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The Global Crisis of Unsustainable Development and the Case for a Global Economy of Moderation

Cognitive and Normative Perspectives

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The global crisis of UNSD and the case for a GE of M

MOTTO

„One reason technology and markets are unlikely to prevent overshoot and collapse is that ***technology and markets are merely tools to serve goals of society as a whole***. If society's implicit goals are to exploit nature, enrich the elites, and ignore the long term, then society will develop technologies and markets that destroy the environment, widen the gap between rich and poor, and optimize for short-term gain. ***In short, society develops technologies and markets that hasten a collapse instead of preventing it"***

(Meadows, Randers, Meadows 2002, *Limits to Growth. The 30-Year Update. A Synopsis*, pp. 8-9).

The Global Crisis of UNSD and the Case for a GE of M

Introduction

The paper is an attempt at ***comprehensive*** approach to the global crisis of UNSD which includes:

- a **positive (descriptive and explanatory)** analysis of the global crisis of **UNSD** (Part one)
- a **normative** reflection on possible pathways towards a more sustainable future, towards a **GE of M** (Part two)

In **concluding remarks**, we briefly refer to the need of changing attitudes and patterns of economic behaviour, education and New Ethics of Development

Part I. Selected cognitive aspects of the crisis of UNSD

- A natural starting point of our analysis is the concept of **Sustainable Development** (SD)
- Despite its widespread use, **SD remains a highly contested concept**, characterized by great ***diversity,*** both ***theoretically*** and ***operationally***.
- Two main dimensions of this **diversity** can be identified:

➢ **analytical and policy-oriented dimension** (the essence of SD, its objectives and basic principles/foundations, methods of measurement and evaluation)

➢ **theoretical and cognitive dimension**

(1) the very meaning of long-term sustainability

(2) conditions and limits of social welfare growth in the approach of

❖ mainstream growth theory and

❖ heterodox approaches, including Ecological Economics, Sustainability Economics, Evolutionary Economics

Part I. Selected cognitive aspects of the crisis of UNSD

- Secondly, our point of departure is a **critical assessment of mainstream growth theories** (neoclassical mostly) because, particularly, of their two shortcomings

- **Neglecting or paying insufficient attention** to such outcomes of increasing production and consumption as:

1. environmental degradation
2. social inequalities
3. long-term sustainability and intergenerational ecological justice

In this context, we also firmly emphasize negative impacts connected with fundamental **behavioural foundation of NCE:** ***Utility Maximization Hypothesis*** and related concept of Homo Oeconomicus

Part I. Selected cognitive aspects of the crisis of UNSD

- Second **shortcoming** to which we refer to in our critical assessment of mainstream growth theories is the **„separation of economy and nature**" which means that socio-economic systems are frequently analysed as if they existed **alongside nature rather than within it**. As a consequence:

- ecological constraints on growth tend to be underestimated
- natural limits to growth are often ignored
- excessive faith is placed in technological solutions
- physical laws governing resource use (e.g. conservation of matter and energy) are not sufficiently taken into consideration

By and large, it can be described as the **ecological growth optimism** of mainstream (NCE) economics

- In the context of aforementioned critique, **Sustainable Development** is an attempt at **integrated (holistic), and not fragmented,** approach to socio-economic development, connecting its ecological, economic, technological, cultural and institutional aspects

Part I. Selected cognitive aspects of the crisis of UNSD

❑Three pillars of sustainability

- **economic**, referring to conventionally understood economic growth and social welfare
- **social**, implying, first of all, reduction of social inequalities, preventing various kinds of social exclusion and growth of human capital
- **ecological,** the most important one in the long run or secular perspective, meaning in turn:

1. **(a)** the need for preserving socially acceptable environmental quality, **(b)** preventing irreversible ecological changes and losses **(c)** preserving environmental resources and values (natural capital) for future generations
2. Imperative of consideration of socio-economic phenomena with taking into account ***functions and constraints of particular natural ecosystems and physical foundations of*** economic processes: law of conservation of matter, entropy, and others

Part I. Selected cognitive aspects of the crisis of UNSD

Sustainable Development: An Operational Perspective

- Sustainability of development means maximizing ***the net benefits of economic development*** while preserving the utility and quality of natural resources over the long term (intergenerational perspective)
- Development can be regarded as sustainable only if

1. no essential component of social welfare deteriorates> ***SD*** is not synonymous with ***green growth*** or ***eco-development***
2. ***future opportunities are not compromised***
3. economic gains are not achieved at the expense of environmental degradation

Part I. Selected cognitive aspects of the crisis of UNSD

❑ SD and Intergenerational Justice

- **Intergenerational justice** is a fundamental ***feature***, as well as ***principle*** and one of superior ***social goals*** (along with welfare and safety) of SD in each of its three pillars (in accordance with ***Brundtland's*** definition)
- ***current generations can not be better off through making future generations worse off in terms of their welfare/well-being*** (there is no intergenerational „trade-off" of welfare, neither in environmental nor economic dimension
- Sustainability of Development may be also defined as the **mini-max principle** which implies that

(1) future generations may be merely *better off* in relation to current generations, and, simultaneously

(2) currently living generations can not be *worse off* (in terms of welfare) vis-a-vis future generations

Part I. Selected cognitive aspects of the crisis of UNSD

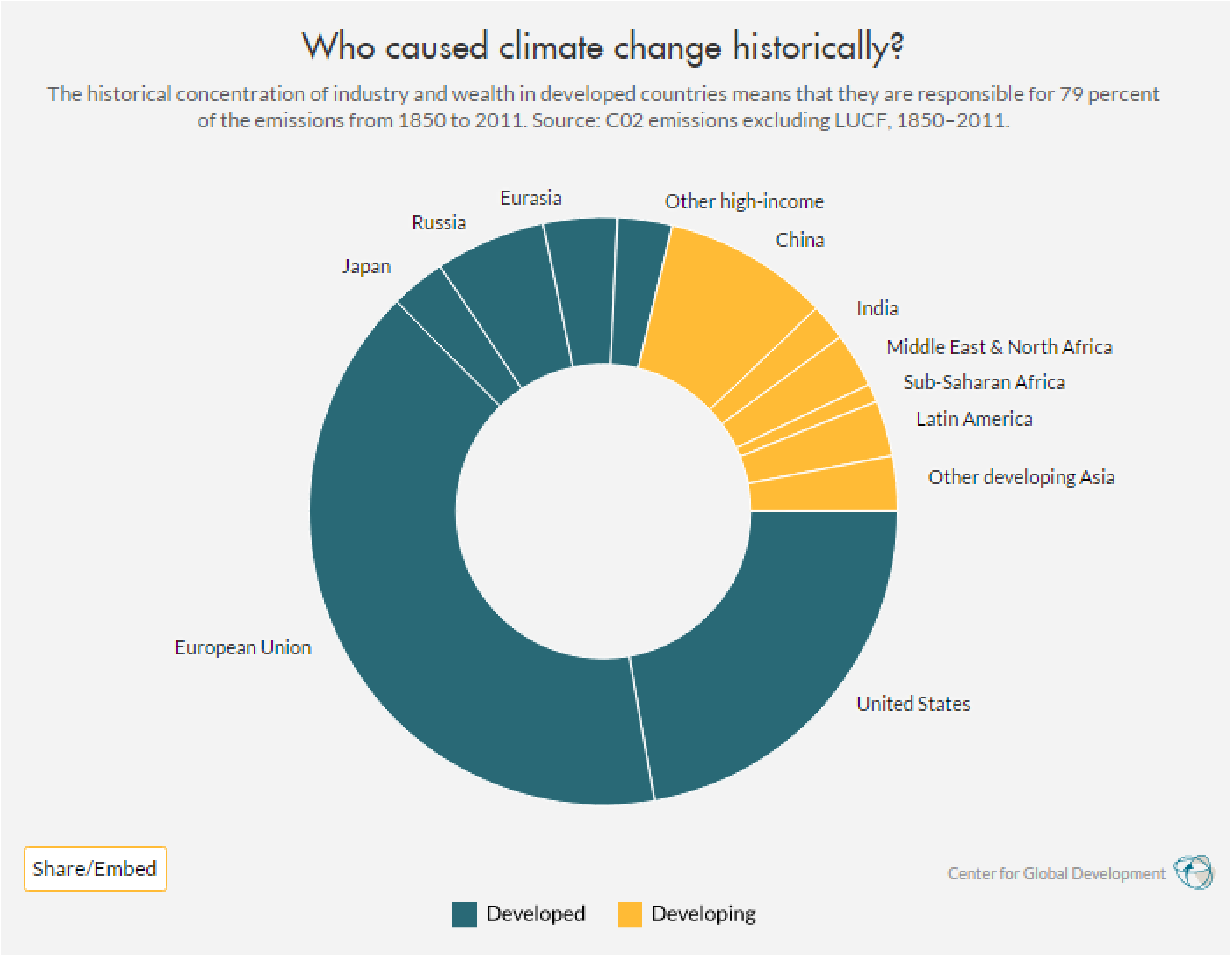
❑ SD – intragenerational justice, ecological aspect

- Irrespectively of interpreting the SD in terms of mini-max principle, there are at least two empirical arguments - connected with ecological dimension of SD - for ***intragenerational distribution of welfare***

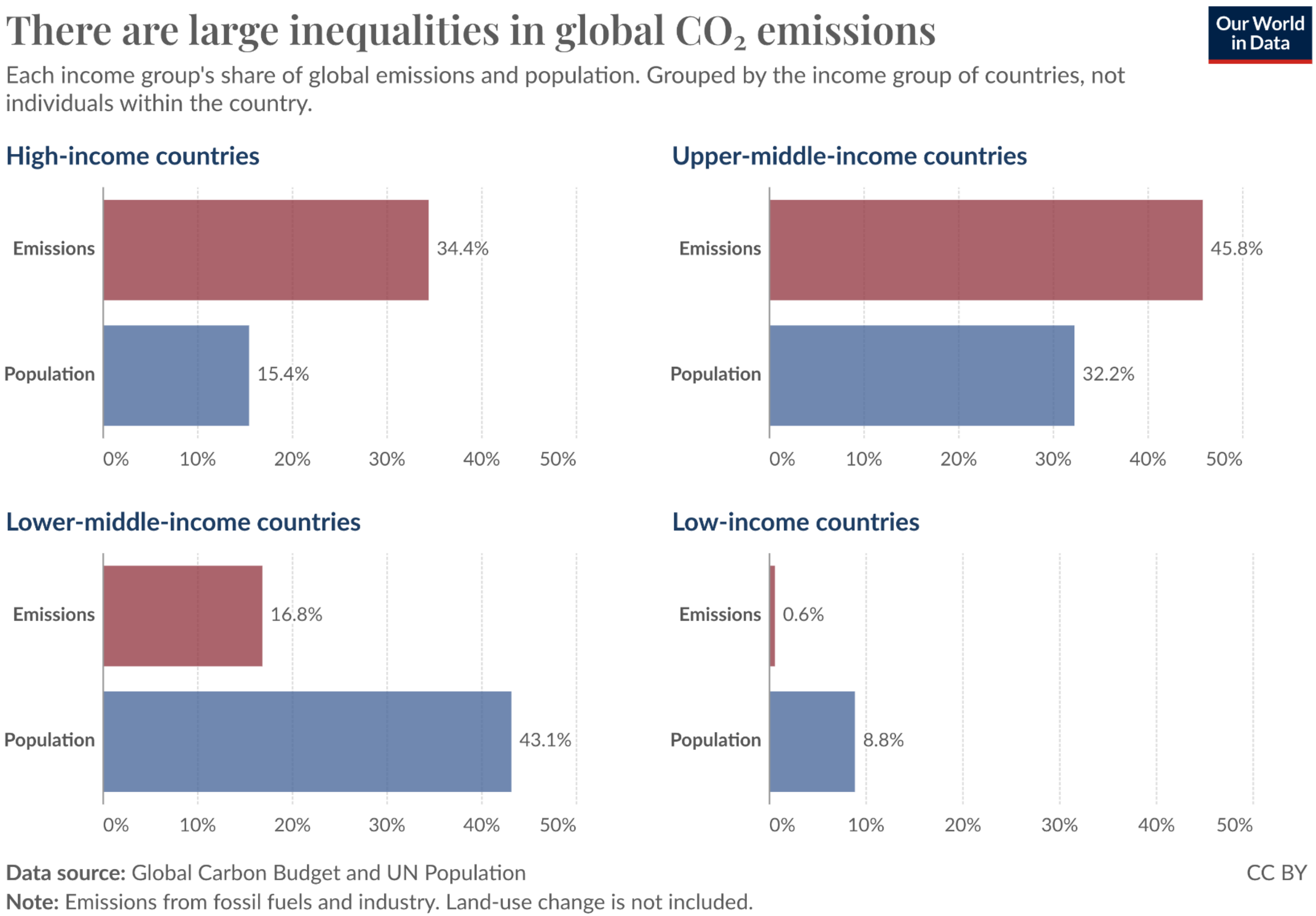
1. Firstly, one observes **a huge differentiation between highly developed and catching-up (emerging market) economies in terms of their contribution to global emission of greenhouse gases** and, following that, to the increase of Earth's average temperature.
2. Secondly, also today we have to do with a **big discrepancy** between the shares of highly developed and developing countries in **global emission of GHGs and their shares in the world's population**

- An example of positive respond of international community to above mentioned challenges is **the Kyoto Protocol**. It is based on the principle of **common responsibility** for the climate change, but recognizing **various responsibilities** of particular countries from the historical perspective

Part I. Selected cognitive aspects of the crisis of UNSD



Part I. Selected cognitive aspects of the crisis of UNSD



Part I. Selected cognitive aspects of the crisis of UNSD

Global crisis of unsustainable development as a quite new feature or property in the development (history) of modern economies

1. **Firstly**, because it pays attention to fundamental and growing significance of ***energy and natural raw materials*** (fossil fuels and non-energy critical raw materials in particular) limits to growth, along with ***cumulative global ecological outcomes*** of their use
2. **Secondly**, because it shows that for the economic growth to be sustainable in the long run it is necessary to start and consistently implement the ***overall energetic transformation:***

- **growth of efficiency** of primary energy carriers in generation of final energy,
- **energy savings** in production, transport, housing and residential sector etc
- radical increase in the share of **renewable energy** in the generation of final energy

Part I. Selected cognitive aspects of the crisis of UNSD

3. **Thirdly,** because global unsustainable development is connected with ***global ecological threats*** which (before the end of XXI century, according to some scenarios) may result in the collapse of contemporary civilization, and threaten the ***existence of homo sapiens*** as a biological species
4. **Fourthly,** because the global crisis of UNSD emphasizes the need of striving for **intergenerational justice** in its two dimensions :

- access to various kinds and functions of **natural capital**,
- socially acceptable **environmental quality**

5. **Fifthly**, there is a **general consensus of world scientific community** that the most important global threat is ***global warming***, and this process is of mostly **anthropogenic** character **(**emission of GHGs)

Part I. Selected cognitive aspects of the crisis of UNSD

6. **Sixthly, aawareness of global ecological threats**, and global warming (or climate changes in in a broader approach) is expressed on two different levels:

- aforementioned **general consensus of world scientific community,** as expressed e.g. in subsequent Assessment Reports prepared by the IPCC
- **global political activities:** UNFCCC (1992), Kyoto Protocol (1997/2005), Paris Agreement (2015, COP21)

aimed at achieving the following **strategical goals** :

1. **to prevent from the increase of average Earth surface temperature above 1,5^{0} C in relation to the pre-Industrial Revolution time till the year 2050** and maximum 2^{0} C in the year 2100
2. **to achieve the balance between anthropogenic emissions and their absorption by different "sinks of GHGs"** (natural and „man-made" ones) in the second half of XXI century > the so called **climate neutrality**

Part I. Selected cognitive aspects of the crisis of UNSD

- **A cautious optimism regarding sustainable development**, as based on aforementioned increasing scientific and social awareness of global ecological threats, and in this climate change, and some coordinated activities of world's community, must be accompanied by **realism**
- Overcoming the global crisis of UNSD and the transition towards sustainability may remain merely a beautiful idea unless **profound changes occur at several levels**: economic, institutional, social, cultural and anthropological
- Paraphrasing **Richard Thaler** (Nobel Prize winner in 2017): Humanity must move from the logic of Homo oeconomicus toward a broader understanding of Homo sapiens, which inevitably implies that **we think and act also in terms of intergenerational environmental sustainability** in order to maintain conditions of our survival as a biological species
- As **Paul Collier** warns, otherwise, we may leave future generations a **"plundered planet"**

The Global Crisis of Unsustainable Development and the Case for a Global Economy of Moderation

Part II. Key Normative Dimensions of the Economy of Moderation

- Main Themes
  - Ecological ceilings
  - The imperative of change
  - Global rationality and moderation
  - Rationality, utility and welfare
  - Normative commitment
  - The common good
  - Policy implications and conclusions
- The central question is:

  How should humanity act if long-term civilizational survival becomes a primary objective?

Part II. Key Normative Dimensions of the Economy of Moderation

- **Humanity and the Environment: Ecological Ceilings**

Human activities increasingly operate near or beyond critical ecological limits.

- **Major Planetary Pressures**
  - Climate change
  - Biodiversity loss
  - Chemical pollution
  - Land-use change
  - Ocean acidification
  - Nitrogen and phosphorus overload
  - Excessive freshwater extraction
  - Resource depletion
- **The Anthropocene**

Human influence on Earth systems has become so extensive that many scholars describe the current epoch as the **Anthropocene**.

In many respects, human activity now affects ecosystems more strongly than natural processes themselves.

Part II. Key Normative Dimensions of the Economy of Moderation

- **The Imperative of Change**
  - The need for change stems from the limited carrying capacity of ecosystems.

  Economic and social processes cannot be analysed independently of:
    1. ecological functions
    2. environmental constraints
    3. physical limits
  - **Sustainable Development and Intergenerational Justice**

  Three obligations emerge:
    1. Environmental Quality – Maintaining socially acceptable environmental conditions
    2. Prevention – Avoiding irreversible ecological damage.
    3. Stewardship – Preserving environmental resources and values for future generations
- **Three Key Concepts**
  - Global Rationality
  - Moderation
  - Common Good

These concepts provide the normative foundation for a new development paradigm

Part II. Key Normative Dimensions of the Economy of Moderation

- **Global Rationality and Moderation: A Holistic Perspective**
  - **At the Civilizational Level**

    Global rationality and moderation mean organizing economic and social life in ways that ensure humanity's long-term survival

    This requires recognition of:

    1. ecological constraints
    2. social risks
    3. political consequences of environmental degradation
  - **At the Individual Level**

    Moderation implies that individual behaviour is assessed not only through personal benefits but also through its broader societal and environmental consequences.
  - **The Central Challenge**

    How can societies create institutions capable of promoting harmony, responsibility, and long-term thinking?

Part II. Key Normative Dimensions of the Economy of Moderation

- **Rationality, Utility, Preferences and Welfare – Theoretical Foundation**

These concepts occupy a central position in economics.

- **Mainstream Perspective**

  Economic welfare is generally identified with utility derived from satisfying individual preferences

  Consequently: more consumption implies greater welfare, growth becomes the principal objective

- **The Sustainability Problem**

  Without changing prevailing patterns of production and consumption, climate stabilization is unlikely. A particularly important challenge arises from:

  1. the expansion of the global middle class
  2. rising consumption aspirations in emerging economies

- **Physical Limits Matter**

  The universalization of high-consumption lifestyles is impossible because of:

  1. finite resources
  2. energy constraints
  3. ecological limits

Part II. Key Normative Dimensions of the Economy of Moderation

- **Rationality, Utility, Preferences and Welfare – Theoretical Foundation**

  - **The conventional concept of rationality** assumes that:
    1. utility is determined by individual consumption
    2. individuals seek to maximize their own welfare
    3. actions are guided primarily by self-interest
  - **The Utility-Maximization Paradigm**

  This framework reaches its most complete expression in the concept of: **Homo Oeconomicus.** Although widely criticized, this model continues to influence both economic theory and public policy
  - **The Problem**

  A development model based exclusively on utility maximization may conflict with:
    1. ecological sustainability
    2. collective responsibility
    3. long-term civilizational interests

Part II. Key Normative Dimensions of the Economy of Moderation

- **Theoretical Foundation – Normative Commitment**
  - **Mainstream economics** remains strongly influenced by:
    1. **Methodological Individualism.** Economic outcomes are explained primarily through individual decisions
    2. **Reductionism –** Broader ethical, social and cultural contexts are often treated as secondary

  - **The Alternative Perspective is necessary –** The concepts of global rationality and moderation require a broader understanding of human behaviour. Economic choices are not determined solely by self-interest. They are also shaped by:
    1. values
    2. social norms
    3. moral obligations
    4. responsibility toward future generations
  - **The Question**

  Can individual freedom and collective responsibility be reconciled within a sustainable development framework?

Part II. Key Normative Dimensions of the Economy of Moderation

❑ Theoretical Foundation – Normative Commitment

- **Normative Commitment: An Alternative to Pure Self-Interest**

The concept of **global rationality** requires a broader understanding of human motivation than that offered by the traditional Homo Oeconomicus model.

- **The Core Challenge**

How can the tension between:
individual rationality
and global rationality
be reconciled?

- **Alternative Models of Human Behaviour**

A number of alternative concepts have emerged in economic and social thought:

1. *Homo modestus*
2. *Homo empathicus*
3. *Homo sociologicus*
4. *Homo sustinens*

All of them emphasize dimensions of human behaviour that extend beyond utility maximization

Part II. Key Normative Dimensions of the Economy of Moderation

- **Theoretical Foundation – Normative Commitment**

  - **Amartya Sen: Freedom, Commitment and Responsibility**

  Amartya Sen offers one of the most influential responses to the limitations of conventional rationality

  - **Commitment as a Dimension of Human Agency**

  According to Sen, individuals may take the interests of others into account in two ways:

    1. **Sympathy –** Concern for the well-being of others because their situation affects our own feelings
    2. **Commitment –** Acting according to moral principles or social norms even when doing so does not increase – and may even reduce – one's own utility

  - **A Fundamental Insight**

  Human beings are capable of making choices guided not only by preferences but also by ethical obligations

  - **Freedom and Development**

  For Sen:

  Freedom is both the primary means and the ultimate end of development

Part II. Key Normative Dimensions of the Economy of Moderation

❑ Theoretical Foundation – Normative Commitment

- **Commitment as a Bridge Between Individual and Global Rationality**

The concept of commitment provides a potential bridge between:
the economy of moderation, global rationality, individual decision-making

- **However, Is Moral Awareness Enough?**

Probably not. If moderation is to become a practical social principle, societies may need mechanisms that actively support responsible behaviour

- **Possible Instruments**
  1. dissemination of good practices
  2. institutional innovation
  3. fiscal incentives
  4. environmental taxation
  5. lifelong education for sustainable development
- **Implication**

The transition toward sustainability requires not only knowledge, but also institutional support and social learning

Part II. Key Normative Dimensions of the Economy of Moderation

- **Theoretical Foundation – Normative Commitment**

  - **Libertarian Paternalism and Ecological Moderation**

  Can societies promote moderation without undermining individual freedom?

  A Possible Answer – The concept of **libertarian paternalism**, developed by: Richard Thaler, Cass Sunstein

  - **Basic Idea –** Public institutions may encourage socially desirable behaviour without eliminating freedom of choice
  - **Examples –** fiscal incentives, default options, information architecture, behavioural nudges
  - **Application to Sustainability –** Just as governments promote healthier lifestyles or retirement savings, they may also encourage: responsible consumption, energy efficiency, environmentally sustainable behaviour

  At this point, the concept of the **common good** becomes particularly important

Part II. Key Normative Dimensions of the Economy of Moderation

❑ Theoretical Foundation – Normative Commitment

- **The Common Good in a Globalized World**

The notion of the common good is difficult to translate into everyday language. Yet contemporary global challenges make it increasingly relevant.

- **An Illustrative Example**

The COVID-19 pandemic may be interpreted as a consequence of insufficient investment in global public preparedness.

- **A Broader Interpretation**

The common good may be understood as:
a global system of prevention and collective resilience protecting humanity against systemic threats and “black swan” events.

- **Key Characteristic**

It is not produced by a single actor.
It emerges through the collective efforts of the global community.

Part II. Key Normative Dimensions of the Economy of Moderation

- **Global Rationality and Moderation as a Universal Common Good**
  - The proposed concept of a global economy of moderation can itself be viewed as a form of common good

    Why?

    Because its ultimate objective is the preservation of civilization over the long run
  - **A Special Type of Common Good –** Unlike conventional economic definitions of public goods, this common good possesses an existential dimension

    Without the survival of civilization: prosperity loses meaning, economic growth becomes irrelevant, other public goods cannot be sustained
  - **Therefore**

    Moderation should be regarded as:

    1. a global intangible resource
    2. a universal common good
    3. a necessary condition for humanity's future

Part II. Key Normative Dimensions of the Economy of Moderation

- **Conclusions**
  - **The Economy of Moderation Is an Imperative**

    The transition toward an economy of moderation is not merely desirable

    It is necessary
  - **The Good News**

    Such a transformation is possible

    It should not be viewed as a utopian project but as a realistic response to emerging ecological constraints
  - **Why Moderation Matters**

    Moderation enables:

    1. global rationality
    2. long-term responsibility
    3. intergenerational justice
    4. civilizational continuity

  Without moderation, the long-term survival of contemporary civilization may be at risk

Part II. Key Normative Dimensions of the Economy of Moderation

- **Conclusions**
  - **Rethinking Growth and Progress –** One of the most important challenges concerns the operationalization of moderation

    Key Questions
    1. Which ecological conditions must be satisfied for civilization to remain viable?
    2. How should these conditions be measured?
    3. How can compliance be ensured over the long term?
  - **Beyond Carbon Metrics**

    The sustainability agenda cannot be reduced to measuring carbon footprints alone
  - **Moving Beyond GDP Fetishism –** Not every form of economic growth improves human well-being. Consequently: not all innovation is socially desirable, not all scientific investments generate positive outcomes
  - **Policy Implication**

    Greater support should be directed toward:
    1. green technologies
    2. sustainability-oriented innovation
    3. socially responsible science

Part II. Key Normative Dimensions of the Economy of Moderation

- **Conclusions**
  - **Education, Public Debate and Long-Term Thinking –** Public discourse must leave room for ideas that may initially appear unrealistic or overly ambitious

    Why?

    Because many of today's realities were yesterday's utopias
  - **The Real Challenge**

    To move beyond:
    1. short-termism
    2. ad hoc policymaking
    3. crisis-driven decision-making
  - **Guiding Ideas**
    1. Global Rationality
    2. Common Good
    3. Moderation
    4. Intergenerational Responsibility
  - **Education and Regulation –** Both matter

    However, if one priority must be identified, it is:

    EDUCATION, STUPID!

    Without education, neither institutions nor regulations can secure a sustainable future

Thank You for Your Attention!

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