



Nature is too big to fail - financial actors need to act swiftly

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The COVID-19 pandemic has demonstrated just how fragile countries and global systems are to major shocks. The outbreak is having a devastating toll on lives and health of people across the world, especially on the most vulnerable. More than three-quarters of the recent human diseases, emerging or re-emerging at the beginning of the 21st century are caused by pathogens originating from animals or from products of animal origin, including wild animals¹. To reduce the chance of future diseases passing from animals to humans, and putting human well-being and livelihoods at risk, we must urgently transform our relationship with our natural environment. Climate change and biodiversity loss both pose serious threats to our future, and they need to be met with the necessary response.

Despite the growing understanding that the urgency of biodiversity loss demands immediate global action, not enough has been done to reverse this trend. **Global wildlife populations have declined on average by 60 percent in the past 40 years**, largely due to threats and actions induced by human activities.

The direct effects of biodiversity loss on the real economy are rising into the billions, up to **US\$ 577 billion of global crop output are at risk annually due to bees and other pollinators loss (IPBES, 2019)**, or the overexploitation of fishing resources leads to **US\$ 50 billion shortfall each year**. Generally, land-based ecosystem services worth around US\$ 50 billion each year² are lost. If this trend continues, the associated **cost of inaction could rise up to the equivalent of 7% of GDP by 2050**.

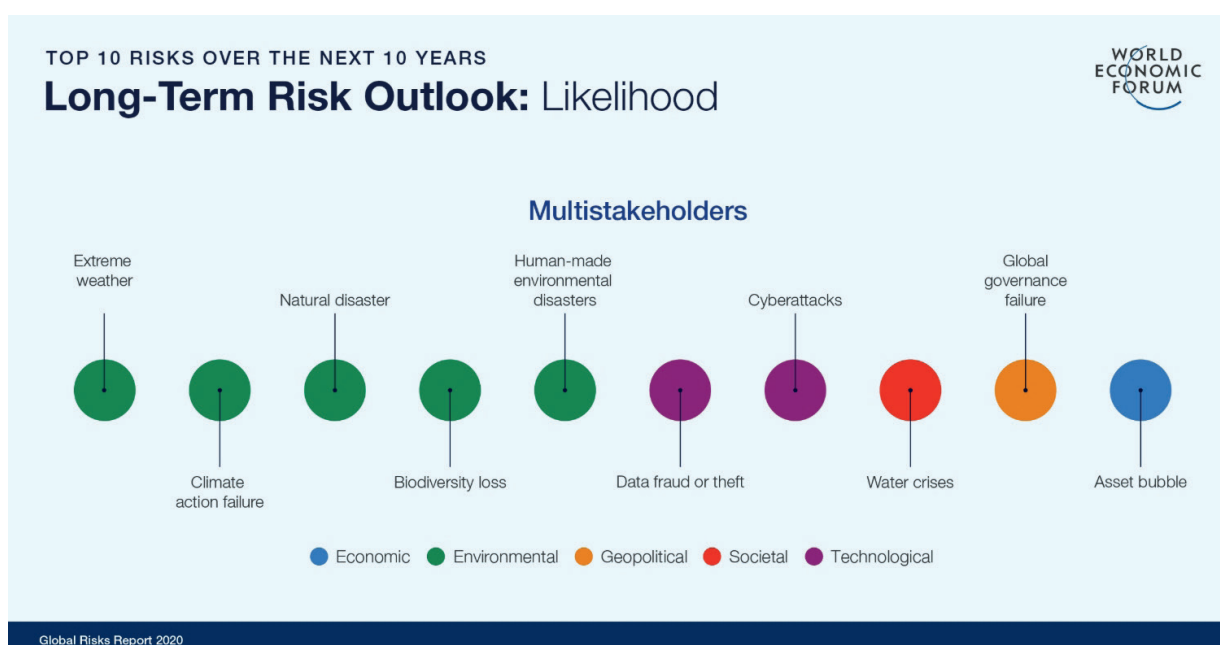
Looking from the opportunity-side: the global economy profits from **USD 125 trillion** worth of ecosystem services through drinkable water, food and pollination, fresh air, heat absorption, and forests & oceans that soak up carbon dioxide – the equivalent of **1.5 times the global GDP**. While impacts and dependencies of many economic sectors on biodiversity are mostly understood, the **financial sector has not been responsive yet to the risks arising from biodiversity loss**.

Loss of biodiversity is an unrecognized environmental risk

The 15th edition of the World Economic Forum's [Global Risks Report](#) published last January is a large survey of experts and decision-makers who are asked to rank their biggest concerns in terms of likelihood and impact. For the first time in the survey's 10-year outlook, the top five global risks in terms of likelihood are all environmental (see graph below) and the report has sound alarm on several key risks, among them the risk of "major biodiversity loss and ecosystem collapse (terrestrial or marine) with irreversible consequences for the environment, resulting in severely depleted resources for humankind as well as industries"³.

Some financial actors have started to recognize biodiversity loss as a financial risk. The French Parliament amended the Article 173 in 2019 to include the disclosure of biodiversity impacts and risks and the Network on Greening the Financial System (NGFS) has recognized environmental risks (beyond climate) as a source of financial risks while some central banks such as the Central Bank of the Netherlands are starting to measure the impact of biodiversity loss on financial stability.

However, the financial industry as a whole is still in its infancy regarding the understanding of the implications of biodiversity loss. Environmental risks are too often confined to climate risks, as the joint report from WWF and AXA "[Into the Wild: integrating nature into investment strategies](#)" highlighted in May 2019.



It is in this context WWF Switzerland has collaborated with PwC Switzerland to analyze the financial risks stemming from nature loss. In a recent report, '[Nature is too big to fail – Biodiversity: the next frontier in financial risk management](#)', PwC Switzerland and WWF Switzerland find that the financial risks associated with the loss of biodiversity will become increasingly important in 2020/21 - especially in the lead up to the United Nations Biodiversity Conference in China. As climate change and the loss of biodiversity mutually reinforce each other, decision-makers face a huge challenge to respond to this double crisis, as the risk of financial market instability significantly increases.

Climate change is a financial risk and recognized as such by a growing number of financial actors and regulators. A related but unrecognized environmental risk is the rapid loss of global biodiversity. Climate change further accelerates the extinction of species and leads to rapid changes in ecosystems. This in turn drastically limits natural carbon sequestration of ecosystems, which again worsens climate change. A negative spiraling loop, which has been until today almost completely ignored by decision-makers, the financial sector, and their regulators.

"It is particularly dangerous for the financial sector to not account for biodiversity loss, as all economic sectors in which they invest, finance or insure depend on biodiversity. To avoid financial instability, we urge central banks and financial regulators to assess the financial risks stemming from environmental degradation more thoroughly, and to act accordingly," says Andreas Staubli, CEO of PwC Switzerland.

Thomas Vellacott, CEO of WWF Switzerland: “Biodiversity-related financial risks have not only been completely ignored by the financial sector but also by decision-makers globally. It is time to respond swiftly to the double crisis from biodiversity loss and climate change. Thus, humanity is in urgent need of a New Deal for People and Nature. All market, governmental and civil society actors are needed. Nature is too big to fail”.

Four biodiversity-related financial risks defined


The joint report published by PwC Switzerland and WWF Switzerland suggests a typology of four financial biodiversity-related financial risks: physical, transition, litigation, and systemic risks.

	Credit risk	Market risk	Operational risk
Transition risk	Investee suffers substantial losses due to sanctions, damages or increased taxes stemming from its negative impact 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 downgrades and share price losses after biodiversity loss	Biodiversity loss affects balance sheet
Litigation risk	<ul style="list-style-type: none"> • Litigation as pertaining to biodiversity loss and breach of the under-lying legal frameworks • New regulatory rules impose limitations on investing in activities with 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/entire markets

Source: PwC Switzerland/ WWF Switzerland January 2020, Nature is too big to fail – Biodiversity: the next frontier in financial risk management, adapted from BaFin (2019), Guidance notice on dealing with sustainability risks and BaFin (2019), BaFin Perspectives Issue 2c

The report further highlights what can be learned from the discussions around climate-related financial risks. It provides a framework on how to integrate biodiversity losses into the classical risk framework of financial institutions and suggests recommendations to financial regulators/central banks, financial market players, and states/international organizations:

- States agree to an ambitious Global Biodiversity Framework in China in 2021 by bringing all financial flows in line with biodiversity conservation and restoration (Paris Agreement Obj. 2.1.c equivalent for biodiversity)
- The funding gap for biodiversity conservation and restoration of at least half a trillion US dollars per year needs to be closed by all actors rallying together.

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- As biodiversity-related financial risks and the spiraling effect with climate change pose a systemic risk, all central banks and financial regulators need to emphasize the importance that the regulated entities regularly disclose their biodiversity-related financial risks. Furthermore, stress tests regarding biodiversity-related financial risks should be run regularly.
 - A task force on nature-related Financial Disclosures should be created. It should drive standardized disclosure on nature-related risks, taking into consideration the physical, transition, litigation, and systemic financial risks that stem from biodiversity loss.
 - All financial actors should proactively manage biodiversity-related financial risks and seize and secure opportunities offered by ecosystem services (e.g. flood protection, pollination, clean water, fertile soils, and adaptation to climate change).

Finally, pandemics like COVID-19 are expected to occur more often when biodiversity is destroyed at a scale and pace as it is today. Preserving biodiversity and maintaining ecosystem resilience is much needed to cope with other environmental challenges like global temperature rise. Financial actors are well-advised to systematically integrate these risks into their strategies and risk management processes.

References

- 1 Report of the WHO/FAO/OIE joint consultation on emerging zoonotic diseases 2004.
- 2 https://ipbes.net/sites/default/files/2020-02/ipbes_global_assessment_report_summary_for_policymakers_en.pdf
- 3 <https://www.weforum.org/press/2020/01/burning-planet-climate-fires-and-political-flame-wars-rage>



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