The Changing Wealth of Nations 2021

Managing Assets for the Future

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Background

- CWON 2021 is the fourth report in the series

- Theme: “Managing Assets for the Future”

- It is the first report to focus on:
  - The future wealth of nations
  - Climate risks and global decarbonization
  - How policy choices shape wealth
Looking ‘Beyond GDP’

- GDP measures economic growth
- Wealth measures the underlying assets that generate income
- GDP is *sustainable* only if asset base is not shrinking
- Changes in wealth per capita measures how the asset base changes
Comprehensive wealth covers a wide range of asset types

- Produced capital
  - Machinery, structures, urban land
  - Non-renewable natural capital
    - Fossil fuels, minerals
    - Cropland and pastureland
  - Renewable natural capital
    - Forest timber and eco services
    - Protected areas
- Human capital
- Net foreign assets
  - Male/female, employed/self-employed
  - Assets-liabilities
Downward trends in per capita wealth put sustainable prosperity at risk for some

Percent Change in Wealth Per Capita 1995 -2018

CHANGE IN WEALTH PER CAPITA
1995—2018

- > 100%
- 51—100%
- 1—50%
- -5—0%
- <-5%
- MISSING DATA
Key Findings
Significant disparities in wealth per capita across countries
Composition of Japan’s Renewable Natural Capital 2018

- Cropland, 29%
- Protected areas, 11%
- Forests, ecosystem services, 29%
- Pastureland, 20%

Other categories include:
- Forests, timber, 6%
- Fisheries, 2%
- Mangroves, 2%
- Natural gas, 1%
- Other, 0.5%
Human capital is the largest asset across all income groups.

Annual Growth Rate of Human Capital per Capita, by Income Group, 1995–2018 (%)

- Lowest growth in high-income non-OECD countries dependent on non-renewables.
- Significant disparity between male and female human capital persists.
Blue Natural Capital saw a decline of fisheries and rise of mangroves wealth. Overall, the share of Blue Natural Capital in total wealth declined.

Shares of Marine Fisheries and Mangroves in Blue Natural Capital, 1995–2018

Source: authors’ calculations
The low-carbon transition can reduce value of fossil fuel assets up to $6.2 Tn below BAU, with large differences by region, country, fuel and policy.
Renewable Energy – still unaccounted wealth of nations

The value of renewable energy assets in Japan 1990-2017

Hydropower
Solar PV + CSP
Wind
Unit Rent of Variable Renewable Energy Growing

Renewable energy rents per GWh of electricity produced in Japan 1990-2017
Policy Recommendations
Our policy priorities

1 | Measure and monitor wealth

2 | Invest in comprehensive wealth

3 | Create policy incentives to protect and increase the value of wealth

4 | Diversify and rebalance the asset portfolio to make growth sustainable and resilient
CWON 2023: How resilient & sustainable is wealth?
The comprehensive wealth methodology will be reviewed to incorporate strong sustainability concerns

• Key challenge with current methodology: *weak sustainability*

• Key question: how to introduce *strong sustainability* concerns
The coverage of renewable natural capital will be significantly expanded

Comprehensive wealth

Decomposition in physical and monetary (MER- and PPP-based) terms
Natural capital will be streamlined into economic analysis to answer key policy questions

Policy scenario
Ecosystem restoration

Climate change impacts
Optimistic & pessimistic scenario

1. Pollination
2. Timber
3. Carbon
4. Fisheries
5. Water regulation
6. Sediment control

Dynamic CGE Economic Model

Predicts change in resource use

Predicts change in ecosystem services

For a typology of countries, e.g., fossil fuel rich, ocean, or agricultural economies
Thank you!
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| **Renewable Natural Capital** | - Forests: Policies and investments to prevent deforestation and forest degradation can enhance overall natural capital wealth, especially in low-income and lower-middle-income countries which, as a group, show a decline in forest timber and forest ecosystem services wealth per capita. Mechanisms that make visible the full value of forest ecosystem services can help incentivize protection and sustainable use, relative to timber and agricultural uses.  
- Critical services provided by forests and other ecosystems include retention (stock) and sequestration (flow) of carbon. Markets so far failed to reflect this value in widespread carbon prices. Domestic policy action to price carbon, alongside internationally comparable accounting standards consistent with SEEA, may pave the way for emergence of the global demand and willingness to pay for retention and sequestration services provided by ecosystems, and stem over-use of forests for timber or clearance.  
- Marine capture fisheries: Reforming and repurposing fishery subsidies, agreeing sustainable quotas, and the replenishment and monitoring of fish stocks can all help prevent over-fishing and depletion of the fishery wealth, especially impacting coastal communities.  
- Mangroves: Return to investments in mangroves restoration and preservation should include both the value of ecosystem services they provide to economy and the value of produced capital they protect from floods and storm surges especially as these risks are increasing with climate impacts.  
- Agricultural land: Countries with significant shares of cropland wealth that are vulnerable to the impacts of climate change on crop yields should manage this risk through diversifying their portfolio investing in other renewable assets, human or produced capital.  
- Renewable energy: Countries, EIA and SEEA, should assign explicit values to renewable energy assets in national balance sheets as they currently assign to fossil fuel reserves. | Chapter 5 | ✓ | ✓ | ✓ |
| **Nonrenewable Natural Capital** | - Fossil fuel rich countries should manage the risks associated with global decarbonization and stranded assets via international cooperation and asset diversification, avoiding carbon-intensive downstream activities. Policy instruments might include energy taxation (or reducing energy subsidies) to better reflect environmental costs of fuels. This can also help manage external risks, such as carbon border adjustment taxes and other tariffs and non-tariff trade barriers to goods with high environmental footprint. | Chapter 14 | ✓ | ✓ | ✓ |
| **Human Capital** | - Resource rents from nonrenewable natural resources (especially oil, gas, minerals) should be transparently collected and re-invested in sustainable forms of wealth – including public infrastructure, green produced capital, renewable natural wealth and human capital (skills, health) to support sustainable prosperity.  
- Investing in girls’ education can improve both the level and equity of human capital wealth. This may be particularly urgent in countries with overly unequal distribution of human capital, such as measured by CWON, including in some resource rich countries.  
- Investments in education and health, including policies and measures that reduce population exposure to air pollution can enhance the value of human capital alongside improving wellbeing and productivity. | Chapter 9, 11 | ✓ | ✓ | ✓ |
| **Produced Capital** | - Public capital (e.g. infrastructure): Use proceeds from nonrenewable natural resources (oil, gas, minerals) to invest in public infrastructure in capital scarce countries.  
- Risks to the value of produced capital, such as infrastructure and cities, from storm and flooding can be mitigated by leveraging investments in nature, such as protective mangroves.  
- Proceeds from nonrenewables can be invested in produced capital, and used to help improve the investment environment – as process known as ‘investing in investing’, promoting both asset diversification away from dependence on non-renewables, and economic sustainability.  
- Fiscal policies should avoid unwarranted accumulation of produced capital in sectors exposed to transition risks and encourage accumulation of climate-proof produced assets. | Chapter 7, 9, 11 | ✓ | ✓ | ✓ |

Policy matrix