital by 2030.

The Alliance focuses on three main priorities. The first is to develop innovative, risk-adjusted and scalable products that help drive investment into coastal natural capital and increase resilience while delivering a return on investment. The products include nature-based insurance and micro-insurance, carbon credit initiatives, micro-finance, green and/ or blue bonds, and resilience bonds. The second priority is to accelerate the research and data collection needed to better analyse, model and manage ocean risk. In

collaboration with several partners, AXA XL is leading the development of an Ocean Risk Index to develop potential scenario analyses of the implications of sea-level rise and habitat degradation, with the benefit of helping motivate the protection of ecosystems. The third ORRAA priority is to raise awareness and public understanding of ocean risks and inform and advance ocean risk policy among governments and the private sector.

### *Opportunities and challenges for scaling up ocean-relevant risk management tools*

Greater expected impacts from extreme weather events call for innovative products that incorporate and manage ocean risks and that can effectively generate adequate resources to preserve and restore natural capital essential to resilience. The two examples are promising, but they remain isolated initiatives, suggesting there is scope for replication and scaling-up.

The Mexican insurance scheme for coral reefs, in particular, has high potential for replicability in coral regions and other regions where ecosystems are threatened by extreme natural hazards. Because of how it is structured, this parametric insurance effectively provides a new source of conservation finance. It demonstrates that natural capital can be effectively integrated in emergency response planning and implementation. Due to its characteristics, it gives countries the incentive to undertake continuous preventive work and enhance capacities to assess climate risks to coral reefs and different ecosystems. Challenges to replicating and scaling up these innovative insurance schemes include the availability of adequate data and modelling to evaluate the benefits from marine and coastal ecosystems (Reguero et al., 2019<sup>[32]</sup>). Further, instruments such as the Mexican insurance scheme would only work in highly touristic areas. It proves more difficult to apply such instruments in areas where resilience building is needed but that are not as attractive for tourists. Therefore, the design of coastal risk management policies and tools should take into account the main beneficiary group and identify an adequate stream of funding.

### *The role of development co-operation in supporting the scaling up of ocean-relevant risk management tools*

In the examples above, development partners provided critical support that allowed innovative products for managing increasing ocean risks to be tested and developed and therefore to generate funding for the conservation of marine ecosystems that contribute to reducing ocean risks. It is positive that development partners such as Canada and some multilateral institutions have been at the forefront of these experiments, but a larger number of champions is required. Critically, development partners have a role to play in helping bring together different communities such as governments, conservation experts, the insurance industry and investors to help develop a common understanding of the challenges at stake and innovative solutions that can align interests. Technical assistance, support for building data systems, and capacity building to develop expertise for managing these new instruments will be essential.

## **Investment funds and products for the ocean**

### *Current market*

In the context of sustainable ocean economies, making investments sustainable implies a dual challenge: scaling up investment in the sustainable use and conservation of the ocean and scaling down/ phasing out investment in unsustainable economic activities that accelerate irreversible destruction of marine ecosystems. For decades already, investments in industrial overfishing, dumping of chemical and plastic waste into the ocean, and other damaging activities have pushed the ocean to unprecedented conditions. The expected expansion of the global ocean economy could further aggravate the situation. The global ocean economy is expected to grow faster than the rest of the world economy (OECD, 2016<sup>[33]</sup>) and a race to secure extraction rights – including for oil, gas and seabed mining – has already started. Growth in ocean investment is by no means destined to be sustainable in environmental and social terms. The

characteristics of several ocean sectors suggest that harmful impacts are actually more likely (Jouffray et al., 2020<sup>[34]</sup>).

On the other hand, fostering sustainable ocean economies presents tremendous business and investment opportunities that range from climate resilient infrastructure to innovative businesses addressing plastic pollution, sustainable tourism, sustainable fisheries and decarbonised shipping, to mention only a few. Sustainability is not earned at the expense of profitability. The World Bank (2017<sup>[35]</sup>) estimates that the global fisheries industry would earn an extra USD 83 billion every year if fisheries were managed sustainably. But there is a need to rethink short-term profit (or return on investment) as the key metrics for business and investment success.

While it is difficult to estimate how much investment goes into ocean-based industries and ecosystems, and how much of that is sustainable, a few dedicated impact investment funds have emerged in the last five years that are directly relevant for attracting commercial capital for sustainable ocean economies. Investments currently focus mainly on marine conservation, sustainable fisheries, and marine plastic litter and/or circular economy. These funds been developed under the impetus of impact investors with support from philanthropies and development partners. The United States, for instance, has provided loan guarantees to several of these funds, including the Althelia Sustainable Ocean Fund, the Meloy Fund and Circulate Capital's Ocean Fund. These new impact investment funds are briefly described in Box 5.1.

#### Box 5.1. Impact investing for sustainable ocean economies

**The Althelia Sustainable Ocean Fund** is a public-private partnership established by Althelia Ecosphere, with the support of Conservation International and with technical and scientific advice from the Environmental Défense Fund. It aims to invest in companies able to deliver marine conservation, improved livelihoods as well as attractive economic returns. The Fund's portfolio will focus on circular economy, sustainable seafood and ocean conservation. Key targeted areas for investments include coastal fisheries, sustainable aquaculture, the seafood supply chain and other select coastal projects. Target impacts include improved food and climate security, livelihoods and ecological biodiversity. Through blended financing models, the Fund seeks to crowd in sustainable ocean related investments, by reducing their risks and improving returns. The Fund's requirement of sustainable covenants and the subscription of contracts will ensure the compliance of the environmental and social safeguards. In 2019, the fund's achieved its first closing of USD 100 million of capital, with commitments from leading institutional investors, including the European Investment Bank and the Inter-American Development Bank, among others. The United States Agency for International Development (USAID) participated providing a USD 50 m guarantee facility to cover eligible projects in the portfolio. In 2016 and 2017, the Fund identified potential investments in Belize, Bangladesh, Colombia, Chile, Ecuador, Honduras, Mexico and Madagascar (Althelia Ecosphere, 2020<sup>[36]</sup>).

**The Meloy Fund for Sustainable Community Fisheries** is a USD 20 million impact investment fund, of which USD 6 million was committed on concessional terms by the GEF. The Fund was established to invest through debt or equity in fishing-related enterprises that support the recovery of coastal fisheries in Indonesia and Philippines. Interventions target supply chain and production inefficiencies, waste reduction, aggregation, and value added processing. The Fund also invests in projects to offset fishing pressure on fish populations, such as ocean-based aquaculture. This allows for stock recovery and helps fishers access alternative, complementary income sources. The average investment amounts to USD 500 000 to USD 2 million with a duration of five to seven years. In 2016, Rare Conservation, of which the Fund is a subsidiary, closed a USD 1-million, five-year investment in Meliomar, a Philippines-based seafood company (Duke University/Environmental Defense Fund, 2018<sup>[37]</sup>).



**Encourage Capital** is a social investment firm that aims to recover the economic value of fisheries that have been affected by poor management policies, restore ocean ecosystems, and increase the sustainable seafood supply in the pilot countries of Brazil, Chile and Philippines. It was established with support from the Rockefeller Foundation and Bloomberg Foundation. With USD 10 million in support from Zoma Capital, the family investment office of Ben and Lucy Ana Walton, Encourage capital established Pescador, a sustainable seafood investment holding company. The company's focus is the recovery of hake fishery in Chile, which collapsed in the early 2000s (Inamdar et al., 2016<sup>[38]</sup>).

USAID and the Circulate Capital impact investment firm launched an initiative to attract private capital to combat plastic pollution in the ocean across the Indo-Pacific region. USAID provided a USD 35-million 50% loan portfolio guarantee to Circulate Capital to mobilise private capital by lowering the risk of loss and making investment more appealing. The initiative aims to be a powerful instrument for developing a market around waste management, recycling and the circular economy in the Indo-Pacific region by financing companies, innovation and infrastructure projects to improve waste management systems. At least half of the total investment will be allocated to Indonesia, Philippines, Viet Nam and Sri Lanka, four of the countries most impacted by ocean plastic. To date, the fund created through this initiative has attracted USD 100 million in commitments from some of the world's leading businesses.

With the aim to promote impact investing and blended finance solutions for conservation of marine biodiversity, Blue Finance is developing a suite of investments in the Caribbean, including Antigua and Barbuda, the Dominican Republic, and Saint Kitts and Nevis. Blue Finance operates under the umbrella of the UN in partnerships with government, investors and other stakeholders to ensure sustainable financing and efficient management of marine protected areas (MPAs). The Blue finance initiative expects to restore marine and terrestrial biodiversity, improve tourism attractiveness, and create significant job opportunities in the tourism, fishery and agro-forestry sectors. Blue Finance expects to restore marine and terrestrial biodiversity, improve tourism attractiveness, and create significant job opportunities in the tourism, fishery and agro-forestry sectors. It also promotes public-private partnerships for the management of MPAs, whereby the private sector is expected to provide the majority of required funds to improve and manage an area in exchange for a return on investment, mainly through fees and innovative tourism products. In this scheme, national governments maintain their core functions, with responsibilities over the regulation and enforcement of uses and zoning, the establishment user fees and the maintenance of specific onshore facilities. Funds are used mainly to finance the upfront capital expenditures and innovative tourism activities. (Pascal et al., 2018<sup>[39]</sup>).

### *Opportunities and challenges for scaling up impact investing for sustainable ocean economies*

While still at an early stage, new impact investing funds focused on the ocean are helping fill the financing gap for marine conservation and sustainable ocean-based economic activities and demonstrating the feasibility of achieving environmental, social and financial returns at the same time.

Scaling up impact investing for sustainable ocean economies faces several challenges common to the broader impact investing industry and some specific challenges. Common challenges include the need to develop data, definitions and standards, the ticket size and thus the need to structure and aggregate projects so that they can accommodate demand from larger investors, and the need to familiarise investors with new products. These challenges may be exacerbated by the fact that, while impact investment is in general fairly recent, impact investing in sustainable ocean economy activities is even more recent, although growing rapidly. As discussed, there are currently no recognised standards and classifications for what should be defined as sustainable across ocean-based economic activities. Therefore, a critical challenge becomes the identification of a pipeline of bankable projects with a clear and proven sustainability profile.

Impact investing in marine conservation may face specific challenges relating to the identification of revenue streams able to generate returns that meet the appetite of investors. Overall, private investment in marine biodiversity and ecosystem services is in an early stage of development and practical experience is very limited. While there are numerous examples of impact investments in terrestrial environments, such as those focusing on watershed and forest ecosystem services, initiatives focusing on marine ecosystems are rare and not well documented. The lack of a track record of solid investment opportunities is thus a challenge to scaling up investments (Pascal et al., 2018<sup>[39]</sup>).

## Suggestions for re-orienting investments towards sustainability

The global impact investing market is growing fast and reached an estimated USD 502 billion in 2019 (Global Impact Investing Network, 2019<sup>[40]</sup>). Yet, this is still a tiny fraction of total global investments. The blue bonds market is in its infancy. The green bond market, that some point to as the reference and target market for blue bonds, amounts to less than 0.6% of the total bond market globally despite sustained growth in the past decade.

Therefore, a two-track approach is needed. On one hand, it is necessary to increase the contribution of these niche investments to sustainable ocean economies and, as discussed so far in this chapter, to explore how new and existing financial mechanisms can grow finance for sustainable ocean-related economic activities and ocean conservation. Table 5.2 summarises the range of new financial instruments discussed above and how development co-operation can help replicate them and scale them up. On the other hand, it is necessary to mainstream sustainability concerns to the bulk of global investments and corporate finance in ocean-based industries and those that have either direct or indirect impacts on the ocean. This is particularly important because there is growing appetite from investors to invest in the ocean and yet most investors are not aware of their investments' effects on the marine environment (Fritsch, 2020<sup>[9]</sup>). Investors are also not aware of how degrading ocean ecosystems may subsequently affect their portfolios' performance and value. In other words, the financial system is building up liabilities of which it is not aware.

**Table 5.2. How development co-operation providers can help replicate and scale up innovative financial mechanisms and scale down unsustainable investments**

<b>Blue bonds</b>	<ul style="list-style-type: none"> <li>- Support the design of a clear mission-oriented strategy for the sustainable ocean economy</li> <li>- Support the design of a financing plan that the blue bonds will be part of, in conjunction to other financing instruments.</li> <li>- Support the development of a pipeline of projects responding to the mission-oriented strategy</li> <li>- Structure concessional finance packages (such as grants, guarantees, etc.) as a mean of credit enhancement to make borrowing affordable for the country</li> <li>- Enhance domestic capacities to manage complex borrowing options and meet the costs of bonds design</li> </ul>
<b>Debt-for-ocean swaps</b>	<ul style="list-style-type: none"> <li>- Provide expertise for structuring debt conversions</li> <li>- Engage early funding commitments to attract political and investor interest</li> <li>- Help obtain creditor consent to conduct the debt conversion</li> </ul>
<b>Blue carbon schemes</b>	<ul style="list-style-type: none"> <li>- Incorporate livelihoods aspects in the design of blue carbon projects</li> <li>- Conceptualise future projects based on ecosystems other than mangroves, such as marshes and seagrass</li> <li>- Include carbon stored within the soil of blue carbon ecosystems in the project's potential</li> </ul>
<b>Ocean-relevant risk management tools</b>	<ul style="list-style-type: none"> <li>- Build data systems and develop expertise for managing these new instruments will be essential</li> <li>- Develop a common understanding among different communities of the challenges posed by ocean risks</li> <li>- Explore and develop innovative products to manage increasing ocean risks and to fund the conservation of marine ecosystems that reduce ocean risks</li> </ul>
<b>Scaling up sustainable ocean investments</b>	<ul style="list-style-type: none"> <li>- Improve the investment size and aggregation of ocean projects</li> <li>- Develop a pipeline of bankable projects that respond to clear and verifiable sustainability criteria and are aligned to partner countries' priorities</li> </ul>

### Scaling down unsustainable ocean investments

- Integrate ocean sustainability requirements in all ODA lending and all development finance institutions (DFIs) lending
- Support the adoption of the Sustainable Blue Economy Finance Principles and the integration of ocean-sustainability requirements by international financial institutions
- Advocate for the adoption of the integration of ocean sustainability requirements by exchange listing and other financial market regulations

Source: Authors.

Requiring integrated reporting of both financial and non-financial information would enable investors, financiers and other stakeholders to better assess firm performance and risks (Jouffray et al., 2019<sup>[41]</sup>). Financial reporting would need to include the assessment and management of ocean risks, including both the impact of investments on ocean and the risks on investments from degrading ocean health. Non-financial reporting would need to enhance disclosure on practices. For instance, for seafood companies, given the widespread prominence of IUU fishing, with one in every five fish sold being stolen (FAO, 2017<sup>[42]</sup>) and equivalent to USD 23 billion each year, introducing requirements on origin and traceability as well as on human and labour rights will be critical.

A number of principles for responsible and sustainable investments have been developed recently that could help refocus investments. These are, however, voluntary commitments that call upon the good will of companies and investors. To be effective, they will need to be subscribed to more broadly and linked to clear and solid implementation and monitoring frameworks. Relevant principles include:

- The Sustainable Blue Economy Finance Principles, developed in 2017 by a partnership of the European Commission, World Wildlife Federation, the Prince of Wales's International Sustainability Unit in the United Kingdom and the European Investment Bank.
- The Principles for Investment in Sustainable Wild-Caught Fisheries, launched at the World Ocean Summit 2018.

Finally, identifying leverage points in the financial system will be important to redirect investments towards more sustainable practices, within and across industries. In their recent study, Jouffray et al. (2019<sup>[41]</sup>) identify bank loan covenants, stock exchange listing rules and shareholder activism as potential financial sector leverage points for increasing sustainability in the seafood industry. While developed with a specific reference to the seafood industry, these levers could be relevant to other industries that produce impacts on ocean. Given that medium and larger companies that are not listed on exchanges rely heavily on bank loans, sustainability requirements could be a particularly effective instrument through which banks might encourage companies to refrain from harmful practices or to adopt sustainable behaviour. An example is the Louis Dreyfus Company, which agreed to a USD 750-million loan with an interest rate that is linked to the company's sustainability performance; the higher the sustainability performance rating, the more the interest rate goes down (Jouffray et al., 2019<sup>[41]</sup>).

Introducing sustainability criteria in exchange listing rules could be particularly effective, as just two of the world's ten largest stock exchanges now require some environmental and social reporting as a listing rule companies (Sustainable Stock Exchanges Initiative, 2019<sup>[43]</sup>). Shareholder activism also could be leveraged to enhance the weight of sustainability considerations in corporate decisions, especially in light of documented increasing levels of activism among shareholders (Jouffray et al., 2019<sup>[41]</sup>).

### ***The role of development co-operation in helping re-orient private investments***

A few development partners have supported the establishment and implementation of new impact investing funds and products to channel commercial finance towards marine conservation and sustainable ocean-based activities. While such support has come mainly from development partners that have more flexibility in their legislation and policies to use financial instruments other than standard ODA grants and loans, such standard grants and loans can also be used catalytically to crowd in private investments. Moreover, development partners can do much to help developing countries tackle issues around investment size and the aggregation of projects and to develop a pipeline of bankable projects that respond

to clear and verifiable sustainability criteria and are aligned to partner countries' priorities. Technical assistance and support for the preparation costs could be provided to develop a pipeline of investment opportunities with an attractive investment size. This is a critical issue because investment tickets, especially for marine conservation, are usually smaller than institutional investors' minimum investment size but larger than many individual impact investors' desired allocation (Pascal et al., 2018<sup>[39]</sup>). Innovative deal and fund structures consolidating projects could help accommodate investors' needs and facilitate the matchmaking.

Development partners have a further role to play in integrating sustainability requirements into traditional financial services and investments, whether in financial markets (e.g. stocks and bonds) or in credit markets (e.g. loans or bonds). To help redirect and re-orient private finance towards sustainable ocean-related businesses and activities and support the co-creation of new sustainable markets and products, development co-operation providers need to use ODA catalytically to enhance the risk-return profiles of sustainable investments and supporting the development of new financial instruments. They should also use their financial levers, such as grants and loans requirements, to push businesses and actors to adopt sustainable practices and standards. Development partners have an additional role in supporting financial system reforms and regulations to phase out unsustainable investments, including through sustainability requirements in stock exchange listing rules. Specific suggestions include:

- use ODA catalytically to improve the commercial viability of investments in sustainable activities and businesses, helping to create new sustainable products and markets including through new investment vehicles and instruments
- integrate ocean sustainability requirements in all ODA lending and in all development finance institution (DFIs) lending (not all of which is concessional in ODA terms)
- support the adoption of the Sustainable Blue Economy Finance Principles and the integration of ocean sustainability requirements by international finance institutions, which bilateral development partners can influence as they are members and shareholders of these institutions
- advocate for the adoption of the integration of ocean sustainability requirements in exchange listing rules and other financial market regulations to refocus investments to ocean-based industries towards sustainability
- strengthen independent assessments of the impacts of financial flows to the ocean economy such as through international and research institutions.

## References

- Althelia Ecosphere (2020), *Sustainable Ocean Fund (webpage)*, <https://althelia.com/sustainable-ocean-fund/>. [36]
- Asiedu-Akrofi, D. (1991), “Debt-for-Nature Swaps: Extending the Frontiers of Innovative Financing in Support of the Global Environment”, *The International Lawyer*, Vol. 25/3, <https://scholar.smu.edu/cgi/viewcontent.cgi?article=2820&context=til>. [12]
- Caribbean Development Bank (2018), *Financing the Blue Economy: A Caribbean Development Opportunity*, <http://www.caribbeanhotelandtourism.com/wp-content/uploads/2018/09/CDB-Financing-the-Blue-Economy-A-Caribbean-Development-Opportunity-2018.pdf>. [10]
- Convergence (2017), *Seychelles Debt Conversion for Marine Conservation and Climate Adaptation Case Study*, <https://www.convergence.finance/resource/3p1S3pSTVKQYYC2ecwaeiK/view>. [14]
- Duke University/Environmental Defense Fund (2018), *Financing Fisheries Reforms: Blended Capital Approaches in Support of Sustainable Wild-Capture Fisheries*, <https://nicholasinstitute.duke.edu/publications/financing-fisheries-reform-blended-capital-approaches-support-sustainable-wild-capture>. [37]
- FAO (2017), “Seafood traceability for fisheries compliance: Country-level support for catch documentation schemes”, *FAO Fisheries and Aquaculture Technical Paper*, No. 619, Food and Agriculture Organization, Rome, <http://www.fao.org/3/a-i8183e.pdf>. [42]
- Fourqurean, J. et al. (2012), “Seagrass ecosystems as a globally significant carbon stock”, *Nature Geoscience*, Vol. 5, pp. 505-509, <https://doi.org/10.1038/ngeo1477>. [19]
- Fritsch, D. (2020), *Investors and the Blue Economy*, Credit Suisse, London, <https://www.esg-data.com/blue-economy>. [9]
- Fuller, F. et al. (2018), *Debt for Climate Swaps: Caribbean Outlook*, Climate Analytics, Berlin, <http://www.undp.org/content/sdfinance/en/home/glossary.html>. [16]
- Global Impact Investing Network (2019), *Sizing the Impact Investing Market*, [https://thegiin.org/assets/Sizing%20the%20Impact%20Investing%20Market\\_webfile.pdf](https://thegiin.org/assets/Sizing%20the%20Impact%20Investing%20Market_webfile.pdf). [40]
- Herr, D. et al. (2018), “Coastal blue carbon and Article 6: Implications and opportunities”, *Climate Focus*, Amsterdam, [https://climatefocus.com/sites/default/files/20181203\\_Article%206%20and%20Coastal%20Blue%20Carbon.pdf](https://climatefocus.com/sites/default/files/20181203_Article%206%20and%20Coastal%20Blue%20Carbon.pdf). [25]
- Herr, D., E. Pidgeon and D. Laffoley (2012), *Blue Carbon Policy Framework 2.0*, International Union for Conservation of Nature, Gland, Switzerland, <https://portals.iucn.org/library/sites/library/files/documents/2012-016.pdf>. [26]
- IMF (2016), *Small States’ Resilience to Natural Disasters and Climate Change – Role for the IMF*, International Monetary Fund, Washington, DC, <https://www.imf.org/en/Publications/Policy-Papers/Issues/2016/12/31/Small-States-Resilience-to-Natural-Disasters-and-Climate-Change-Role-for-the-IMF-PP5079>. [18]

- Inamdar, N. et al. (2016), *Developing Impact Investment Opportunities for Return-Seeking Capital in Sustainable Marine Capture Fisheries*, World Bank, Washington, DC, <http://www.wildernessmarkets.com/wp-content/uploads/Fish-Finance-Paper-final-clean.pdf>. [38]
- Indonesia Ministry of Finance (2019), *Green Sukuk Issuance, Allocation and Impact Report*, <https://www.sdgphilanthropy.org/system/files/2019-02/Green%20Suku%20Issuance%20-%20Allocation%20and%20Impact%20Report%20.pdf>. [8]
- Jouffray, J. et al. (2020), "The Blue Acceleration: The Trajectory of Human Expansion into the Ocean", *One Earth*, Vol. 2/1, pp. 43-54, <https://doi.org/10.1016/j.oneear.2019.12.016>. [34]
- Jouffray, J. et al. (2019), "Leverage points in the financial sector for seafood sustainability", *Science Advances*, Vol. 5/10, <http://dx.doi.org/DOI: 10.1126/sciadv.aax3324>. [41]
- Kattel, R. et al. (2018), "The economics of change: Policy and appraisal for missions, market sharpening and public purpose", *Working Paper Series*, No. 2018-06, UCL Institute for Innovation and Public Purpose, London, <https://www.ucl.ac.uk/bartlett/public-purpose/sites/public-purpose/files/iipp-wp-2018-06.pdf>. [1]
- Morgan Stanley Institute for Sustainable Investing (2019), *Blue Bonds: The Next Wave of Sustainable Bonds*, [https://www.morganstanley.com/content/dam/msdotcom/ideas/blue-bonds/2583076-FINAL-MS\\_GSF\\_Blue\\_Bonds.pdf](https://www.morganstanley.com/content/dam/msdotcom/ideas/blue-bonds/2583076-FINAL-MS_GSF_Blue_Bonds.pdf). [7]
- Murray, B. et al. (2010), "Payments for blue carbon: Potential for protecting threatened coastal habitats", *Policy Brief*, No. 10-05, Nicholas Institute for Environmental Policy Solutions, Duke University, Durham, NC, <https://nicholasinstitute.duke.edu/sites/default/files/publications/blue-carbon-paper.pdf>. [27]
- Murray, B. et al. (2011), *Green Payments for Blue Carbon: Economic Incentives for Protecting Threatened Coastal Habitats*, Nicholas Institute for Environmental Policy Solutions, Duke University, Durham, NC, <https://nicholasinstitute.duke.edu/sites/default/files/publications/blue-carbon-report-paper.pdf>. [20]
- OECD (2018), *Making Blended Finance Work for the Sustainable Development Goals*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264288768-en>. [2]
- OECD (2016), *The Ocean Economy in 2030*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264251724-en>. [33]
- OECD DAC (2020), *Amounts mobilised from the private sector for development*, <https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/mobilisation.htm> (accessed on 19 June 2020). [3]
- Pascal, N. et al. (2018), "Impact Investment in Marine Conservation", *Duke Environment Law & Policy Forum*, Vol. XXVIII/199, <https://pdfs.semanticscholar.org/6d2b/e4faf94728ee781378054889fb4a41142eb3.pdf>. [39]
- Pörtner, H. et al. (eds.) (2019), *Summary for policymakers*, Intergovernmental Panel on Climate Change (IPCC), Geneva. [21]
- Reguero, B. et al. (2019), "The risk reduction benefits of the Mesoamerican Reef in Mexico", *Frontiers in Earth Science*, Vol. 7, <http://dx.doi.org/10.3389/feart.2019.00125>. [32]

- Roth, N., T. Thiele and M. von Unger (2019), *Blue Bonds: Financing Resilience of Coastal Ecosystems*, 4Climate, Bereldange, Luxembourg, [https://www.4climate.com/dev/wp-content/uploads/2019/04/Blue-Bonds\\_final.pdf](https://www.4climate.com/dev/wp-content/uploads/2019/04/Blue-Bonds_final.pdf). [5]
- Secretaria de Ecología y Medio Ambiente Quintana Roo (2019), *Seguro paramétrico para arrecifes y playas en Quintana Roo*, Secretaria de Ecología y Medio Ambiente Quintana Roo, <https://qroo.gob.mx/sema/seguro-parametrico-para-arrecifes-y-playas-en-el-estado-de-quintana-roo>. [30]
- Silver, J. and L. Campbell (2018), “Conservation, development and the blue frontier: the Republic of Seychelles’ Debt Restructuring for Marine Conservation and Climate Adaptation Program”, *International Social Science Journal*, <https://doi.org/10.1111/issj.12156>. [13]
- Spalding, M. et al. (2014), “The role of ecosystems in coastal protection: Adapting to climate change and coastal hazards”, *Ocean & Coastal Management*, Vol. 90, pp. 50-57, <http://dx.doi.org/10.1016/j.ocecoaman.2013.09.007>. [28]
- Sustainable Stock Exchanges Initiative (2019), *Stock Exchange Database*, <https://sseinitiative.org/data/>. [43]
- The Nature Conservancy (2020), *Naturevest - Debt Conversions for Marine Conservation and Climate Adaptation*, <https://www.nature.org/en-us/about-us/who-we-are/how-we-work/finance-investing/naturevest/ocean-protection/>. [15]
- The Nature Conservancy (2020), *Playbook for Climate Action*, <https://www.nature.org/en-us/what-we-do/our-insights/perspectives/playbook-for-climate-action/>. [31]
- Thrush, S. (ed.) (2012), “Estimating global ‘blue carbon’ emissions from conversion and degradation of vegetated coastal ecosystems”, *PLoS ONE*, Vol. 7/9, p. e43542, <http://dx.doi.org/10.1371/journal.pone.0043542>. [22]
- UN (2016), *Proposal on Debt for Climate Adaptation Swaps: A Strategy for Growth and Economic Transformation of Caribbean Economies*, United Nations Economic Commission for Latin America and the Caribbean, Trinidad and Tobago, [https://repositorio.cepal.org/bitstream/handle/11362/40253/LCCARL492\\_en.pdf?sequence=1&isAllowed=y](https://repositorio.cepal.org/bitstream/handle/11362/40253/LCCARL492_en.pdf?sequence=1&isAllowed=y). [17]
- UN (2015), *United Nations Office for Disaster Risk Reduction - Direct and indirect losses (webpage)*, <https://www.preventionweb.net/risk/direct-indirect-losses>. [29]
- United Nations Global Compact (2020), *Blue Bonds: Reference Paper for Sustainable Ocean Investments*, <https://ungc-communications-assets.s3.amazonaws.com/docs/publications/Blue-Bonds-Reference-Paper-for-Sustainable-Ocean-Investments.pdf>. [6]
- Vanderklift, A. et al. (2019), “Constraints and opportunities for market-based finance for the restoration and protection of blue carbon ecosystems”, *Marine Policy* 107, <https://doi.org/10.1016/j.marpol.2019.02.001>. [23]
- Walsh, M. (2018), *Ocean Finance: Definition and Actions*, [https://gallery.mailchimp.com/b37d1411f778c043250da5ab5/files/f1a910e2-32f9-4aed-ad35-e2bccab6cf12/Ocean\\_Finance\\_Definition\\_Paper\\_Walsh\\_June\\_2018.pdf](https://gallery.mailchimp.com/b37d1411f778c043250da5ab5/files/f1a910e2-32f9-4aed-ad35-e2bccab6cf12/Ocean_Finance_Definition_Paper_Walsh_June_2018.pdf). [11]

- World Bank (2018), "Sovereign Blue Bond Issuance: Frequently Asked Questions", [4]  
<https://www.worldbank.org/en/news/feature/2018/10/29/sovereign-blue-bond-issuance-frequently-asked-questions>.
- World Bank (2017), *The Sunken Billions Revisited: Progress and Challenges in Global Marine Fisheries*, World Bank, Washington, DC, <http://dx.doi.org/10.1596/978-1-4648-0919-4>. [35]
- Wylie, L., A. Sutton-Grier and A. Moore (2016), "Keys to successful blue carbon projects: Lessons learned from global case studies", *Marine Policy*, Vol. 65, pp. 76-84, [24]  
<http://dx.doi.org/10.1016/j.marpol.2015.12.020>.

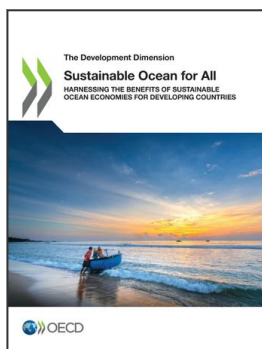
## Notes

<sup>1</sup> The information on private finance mobilised for the sustainable use of the ocean was retrieved from the 2016 OECD-DAC Survey on amounts mobilised from the private sector in 2013-17 by official development finance interventions. Based on the information registered in the database, projects selected were those classified under purpose codes related to ocean activities or ocean sustainability (sanitation, water supply, fishery development, fishery policy, flood prevention, river basins development, waste management, water transport, water resources conservation) and those for which the title included one of the ocean keywords prioritised (ocean, water, aquaculture).

<sup>2</sup> The impact investors are Nuveen, the asset management arm of TIAA (which will include the bond in the TIAA-CREF Social Choice Bond Fund), Prudential Financial and Calvert Impact Capital.

<sup>3</sup> The Paris Club is a group of officials from 22 major creditor countries who negotiate co-ordinated solutions to the payment difficulties experienced by debtor countries.





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