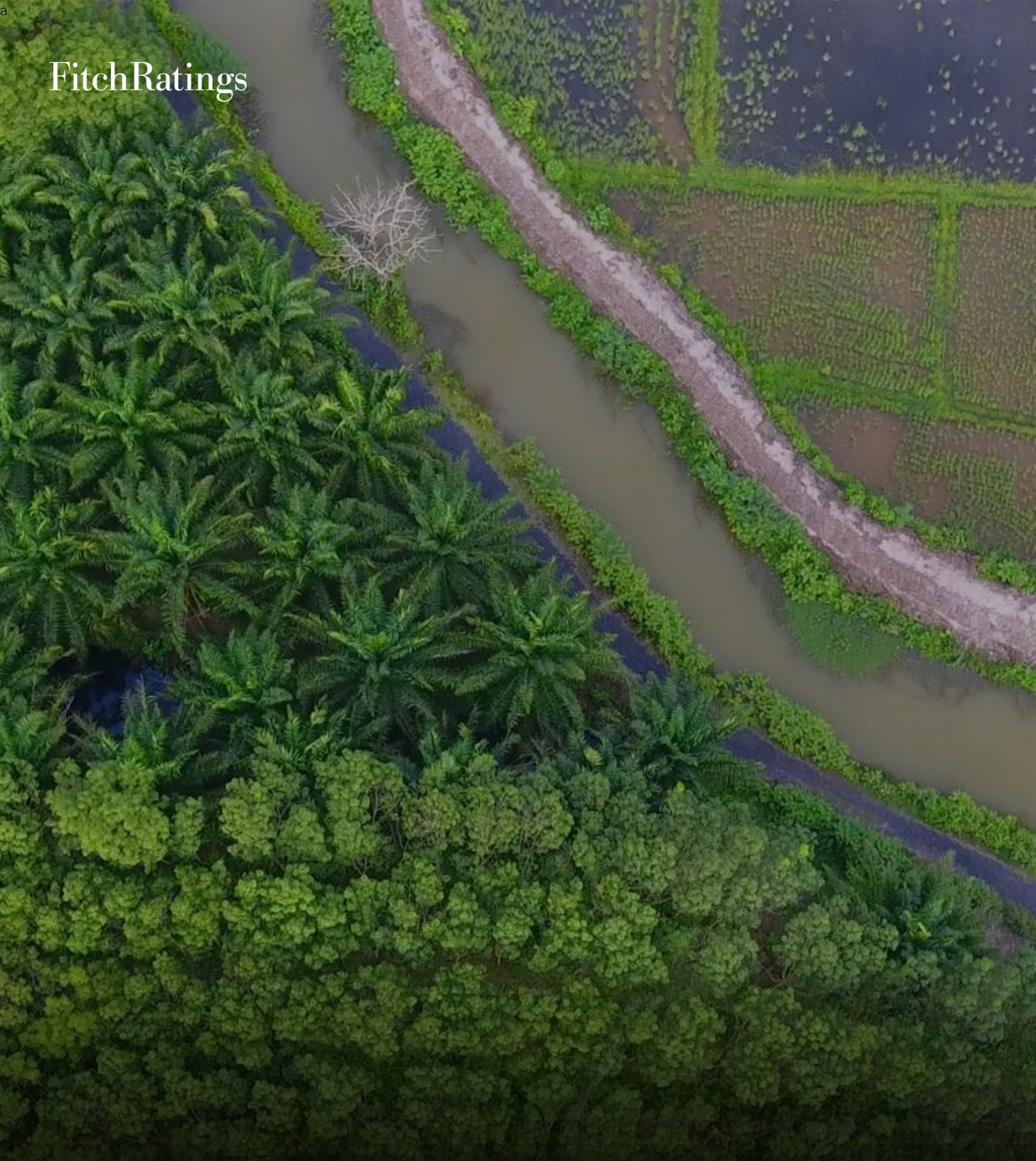

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Investors Grapple with Stemming Biodiversity Loss

Green Debt Swaps, Bonds Could Help Address Challenges of Biodiversity Loss and Debt

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> ‘Despite growing investor interest in addressing biodiversity risks, mechanisms to influence behaviour of state and non-state actors are often limited. However, the emergence of new asset classes that tie sovereign debt financing costs to biodiversity outcomes could help address the dual challenges of nature loss and emerging market debt.’
>
> David McNeil, Director, Fitch Ratings

Investor Influence Is Often Limited

Biodiversity loss is a systemic phenomenon, which creates challenges for integration in investment strategies. Despite rising investor interest in biodiversity risks, opportunities for investors to influence biodiversity outcomes are often more limited than for other environmental risks. This is due to the dominance of private companies within soft commodity supply chains, limited exposure to these companies or sovereign debt among asset owners as well as the ethical problem of engaging sovereigns on policy issues.

Many emerging markets entered the Covid-19 crisis with heavy debt burdens that were exacerbated by economic downturns. In many cases, this debt is denominated in foreign currency and soft commodity exports are important to the balance of payments in biodiverse emerging markets.

Better Financing Terms Could Incentivise Conservation

Investors seeking to demonstrate positive impact on biodiversity and nature could engage with new asset classes that tie interest rates to environmental targets for sovereigns, financial institutions or corporates. This could circumvent the challenges of using engagement or divestment mechanisms on biodiversity issues, avoid unfairly penalising emerging markets and help contribute to debt sustainability.

Supranational financial institutions and development banks have played a key role in bringing such asset classes as green and sustainability bonds into the mainstream. Moreover, Fitch Ratings’ survey of global banks showed their significant influence in promoting the adoption of ESG policies among many emerging market banks. These institutions therefore have an important part to play in bridging the gap between the interests of developed and emerging markets on biodiversity and forestry conservation.

Biodiversity Action Comes into Focus

This year is set to be an important one in terms of policy announcements to address nature and biodiversity loss, with alignment of nature and climate policies coming into focus ahead of the UN COP26 Climate Change Conference in November. The One Planet Summit in October will also convene 11 heads of state and members of the investment community with a focus on mobilising finance towards measures to address climate change and nature degradation.

Costa Rica and France recently launched the High Ambition Coalition for Nature and People, which aims to protect 30% of land and marine areas by 2030 and has gained support from 52 states. Public-private partnerships, such as Germany’s Legacy Landscapes Fund and the international Great Green Wall Accelerator, seek to leverage philanthropic and other sources of finance.

Related Research

Financial Sector Confronts Deforestation as a Key ESG Risk (September 2020)

Sustainability-Linked Debt Ties Borrowers to ESG Goals (November 2020)

ESG Bites into Bank’s Lending to Corporates (January 2020)


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The EU has been particularly active in developing policies, including proposed measures on addressing tropical deforestation linked to imports as well as a due-diligence regulation on damage to nature. The bloc has signalled that any binding regulations are likely to come with additional support measures to assist smallholders and help address the underlying causes of tropical deforestation. This is likely to take the form of partnerships between the EU and producing countries. One such partnership, focusing on cocoa, has recently been established between the EU, Côte d'Ivoire and Ghana.

As a consequence, many investors are attempting to integrate biodiversity performance assessment and risk management into portfolios, but face challenges relating to the lack of clear data and transmission channels linking land use change and biodiversity loss to company activities. Moreover, the financial materiality of biodiversity loss to corporate performance is far less clear than for climate change issues, where some degree of risk pricing can be adopted in anticipation of tightening regulations and physical climate risk exposure. The World Business Council on Sustainable Development has estimated that annual unpriced benefits of nature in the form of food, feed and fibre production is in the order of USD3 trillion a year, reflecting the external costs of nature loss that are not currently internalised by firms and other actors.

The Task Force on Nature Related Financial Disclosure (TNFD) was recently launched in this context, under the leadership of Global Canopy, the UN Development and Environment Programmes (UNDP and UNEP) and the World Wide Fund for Nature. In 2023, the TNFD will deliver a framework for organisations to report and act on nature-related risks, and support a shift in global financial flows away from negative outcomes and towards positive impact for nature and biodiversity. Targets are expected to play a key role within reporting, in a similar vein to the Task Force on Climate Related Financial Disclosures.

Impacts, Dependencies on Nature Differ by Activity

Relationships between biodiversity and corporates, financial institutions and sovereign issuers are typically framed in terms of 'impacts' or 'dependencies'. The Beyond Business as Usual report, produced by UNEP and Global Canopy, identified and ranked a range of sectors on this basis. These sectors either have potentially high material dependencies or potentially high intensity impacts on nature and biodiversity, which means they are likely to be material to financial institutions. Transactions linked to these activities could expose financial institutions to nature-related risk.

Priority Sectors – Nature Impacts and Dependencies

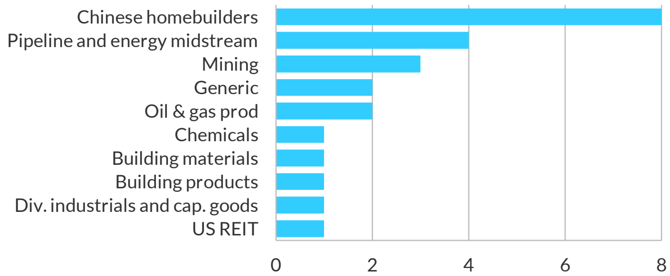
Priority sectors from a dependency perspective (highest to lowest)	Priority sectors from an impacts perspective (highest to lowest)
Agricultural products	Agricultural products
Apparel, accessories and luxury goods	Distribution
Brewers	Mining
Electric Utilities	Oil and gas exploration and production
Independent power producers and energy trade	Oil and gas storage and transportation

Source: Fitch Ratings, UNEP, UNEP Finance Initiative, Global Canopy

The relationship of biodiversity and nature loss to credit is generally perceived to be weak owing to the complexity of financial transmission channels and dearth of comparable data linking impacts on nature with company operations and balance sheets. Analysis of Fitch's ESG Relevance Scores for Corporates under the category Waste & Hazardous Materials Management; Ecological Impacts shows that only a handful of corporate issuers have elevated scores, with most driven by compliance costs or fines relating to waste management rather than biodiversity or ecological impacts. Some limited effects have been seen in such areas as sugar beet processing, where EU insecticide regulations designed to strengthen biodiversity protection have imposed additional operating costs.

Limited Credit Relevance of Ecological Impacts

(No. corporate issuers with score of 4 for 'Waste and hazardous materials management, ecological impacts')



Source: Fitch Ratings

Nonetheless, there is growing recognition among policymakers and investors that many of the systemic risks of biodiversity loss, such as ecosystem collapse and associated increases in physical climate risk exposure, are likely to materialise as financial risks across a range of industries and markets. Major regulators such as the EU are exploring integration of biodiversity risk screening into supply chain due-diligence requirements, which could impose significant additional costs on extractive industries exporting into Europe. Litigation risks relating to biodiversity and impacts on nature look set to rise as data improve, while biodiversity loss is likely to lead to systemic risks to the financial system, such as assets no longer being able to be insured at a reasonable cost.

Credit, Market and Operational Biodiversity Risks

	Credit risk	Market risk	Operational risk
Transition risk	Investee suffers losses due to sanctions, damages or increased taxes due to negative impacts on biodiversity	Long-term price increases as a result of biodiversity change	Image loss resulting from failure to switch to biodiversity management
Physical risk	Revaluation of debt servicing capacity and collateral	Rating downgrade and share price losses after biodiversity losses	Biodiversity loss affects balance sheet
Litigation risk	• Litigation pertaining to biodiversity loss and breach of underlying legal frameworks • New regulatory rules limiting activities that have an impact on biodiversity • Damages due to false reporting of biodiversity risks • Damages due to greenwashing		
Systemic risk	Economy can no longer be insured at reasonable cost	Market threatening effects from biodiversity loss in an entire region	Reputational losses for entire industries/markets

Source: Fitch Ratings, PwC, WWF

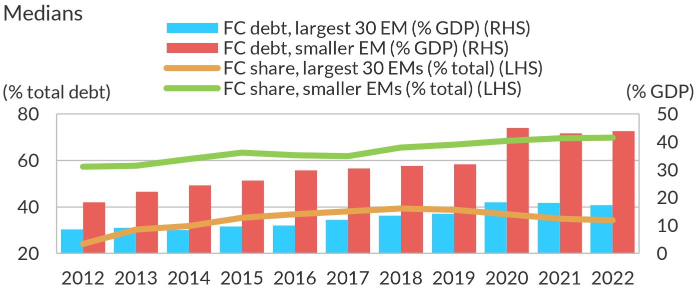
National governments are also key actors from an impacts and dependency perspective, with key links to biodiversity.

Emerging Markets Face Challenges of Debt and Nature Loss

A consequence of the pandemic restrictions and the subsequent global economic downturn has been an increase of both emerging market debt and debt interest rates. Many emerging markets entered the downturn with elevated debt levels and the volatility of soft commodity prices over the past decade has led to increased pressure on many emerging markets that are dependent on commodity production rents and exports. Smaller emerging markets in particular face greater foreign-currency debt pressures, with average foreign-currency debt set to exceed 40% of GDP by 2022.

Smaller EM Face Greater Public Foreign-Currency Debt Risk

Medians

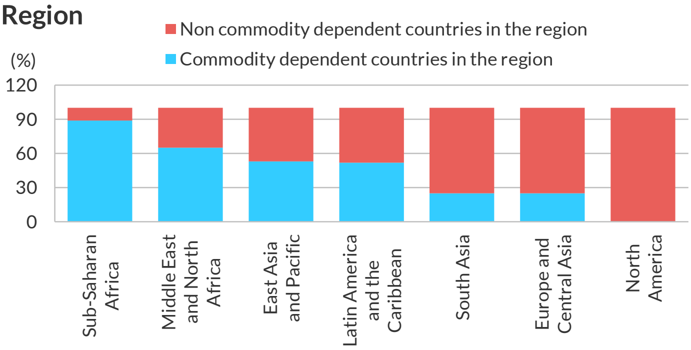


Source: Fitch Ratings

Financing debt interest payments are also a concern for many biodiverse emerging markets. Many south Asian and sub-Saharan African and Latin American countries allocate high shares of overall government revenue to interest payments on existing debt, which reduces funds available for general government spending priorities.

Commodity dependency is common to most emerging markets and has risen over the past decade to affect as many as two-thirds of emerging market sovereigns. Natural resource rents and soft commodity exports are a key element of this in many African, Asian and Latin American emerging markets.

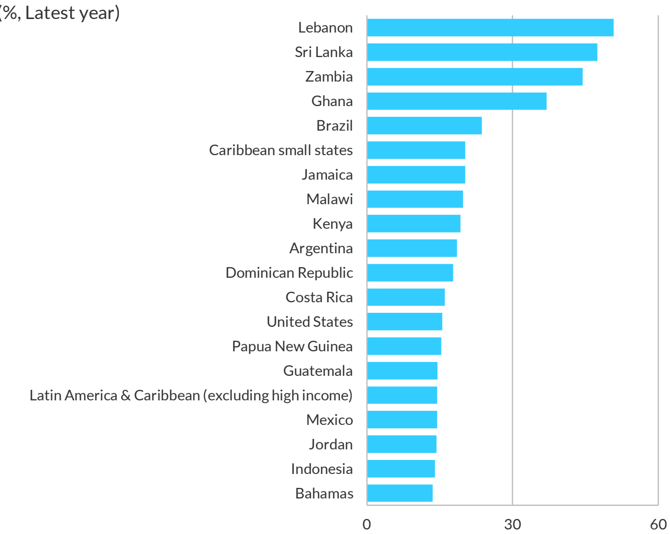
Distribution of Commodity-Dependent Countries by Region



Source: Fitch Ratings, UN Conference on Trade and Development

Debt Interest Payments as % Government Revenue

(%, Latest year)



Source: Fitch Ratings, World Bank

Debt sustainability is increasingly being scrutinised in many emerging markets, with debt interest having risen substantially over the past year. Many emerging markets have sizeable current account deficits and are therefore exposed to the anticipated tapering of the US Federal Reserve assets purchase programme, although deficits are lower than during the last tapering by the Fed in 2013.

Bilateral sovereign debt is also heavily concentrated in a handful of countries, with Angola, Kenya and Pakistan having large monthly debt-servicing liabilities to China, according to the World Bank's Debt Reporting System. China does not disclose its international lending and a large volume of international lending may be underreported given the state ownership of commercial banks that act as international creditors.

Loss Driven by a Handful of Countries and Commodities

Fitch research (Financial Sector Confronts Deforestation as a Key ESG Risk, September 2020) has highlighted growing investor scrutiny of deforestation driven by such commodities as beef, palm oil, rubber and soy due to their link to biodiversity and habitat loss. These are regarded as a 'forest risk commodities', which usually relates less to the commodity itself than the way forestry is governed in a particular location.

In many cases, the land clearance linked to production of these commodities is not considered legal, so challenges relate to monitoring and enforcement of legal and property rights in these locations as much as the laws themselves.

Modelling by Lenzen et al (2012) at the University of Sydney has indicated that as much as a third of the threats to species are due to international trade. Some countries, such as Indonesia, Malaysia, the Philippines and Sri Lanka, effectively export their biodiversity footprint, whereas Germany, Japan, the US, and other developed markets are major importers through consumption. Among the net exporters, 35% of domestically recorded threats to species are linked to commodity production for export. In Honduras, Madagascar, Papua New Guinea and Sri Lanka, it is 50%-60%.

Soy is closely associated with biodiversity and habitat loss because of higher demand in recent years, largely for animal feed as a result of rising meat consumption. Production of soy has led to a large increase in land conversion from savannah and forest to agricultural monocultures, with severe effects on biodiverse regions of Latin America in particular.

Analysis of soy production from Brazil's Cerrado, an exceptionally biodiverse region that is home to 5% of the world's species, shows the effects of international trade on biodiversity. While 44% of the impact on local biodiversity from soy consumption relate to domestic consumption, the rest relates to consumption of soy exports in other countries, particularly China.

Soy exports are dominated by the so-called 'ABCD' trading companies – Archer Daniel Midland Company (A/Stable), Bunge Limited (BBB-/Stable), Cargill Incorporated (A/Stable) and Louis Dreyfus (not rated) – and more recently, the Chinese state-owned trading company COFCO (Hong Kong) Limited (A/Stable). These companies also dominate the global trade in soft commodities.

Developed markets tend to be minor net exporters of commodities linked to biodiversity loss, but substantial importers. This is probably due to more stringent domestic policies that aim to protect remaining species and habitat cover, which forces producers to concentrate production in areas where regulations around land clearance may be less stringent.

Analysis of global land use change patterns between 1960 and 2019 shows that deforestation has been highly concentrated in a handful of critical biomes, including the Amazon, parts of Central America, south and southeast Asia, and sub-Saharan Africa.

Comparison with land use for pasture shows a degree of overlap between areas of deforestation and intensified use for grazing livestock.

Analysis by Pendrill et al (2019) at Chalmers University of Technology of forest cover between 2005 and 2013 showed that about two-thirds of forest loss was attributable to land conversion for agriculture, cropland or plantations. About half of this occurred in Brazil and Indonesia, followed by Argentina and Paraguay. About 40% was attributable to land clearance for cattle meat production, followed by forest products, palm oil, cereals and soy beans. The authors note a substantial share of this 'embodied deforestation' in export commodities going to China, India, Russia and the US, all of which have largely halted deforestation and are now seeing an increase in forest cover.

However, simply halting deforestation may have adverse consequences for some emerging markets. In Malaysia, for example, the forest sector supports 7% of GNP in foreign-exchange earnings, with non-timber forest products providing about 5% of total government revenue.

A big challenge is the illegal nature of many forest clearances. Research by Forest Trends indicates that as much as 70% of Brazil's forest clearance for commercial agriculture contravenes national laws. This points to the need for greater investment in monitoring and enforcement, including wider use of remote sensing satellite data to tackle illegal deforestation.

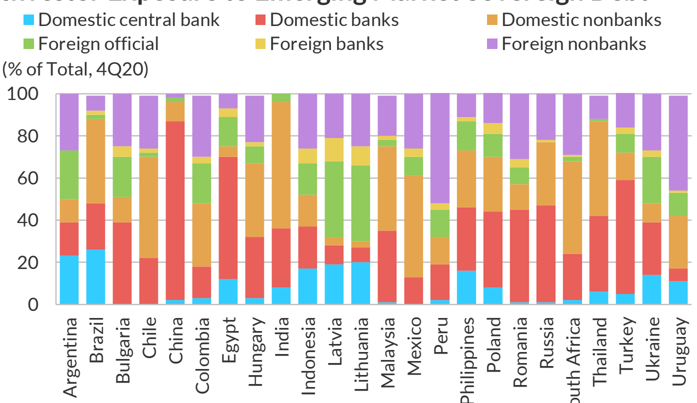
Analysis of major bondholders and shareholders with investment exposure to forest risk commodities and associated biodiversity loss shows the dominance of state-owned financial institutions and development banks in the palm oil, rubber and beef trade. Some of the largest emerging markets, including Brazil and Malaysia, offer state-backed investments for commodities exports. Large investors can mitigate this risk as bond and shareholders.

Despite the clear links between natural resource rents and soft commodity exports, establishing the connection between conservation of biodiversity and forestry resources and economic outcomes is often more challenging. In many cases, this relates to second- or third-order effects that can be difficult to model or value. Forests, for example, play an integral role in carbon sequestration and the water cycle, having a hugely influential effect on global and local climatic conditions. Nitanan et al (2020) at the Commonwealth Forestry Association estimated the economic value of Malaysia's tropical forests at about USD3 billion a year, with the bulk relating to carbon, climate and water regulation effects, all of which have spill over economic value to other sectors and business activities.

Ownership Patterns Limit Influence on Biodiversity, Forestry Policies

Ownership patterns of sovereign and sub-sovereign debt can limit the ability of investors to influence governments and corporates operating in biodiverse regions. For example, holdings of sovereign bonds by non-domestic financial institutions is high in some emerging markets (e.g. Argentina, Chile, Malaysia and Peru) but low in others (e.g. Brazil and Indonesia), where the bulk of bonds are held by domestic banks or non-bank financial institutions as well as central banks. The small exposure of international investors to sovereign bonds of these highly biodiverse countries limits their ability to influence domestic environmental policy.

Investor Exposure to Emerging Market Sovereign Debt



Source: Fitch Ratings, International Monetary Fund

Investors Begin Tentative Engagement, Divestment in Brazil

Nordea Asset Management is divesting from the world's largest meat processor JBS S.A. (BB+/Stable) over deforestation concerns, having stopped investing in Brazilian sovereign bonds in 2020 over deforestation and wildfire issues.

A group of 10 sovereign investors met the Brazilian government to secure action to halt wildfires, while institutional investors with assets under management of USD17 trillion have issued open letters pressuring commodity producers operating in the Amazon to adopt a 'zero deforestation' policy.

While the Brazilian Amazon has become an area of particular focus for engagement by investors in Brazilian sovereign bonds, fixed-income investors are typically wary of using engagement as a tool for addressing deforestation and biodiversity risks (in a similar manner to how climate risks have become a focus for engagement with corporates and financial institutions). This is because governments are ultimately accountable to their citizens and doing so introduces concerns that capital markets are impinging on sovereignty. In addition, investors are particularly reluctant to engage with governments on these topics because the causal links between loss of biodiversity and forests and economic outcomes are still poorly understood.

A key area of distinction is in intergovernmental interactions, such as global environmental policy pledges and trade negotiations. The 15th UN Convention on Biodiversity will be held in mid-2022, and is likely to increase pressure on biodiverse regions to stem biodiversity and forest loss through regulation. Moreover, the timing of the event, just a few weeks before the COP26 conference, is likely to increase the focus on forestry and land use base climate mitigation activities.

At the same time, many consumer countries and regions are coming under considerable pressure from the public to address biodiversity and forest loss embodied in trade and imports. In the EU, the strength of environmental parties in recent elections has translated into heightened policy activity, such as the European Green Deal, as well as signs of increased integration of environmental concerns, for example, deforestation into trade policy.

Biodiversity Risk Increasingly Integrated into Trade Policy

An area of significant contention is the extent to which biodiversity and deforestation concerns can be integrated within trade policies. For example, Indonesia is challenging the EU's sustainability criteria for biofuels, which is negatively affecting its exports of palm oil. This follows a recent pattern of trade policy as a form of extraterritorial environmental policy for many large commodity consuming regions. The proposed EU-Mercosur trade deal faces opposition to approval in the European Parliament on the basis of weak commitments from Brazil on addressing deforestation and concerns that the environmental costs of the deal will outweigh benefits.

Opponents of integration of such concerns into trade suggest that these clauses can lead to inefficiencies such as lower net trade and worse environmental outcomes than domestic action, and moreover impinge on the sovereignty of trading partners and accountability to their domestic populations. Historically, many trade clauses related to environmental concerns have been linked by opponents to protectionist policies.

Nonetheless, these trends are likely to intensify giving the asymmetry of economic power between producing countries and consuming countries, highlighting the need for clear and consistent performance metrics, terms of trade and dispute resolution measures.

Many of the main producers, processors and commodities traders active in forest-risk commodities are privately or state-owned, which limits the influence of investor engagement and external financing. Bunge and Archer Daniels have been subject to recent shareholder resolutions to disclose a deforestation policy filed by Green Century Capital Management, Inc., although the latter has since been withdrawn, and such resolutions are scarce compared with other ESG issues, such as climate change.

Mixed Impact of Product Labelling

Consumers and buyers of commodities linked to deforestation and biodiversity loss are increasingly relying on product sustainability labels in purchasing choices. Labels such as the Roundtable on Sustainable Palm Oil (RSPO) and Forest Stewardship Council have seen widespread use in procurement strategies for large firms, although the RSPO and many similar labels have been criticised for uneven implementation and inconsistent enforcement of standards.

International banks generally continue to lend to companies that adhere to sustainability standards, such as those of the Roundtable on Sustainable Palm Oil. But there is a risk that this access will dwindle as ESG takes a bigger role in lending decisions. In this situation, we would expect regional banks, and in particular domestic state-owned lenders, to step up their lending to the sector to compensate, given its importance to the economy in both countries.

Financial Incentives Could Drive Stronger Conservation Actions

Financing incentives could play a key role in resolving the emerging market biodiversity-debt nexus and could be supported by wider trends towards multilateral and bilateral debt relief and growth in demand for impact investments.

Debt for nature swaps, which link substantial reductions in debt owed to creditors in exchange for environmental outcomes, have been used since the 1980s, when a secondary market was developed that allowed banks to sell and trade foreign debt at discounted prices. In practice, these transactions only work where a sovereign is seen to be at high risk of defaulting on its obligations, allowing debt buyers to purchase remaining debt at heavily discounted rates. Creditors can use the secondary market to divest their loan payments to NGOs at discounted costs by lowering the interest rate, changing the currency of the debt or refinancing the debt at lower value.

Bilateral and multilateral debt for nature swaps have also been used, such as the US debt swaps with Peru between 2002 and 2018, subsidised by several NGOs. Similarly, the restructuring of Poland's debt by a handful of European and North American creditors in the early 1990s was tied to environmental improvements. A deal was implemented for the Seychelles with support of the UNDP, Global Environment Fund and the Nature Conservancy in 2018, focusing on marine biodiversity management.

While debt for nature swaps have been deployed in a range of settings, they have not seen widespread use for debt restructuring. Part of this relates to the complexity and inefficiency of the deal structures, as well as concerns around infringing sovereignty of debtor countries in relief deals.

An emerging alternative is the issuance of sovereign green bonds or the Nature Performance Bonds (NPB), which are being developed by the World Bank and several leading creditor nations. Pakistan aims to be the first issuer of an NPB this year with USD1 billion tied to biodiversity and ecological outcomes. These instruments allow debtors to tap into the demand for green, social and sustainability-linked debt and the rapidly increasing demand for impact investments, which typically accept lower bond yields in return for measurable outcomes in terms of sustainability performance. The debtor country benefits from lower debt-servicing costs while ensuring that terms of the issuance align with local conservation and development needs.

A challenge for all of these asset classes is to ensure robust disclosure and monitoring of use of proceeds, so the development of common disclosure standards and metrics will be crucial.

Supranational Lenders Look to Greening Sovereign Debt

The G20, World Bank and the IMF implemented a Debt Servicing Suspension Initiative (DSSI) in May 2020 to enable heavily indebted emerging markets to deploy their full financial resources towards tackling the pandemic by pausing debt repayments. The DSSI is estimated to have resulted in about USD5 billion in relief funds for more than 40 countries between 2020 and 1Q21.

Given the linkages between emerging market debt and biodiversity loss, as well as those between climate change mitigation and forestry, supranational institutions and lenders will have an important role in developing common standards and disclosure requirements for sovereign or corporate bonds linked to nature and biodiversity outcomes. This in turn should support the growth of the market through standardisation. For example, the European Investment Bank and the World Bank were key players in developing the green bond market, particularly relating to standardising and improving issuers' disclosure practices.

The influence of supranationals on policies of emerging market banks was also clear in Fitch's 2020 survey of 182 global banks (ESG Bites into Banks' Lending to Corporates, January 2020). The survey found that positive ESG screening of investments was limited outside emerging markets, with banks in Africa, east and southeast Asia most likely to positively screen on ESG to increase financing. This is possibly due to funding access, for example, obtaining preferential project finance loans from development finance or supranational institutions.

Argentina has recently become a proponent of debt-for-nature swaps, having initiated bilateral arrangements with the US and other countries. The country has seen a significant increase to its debt since 2015, including a USD57 billion loan from the IMF in 2018. In 2020, the government restructured debt with private creditors, leaving outstanding IMF debt the main concern in the short term. Both the IMF and the World Bank have committed to developing an 'organising framework' for connecting debt to countries' plans for investing in climate and conservation activities, including an advisory platform.

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