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Development trends in the Balkans: How much is enough to reach the 'desired state' of sustainable development?

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Summary

The core idea of sustainable development is to reconcile society's development goals with the planet's environmental limits over the long term. Continuing to develop the human economy within the planet's boundaries calls for new ways of thinking and measuring progress. While the sustainable economy is supposed to stop growing quantitively at some point, it can keep developing qualitatively. The sustainability discourse has become ever more integrated into strategic documents at supranational (EU), national and regional levels. Yet, in practice, development policies often remain strongly subordinated to the growth paradigm. Building on a critical analysis of the Gross Domestic Product (GDP), as the quintessence of the traditional growth model and a main indicator for the size of the economy, this paper highlights the need for alternative and innovative approaches to gauging societal development. It employs composite indices and indicator suites to analyse current development trends in the Balkan region and other countries in Europe. These sustainability-driven constructs allow us (1) to assess discrepancies between socio-economic development and ecological sustainability and (2) compare the performance of different countries and regions. The approach proves useful to define the current state of development along key indicators. The results reveal striking inequalities in terms of overall well-being and that Europe is far from reaching 'the desired state' considering both reconciling development with limits to growth and reaching the Sustainable Development Goals' objectives. Thus, the paper provides insights into understanding major trade-offs (e.g. growth versus sustainability, efficiency versus fairness, and short- versus long-term gains) that any holistic development strategy should address.

Keywords: Sustainable development, Measuring progress, Sustainability indicators, SDGs, Composite indexes, European Union, Central and Eastern Europe, Balkans

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Introduction

Ahead of the 2024 Summit of the Future, the United Nations (UN) Secretary-General Antonio Guterres called on the UN Member States to reconsider and change the way they measure economic performance, moving beyond Gross Domestic Product (GDP) as the key indicator: "[…] it is recognized that a harmful anachronism exists at the heart of global policymaking, which is that our economic models and measurements overlook many aspects that sustain life and contribute to human well-being, while perversely placing disproportionate value on activities that deplete the planet" (UN 2023, p. 2). Thus, there is emerging consensus among scholars and policymakers that GDP is an inadequate measure of development if other important aspects are taken into account, such as environmental degradation and human well-being. Moreover, economic activities causing direct environmental destruction (e.g., deforestation, overfishing, fossil fuels burning) inter alia contribute to GDP increase (e.g. Daly, 2005; Daly, 2013; UN, 2023).

Consequently, if we are to retire metrics like GDP, it is important to explore alternative and complementary indicators or indices that can measure 'what really matters' in human and societal development and transfer them to praxis. This is easier said than done given that leading international and European institutions still draw on GDP. Both the International Monetary Fund and the World Bank look at changes in a country's GDP to guide their policies and financing, and the EU's own distribution of funds is based on GDP considerations.

The recent expansion of the literature on alternatives to GDP has fed scientific/technical and political debates on which should be the relevant indicators, especially as the sustainable development concept has continued to widen, becoming mainstream. Yet, the complexity of development processes and the different notions of development make it difficult to choose the 'right' indicators, methodologies, and algorithms to measure progress and well-being, and to adequately interpret the results and bind them to specific policy actions.

Most papers that aim to assess overall human well-being are based on global development processes, few focus on Europe and even fewer on the Balkan region. The development processes in the Balkan countries present particularly interesting case-studies given that their strong aspirations towards EU integration placed the sustainability concept high on the agenda, requiring considerable improvements of environmental performance. At the same time, however, the region is marked by pressing socio-economic problems, (e.g., high unemployment rates, rising emigration, relatively low purchasing power of households, and unsustainable consumption and production patterns), while the implementation of environmental legislation and protection standards is poor (Raszkowski and Bartniczak, 2019). These conditions make the operationalization of the sustainable development concept even more difficult.

Against this background, the present paper proposes a new selection of indicators/indices which are applied to the Balkan and other European countries, offering deeper insights into how to measure 'what really matters'. This also allows for a comparative analysis among the countries studied to understand differences in their overall development and to assess how far they stray away from the notion of 'sustainable development' based on limits to growth and the Sustainable Development Goals (SDGs) framework.

The remaining part of the paper is organized as follows. Chapter 2 introduces the basic conceptual and political discourses on sustainable development and highlights the evolution of the tools used to measure progress. Chapter 3 explains the methodological approach and the reasoning behind choosing certain indices for the analysis. Chapter 4 presents the key findings and results reached after processing and analysing a large amount of existing statistical data (related to some composite indices and indicators) at country level. Based on the conceptual and empirical parts, Chapter 5 discusses some of the major challenges confronting European countries and supranational organizations. Finally, Chapter 6 delivers key conclusions and messages.

Conceptual framework: Moving beyond GDP for advancing sustainable development

The idea of sustainable development – origin and evolution

Neoclassical economics, also known as mainstream economics, treats economic growth as the solution to a host of issues, including poverty, unemployment, and environmental

degradation. John Stuart Mill is among the first scientists to draw attention to the problem of sustainability with his work 'Of the Stationary State' (1848). Subsequently, the work of Kenneth Boulding (1966), Nicolas Georgescu-Roegen (1971), and Ernst Schumacher (1973) has been fundamental in establishing sustainability as a scientific area. Their tradition is continued by the transdisciplinary field of ecological economics and partly also by two subdivisions of traditional economics, namely resource and environmental economics. Inge Røpke (2004; 2005) chronicles the evolution of ecological economics as an individual field of research which deals with the relationship between ecosystems and economic systems. Essentially, ecological economics calls for a 'paradigm shift' or a change in the vision of how the economic system is treated in neoclassical economics – i.e. from a self-sufficient entity to a subsystem embedded in society and a larger finite ecological ecosystem that sustains it (e.g. Constanza et al., 1991; Constanza, 2001; Daly and Farley, 2004).

New pivotal implications for how we define and measure development arise from the recognition that growth (which is a quantitative increase in size, or in throughput[1]) must end for societal development to proceed within Earth's biophysical limits. Daly and Farley (2004, p. 6) use the term 'development' to refer to a "qualitative change, realization of potential (and) evolution toward an improved, but not larger, structure or system". In this sense, an increased quality of goods and services, provided by a given throughput, aims to enhance human well-being. This logic also underpins the notion of sustainable development', understood as "development without growth – that is, qualitative improvement in the ability to satisfy wants (needs and desires) without a quantitative increase in throughput beyond environmental carrying capacity[2] " (ibid.).

In political debates, the idea of sustainable development originated in the recognized need to harmonise society's developmental goals with the planet's ecological limits over the long term. The seminal documents to advance the relevance of environmental protection and sustainable development in international policymaking are the World Conservation Strategy (1980) and the report of the Brundtland Commission "Our Common Future" (1987) that paved the way to the Rio process initiated in 1992 up to the UN 2030 Agenda for Sustainable Development and the SDGs adopted in 2015.

Acknowledging the limits of natural resources and the importance of treating development and the environment as an indivisible entity, the Brundtland report propelled into wide use the concept of sustainable development, defining it as the "ability to make development sustainable – to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987, p. 16). The basic elements included in this definition are a focus on human needs, anthropocentrism, intergenerative and intragenerative justice.

Although the Brundtland Commission's definition is broadly accepted, it allows for different and often conflicting interpretations. The wavering of political debates between 'sustained growth' and 'sustainable development' expressed ambivalence of attitudes towards the concept also at the EU level. Following international developments during the 1990s, the EU enshrined in its founding treaties sustainable development as a core principle and priority for all its internal and external policies. Yet, the post-2008 economic crisis has led to a reduced high-level policy interest in sustainable development as a policy objective, bringing economic growth and employment to the forefront of related strategies, including the Lisbon Strategy and Europe 2020 strategy (Pallemerts 2013).

At the core of the current global agenda for sustainable development are the 17 SDGs, which represent an urgent call for action by both developed and developing countries in five key areas: people, planet, prosperity, peace, and partnership. The mid-term progress review in 2023, however, raises doubts about the successful achievement of the Global Goals (UN 2023). In this connection, there is growing recognition among policymakers and scholars that setting continued global economic growth as a main goal in the SDG framework (Goal 8), based on GDP, is a major shortcoming that undermines the goals on environmental protection and social welfare (e.g., Reid et al., 2017; Hickel, 2018, Coscieme et al., 2020; UN 2023). Despite the SDGs do not affect the coordination of internal EU policies, their adoption helped resort to the policy rhetoric on sustainable development, playing a role in communicating and monitoring certain objectives and milestones. Since 2019, the climate crisis has become the centre of EU policymaking and resulted in the adoption of the

European Green Deal aiming to make Europe the first climate neutral continent by 2050 (Steuerer 2021; Jordan et al. 2021).

While EU action programmes and legal instruments adopted the language of 'planetary boundaries' (Rockström et al. 2009) and a 'safe operating space for Europe', it remains unclear whether planetary integrity can be achieved given the Union's continued prioritisation of exponential growth as a main goal (Kotze et al. 2022; Fernández and Malwé 2019). Using the Eurostat's SDG indicator set, Hametner (2022), for example, shows that over the past five years socio-economic progress across the EU has occurred at the expense of environmental degradation and in conditions of a perpetual trade-off between socio-economic and environmental objectives. Accordingly, he concludes that the implementation of the 2030 Agenda in the EU Member States has so far failed to reconcile development with environmental protection.

Why GDP proves an inadequate measure of progress

For more than half a century, GDP has been the most widely accepted measure of a country's overall development and prosperity. Moreover, GDP has become "a proxy for how we determine value, how we measure wealth creation and development progress and how we allocate resources on that basis" (UN, 2023). In reality, GDP is only an estimate of the market's throughput, summing up the value of all final goods and services that are produced and traded for money within a given period. It is typically computed by adding together a nation's personal consumption expenditures (payments by households for goods and services), government expenditures (public spending on the provision of goods and services, infrastructure, debt payments, etc.), net exports (the value of a country's exports minus the value of imports), and net capital formation (the increase in value of a nation's total stock of monetized capital goods) (Costanza et al., 2009).
Reporting on the goods and services produced either by domestic or foreign companies in a country, the GDP is designed to answer how an economy grows, which fraction of the production gains is due to inflationary trends, and how much of the ensuing gross income is used for consumption, investment or savings (McCulla and Smith, 2007). Thus, "GDP is not wrong as such but is wrongly used" (Stiglitz et al., 2009), since it was never meant to serve as a tool for assessing overall development. Some of the major academic arguments (often paradoxically used as criticism against GDP itself, not to its misinterpretation) claim that GDP:

- measures only the flow of goods and services produced within the market but ignores several components that do not involve monetary transactions, excluding almost all nonmonetary production, such as childcare or volunteerism and unpaid household services (Costanza et al., 2009; Kubiszewski et al., 2013; Giannetti et al., 2014);

- overlooks many aspects of life that drive prosperity and well-being and measures only a narrow segment of society's activity, ignoring changes in the natural, social, and human components of community capital and environmental sustainability (Costanza et al., 2009; Giannetti et al., 2015; Rusev & Dokov, 2022; UN, 2023);

- counts every expenditure as positive and does not discriminate welfare-enhancing activity from welfare-reducing activity (Cobb et al.,1995; Giannetti et al., 2014);

- disproportionately values activities that destroy the planet and encourages activities that are counter to long-term community well-being, e.g. depletion of natural resources, deforestation, overfishing, the burning of fossil fuels, and other harmful practices that contribute to increases in GDP (Costanza et al., 2009; Giannetti et al., 2014; UN, 2023);

- brings about a 'threshold effect' or 'optimal scale' (the point where the marginal costs of depleting the ecosystem functions equal the marginal benefits of additional growth). This means that as the GDP increases, the overall quality of life often raises too (at least up to a point). Conversely, beyond a certain threshold, uneconomic (unsustainable) growth takes place (Daly and Farley, 2004; Daly, 2005), with the implication that further increases in material well-being have negative side effects on community cohesion, healthy relationships, knowledge, wisdom, a sense of purpose, connection with nature, and other dimensions of human happiness (Inglehart, 1997; Talberth et al., 2007; Costanza et al., 2009);

- fails to provide a solid base for comparative analysis between countries because a GDP

snapshot does not adequately capture the accumulation of wealth over time or its usage, existing internal inequalities, and cultural differences in the understanding of well-being (Giannetti et al., 2014; Rusev & Dokov, 2022).

Therefore, GDP should be considered a measure of economic activity, not well-being. Even the European Parliament issued a special resolution emphasising that "GDP is a measure of production and does not measure environmental sustainability, resource efficiency, social inclusion and social progress in general" and "besides measuring economic development and productivity there are other indicators that influence and explain the living standards" (The European Parliament, 2011). Many scientists also agree that treating GDP as an indicator for prosperity can be inaccurate and even dangerous. Instead, they suggest that at best it should be perceived as a single measure to be integrated within a more advanced multi-dimensional well-being framework, including both economic and non-economic aspects (Marchante and Ortega, 2006; Cracolici et al., 2010; Ghislandi et al., 2019). Similar levels of national GDP can obscure different development realities, vulnerabilities and challenges that exist in different countries (UN, 2023). Notwithstanding, GDP might be "the best single measure of how the market economy is performing" (The European Parliament, 2011) and for an economic tool that has never meant to assess overall development, it proves "surprisingly successful in predicting a population's subjective well-being." (Delhey and Kroll, 2013). Yet, putting it on an equal footing with prosperity seems a misleading simplification, equivalent to reducing well-being to income on a personal level.

The prevailing "GDP fetishism" (Stiglitz, 2009) turned economic growth (increase in GDP) into a major development focus and goal (Abdul Aziz et al., 2015), a "sine qua non for economic progress" (Costanza et al., 2009), and a widely used synonym of improved well-being. However, as evident from the above, a holistic development framework must be based on "measures of the degree to which society's goals are met, rather than measures of the mere volume of marketed economic activity, which is only one means to that end" (Costanza et al., 2009). Furthermore, indefinite economic growth is incompatible with sustainable development and focusing on it can lead to the selection of misleading indicators, particularly in nations where the negative effects of growth outweigh the benefits (Hickel, 2019; Cook and Davíðsdottir, 2021).

Arguments against unlimited growth are also justified by the fact that the biosphere is a finite, non-growing and closed system, governed by the laws of thermodynamics (Georgescu-Roegen, 1971). From this perspective, ecological economists advocate that exponential economic growth cannot be maintained, as it would go beyond the physical limitations of our planet (Daly and Farley, 2004; Daly, 2013). In a wider sustainability perspective these environmental issues are supplemented with further adverse harmful social, cultural, and political effects of growth, summarized in a UNDP report more than two decades ago: 1) jobless growth (a bigger economy but fewer jobs); 2) voiceless growth (a growing economy that suppresses democracy, freedoms and rights); 3) ruthless growth (growth with rising inequalities); 4) rootless growth (culturally destructive effects of economic globalization); and 5) futureless growth (growth powered by undermining finite natural resources) (Kollanyi et al., 1996).

If not GDP, then what? Alternative indicators and indices

When introduced in the 1990s, the Human Development Index (HDI) signalled a new era in understanding the development concept, previously subordinated to economic growth. HDI offered an alternative to GDP and a wider prism to assess well-being, "shifting the focus of development economics from national income accounting to people-centred policies" (Hickel, 2020). While its imperfections soon became obvious, especially those related to its inability to adequately reflect the dynamical changes and incompatibility with ecological stability (Ranis et al., 2006; Ray, 2008; Hickel, 2020), HDI marked a turning point in the quest for new measures of human progress.

Another breakthrough came with the work of Haq (1995) and Sen (1999), leading to a re-definition of the development process: from its fixation on economic growth to one in which the fruits of economic growth benefit the population in terms of higher literacy rates and education levels, better health and nutrition, higher levels of social cohesion and social skills, and more equality (Van der Gaag, 2011). According to Sen (1999), "an adequate conception of development must go much beyond the accumulation of wealth and the growth of national product and other income-related variables… taking into account every aspect of people's life, for instance,

economic, social, environment and political". Thus, already at the beginning of the 21st century, it became clear that a sustainable future depends on shifting the policy focus away from maximising production and consumption (GDP) towards improving genuine human well-being (Kubiszewski et al., 2013).

The modern view is that societal well-being is essentially a complex, multidimensional construct, including both objective and subjective indicators (McGregor et al., 2015; Moreira and Crespo, 2016). At times, it is also related to the five assets that compose comprehensive wealth – i.e. human, natural, social, produced, and financial capital. This paradigmatic shift requires far more attention to be paid to environmental security, ecosystem services, efficient use of resources, synergies among economic sectors and entities, employment, strong communities, social equity, quality of education, and the like. The adoption of the United Nation's 2030 Agenda and its SDGs in 2015 reinforced this perspective.

Against this background, a key question is how exactly to measure progress that takes into consideration critical concerns for the people, the planet, and the future. To be able to answer, a broader approach to measuring life quality and an empirics-based multidimensional framework to conceptualise and evaluate well-being seem necessary (Joshanloo et al., 2019). Doing so has implications not only for academic studies that aim to design the optimal way of comparing different territorial units, but also for policymaking, especially when it comes to monitoring achievements in certain areas (e.g. the SDGs).

In the lead up to the 2024 Summit of the Future, the UN Secretary-General encouraged UN Member States to take bold steps in moving beyond GDP and start measuring what matters for sustainability and prosperity. Key recommendations in this regard include: 1) commit politically to move beyond GDP and create a conceptual framework that can accurately 'value what counts' for people, the planet, and the future; 2) elaborate a robust technical and scientific process, informed by sound and disaggregated data to generate a UN value dashboard of key indicators, beyond GDP; and 3) build capacity and invest resources to enable UN Member States to use the new framework effectively (UN, 2023, p.3).

A multitude of composite indices which allow benchmarking of countries according to their level of development have been crafted over the past two decades. Most of them are based on various economic, social, demographic, health, educational, political, ecological, and other indicators. The selection of specific criteria and corresponding indicators is crucial for the purpose, applicability, and plausibility of a given aggregated index. Another key component is finding an appropriate mathematical model and algorithm to process the data and calculate final results. This is often related to applying specific techniques for adjusting values measured on different scales to a notionally common scale (statistical normalization) and defining weights for the different indicators.

Given the rapid increase in the number of composite indexes, it has become increasingly difficult for scholars to agree on a measure of development and prosperity (e.g. as of 2015 there were 95 indices, most of which had been introduced after 2001) (Cooley and Snyder, 2015). Depending on their conceptual framework, different understanding of the development paradigm, selected indicators and evaluation methodologies, and measures of complex well-being, the approaches for compiling aggregated indices can be conditionally classified into four main categories:

- Indices incorporating various development aspects (including economic) – e.g. Human Development Index, Legatum Prosperity Index, OECD Better Life Index, Where-to-be-born Index;

- Indices focused on social and/or subjective well-being – e.g. Social Progress Index, Multidimensional Poverty Index, Social Development Index, Gross National Happiness Index, Satisfaction with Life Index, Physical Quality of Life Index;

- Indices underscoring sustainable development – e.g. Sustainable Development Goals Index, Happy Planet Index, Sustainable Development Index, Environmental Performance Index, Human Sustainable Development Index;

- Indicator suites – e.g. UN SDGs Goals, Targets and Indicators, EU/Eurostat SDG Indicator set and related progress measures, Millennium Development Goals and Indicators, EU/Eurostat Quality of Life Indicators; OECD's Distance measure to assess progress across SDG goals and targets.

Other indices assess certain development aspects (not the overall well-being), such as: Global Competitiveness Index, Index of Economic Freedom, Ease of Doing Business Index, Globalisation Index, Fragile States Index, Global Peace Index, Democracy Index, Human Freedom Index, Corruption Perception Index, Inclusive Development Index, Ecological Footprint.

Generally, the composite indices can be considered a very useful tool for understanding the real nature of development and differences between countries. Yet, their results should be taken with a grain of salt given that a certain degree of conditionality is inevitable. After all, in practice, it is impossible to have a single perfect and irrefutable measure of human progress that reflects all development concepts, aspects and understandings, and which remains valid in a broad temporal and spatial perspective. Different indices provide distinct perspectives (Ghislandi et al., 2019). In a similar vein, even the most advanced algorithms and methodologies to assess well-being cannot capture and valorise with precision some important factors and their society-tailored impacts, like location, usefulness of infrastructure, affiliation to certain organisations, political and social conjuncture, cultural differences, or psychological and behavioural models and stereotypes.

Consequently, the main points of criticism levelled against composite indexes (i.e. the barriers to developing, implementing, and using better measures of progress) concern[3]:

- Data - related issues – data availability (especially for indices using large sets of indicators and evaluating processes worldwide), data reliability (statistical data for some countries are untrustworthy; different methodologies are sometimes used for measuring the same indicators);

- Methodological issues – unclear (or even lacking) guiding principles for the selection of indicators; misuse of indicators that cannot serve as a base for assessing development; techniques for the standardization of values can produce distortions in the final results; difficulties in determining adequate weights for separate indicators; sensitivity of final rankings to the choice of indicators and methodological approaches; indices designed to compare countries at a specific moment in time are less useful in following the absolute progress of a given country over time;

- Conceptual issues – unclear relation/ connection between a given index and a certain development concept and logic (i.e. the absence of a theoretical framework explaining the choice of approach, indicators, etc.); narrow analytical framework, which ignores important aspects of well-being, i.e. focused on just a few sides of development and failing to capture the full scope of the well-being concept; dominance of the 'growth is good' paradigm in some indices or of ecological determinants in others; underestimation of some non-material and subjective facets of prosperity; employment of culturally biased visions of development;

- Other issues – need of significant resources for compiling and monitoring a large number of indicators (such as those related to the SDGs); political biases in the selection of indicators for coping with societal challenges (later used to assess progress).

In view of the above, some researchers have begun to advocate in favour of simplifying measures of development (Assa, 2021), reducing the complexity of the multidimensional indices and focusing on a limited number of concise, widely accepted, comparable, scientifically robust, statistically sound, and applicable indicators (Ghislandi et al., 2019). While the statement that most composite indexes are "abstracted indicators showing a view from 30,000 feet, not comprehensive reports on the heart and soul of individual communities" (Costanza et al., 2009) might be true to a certain extent, we may not forget that the primary and implicit goal of those measures is to provide a generalized assessment of the overall well-being. As such, they could prove crucial in designing sound and effective development strategies. As a matter of fact, the current measures of performance systems used by international institutions increasingly prioritise the use of indicator sets and composite indices, despite their shortcomings (Diaz-Balteiro et al., 2017; El Gibari et al., 2019; García-Peña, 2022). Thus, while composite indices are clearly imperfect, they are the best tools currently at our disposal to measure the notion of well-being.

Methodology

The primary aim of this paper is twofold: to analyse the development trends in the Balkans and Europe as a whole, and to compare the different countries from a sustainability perspective on quantitative base. The definition

of Europe's territorial coverage and its subregions is based on the UN Regional groups of Member States (yet we consider Cyprus as part of the European region). The European countries are split into four groups: Balkan countries that are members of the EU, Balkan countries not part of the EU, Eastern European countries, and Western European countries. As for the Balkans, given the historical background, as well as certain economic, social, and cultural commonalities, we adopt a wider perspective, including 12 countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Kosovo, Montenegro, North Macedonia, Romania, Serbia, Slovenia, and Turkey. An important limitation for the analysis is that not all indicator sets and indices include sufficient data for all the European countries. For example, Kosovo is excluded from the analysis because of lacking information. Timewise, the study presents both a snapshot of the actual situation (using most recent available data – predominantly for 2022), as well as development trends and changes over time (2000-2022).

To offer a comprehensive framework and build the backbone of the empirical work, we select one example from each of the abovementioned four categories of measures of complex well-being. These have been chosen after close scrutiny of many different indices and indicator suites, as well as of their pros and cons in terms of available data, complexity, plausibility, usage in academia and practice, and geographical coverage. In short, we employ the Legatum Prosperity Index (LPI), the Social Progress Index (SPI), the Sustainable Development Goals Index (SDGI), and the EU/Eurostat SDG Indicator set and related progress measures. Given that the former two indices are not implicitly focused on sustainable development, the analysis of their results will be supplemented by comparisons to certain interpretations of the ecological footprint and biocapacity measures.

The LPI is a framework that assesses countries based on the extent to which they promote their residents' prosperity, reflecting both economic and social well-being. It aims to capture the richness of a truly prosperous life, moving beyond traditional macroeconomic measurements of a nation's development. The algorithm for calculating the results draws on 12 pillars of prosperity split into 67 discrete policy-focused elements and grouped into three domains essential to prosperity: Inclusive Societies, Open Economies, and Empowered People. Each of the 12 pillars captures a fundamental theme of prosperity (Safety and Security, Personal Freedom, Governance, Social Capital, Investment Environment, Enterprise Conditions, Infrastructure and Market Access, Economic Quality, Living Conditions, Health, Education, Natural Environment), and each element covers a discrete policy area, which is measured by indicators. The LPI is constructed by using 299 different indicators from over 70 different data sources. Each indicator is assigned a weight, representing the level of importance within the element it has in affecting prosperity (Legatum Institute Foundation, 2023).

The SPI is another modern tool designed to measure overall well-being. It defines social progress as the capacity of a society to meet the basic human needs of its citizens, establish the building blocks that allow citizens and communities to enhance and sustain the quality of their lives, and create the conditions for all individuals to reach their full potential. The index combines three dimensions: Basic Human Needs, Foundations of Well-being, and Opportunity. Every dimension consists of four components, and each includes between three to five specific outcome indicators. The SPI tracks over 50 indicators and measures the well-being of a society by directly observing social and environmental outcomes (the outputs) rather than economic factors (the inputs in the system). Put differently, it measures social progress independent of economic development. By excluding economic measures from the calculations, it creates opportunities to compare a community's social and environmental progress with its economic development and uncover the relationship between them (Social Progress Imperative, 2022).

The SDGI is a recognised tool for tracking the annual progress of all 193 UN Member States towards the SDGs. It is an assessment of each country's overall performance on the 17 SDGs, giving equal weight to each goal. The score signifies a country's position between the worst possible outcome (score of 0) and the target (score of 100), and can be interpreted as a percentage towards optimal SDG performance. Therefore, the difference between 100 and a country's SDG Index score is the distance, in percentage points, that the given country must overcome to reach optimum SDG performance. The 2023 SDG Index edition includes 97 global indicators. Two-thirds of the data come from official statistics (typically United Nations custodian agencies) and the final third from non-traditional statistics,

including research centres, universities, and non-governmental organisations. Published since 2015, the SDG Index has been peer-reviewed, and its global edition has been statistically audited by the European Commission in 2019 (Sachs et al., 2023). It is a well-recognized tool for measuring the 2030 Agenda for Sustainable Development and is constantly evolving to enhance the quality of the results (García-Peña, 2022).

The EU/Eurostat SDG indicator set was developed in 2017 by Eurostat for the purpose of monitoring progress towards the SDGs in an EU context. It comprises around 100 indicators and is structured along the 17 SDGs. For each SDG, it focuses on aspects that are relevant from an EU perspective. This set is arguably the most appropriate data source when evaluating the EU Member States' progress towards the SDGs (Hametner and Kostetckaia, 2020).

Footprint and biocapacity accounting might be helpful in answering the basic research question related to the 'desired state' of sustainable development: i.e. how much do people demand from biologically productive surfaces (ecological footprint) compared to how much the planet (or a region's productive surface) can regenerate on those surfaces (biocapacity)? The ecological footprint is a measure of the biologically productive land and water area that an individual, population or activity requires to produce all the resources it consumes, accommodate its occupied urban infrastructure, and absorb the waste it generates by using prevailing technology and resource management practices. Biocapacity is the capacity of biologically productive areas to provide for human demand. Like footprint, it is measured in global hectares. It shows the capacity of the biosphere to regenerate and provide natural resources and services for life (York University EFI & GFN, 2023). Comparing the ecological footprint of a country with the global biocapacity shows how many planets Earth would be needed if everyone lives like the citizens of that particular country.

Results and findings

Analyses based on composite indices and limits to growth

Both LPI and SPI convincingly illustrate the striking spatial inequalities within Europe. The LPI results put Denmark in the most favourable position with an overall rating of 84,6 (followed closely by the other Scandinavian countries and Switzerland). Conversely, Turkey seems to be the least developed European country with a score of only 55,5, while the post-Soviet republics exhibit similarly low results. This geographical pattern is largely replicated by the SPI, where Norway occupies the top position (90,7) and Azerbaijan has the lowest rank (63,6). A deeper analysis of the LPI and SPI results and rankings reveals significant similarities, verified by both the linear and rank correlation coefficients (respectively 0,97 and 0,89). Thus, despite being based on rather different approaches, methodologies, and indicators, both composite indices reach similar outcomes, further strengthening their scientific plausibility.

This development gap in Europe is mirrored in the groups of countries studied here (Table 1). On average, Western European countries have much higher scores than their Eastern European counterparts, both in LPI and SPI. The EU-member Balkan countries perform generally better than their Eastern European peers (but their scores

Table 1: Comparison between LPI, SPI and ecological footprint – average scores (not weighted) for the studied groups of countries (including best and worst performers by group) (2022)

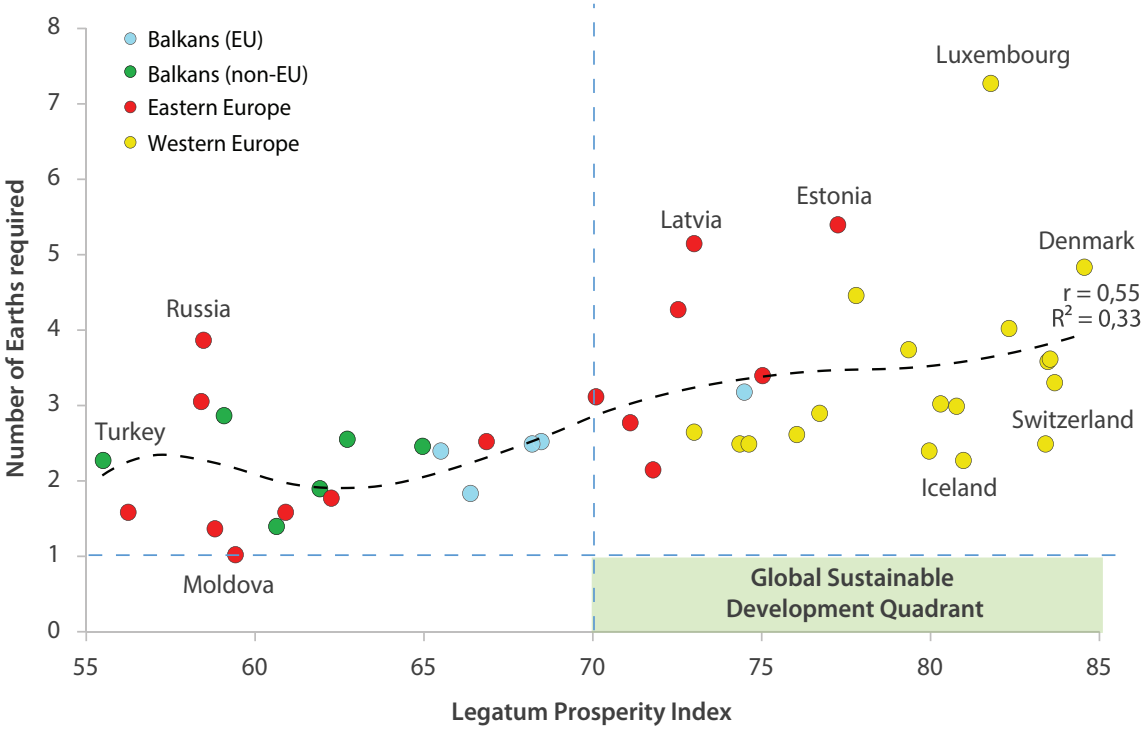
Region	№ of states	Legatum Prosperity Index		Social Progress Index		Earths required	
Balkans (EU)	5	68,6	Slovenia - 74,5 Romania - 66,4; Bulgaria - 65,6	80,5	Slovenia - 84,2; Greece - 82,4 Romania - 76,9; Bulgaria - 76,8	2,5	Romania - 1,8; Bulgaria - 2,4 Greece - 2,5; Slovenia - 3,2
Balkans (non-EU)	6	60,8	Montenegro - 65,0; Serbia - 62,8 Bosnia - 59,1; Türkiye - 55,5	72,5	Serbia - 75,8; Montenegro - 74,6 Bosnia - 71,2; Türkiye - 66,6	2,2	Albania - 1,4; North. Maced. - 1,9 Serbia - 2,5; Bosnia - 2,8
Eastern Europe	15	66,2	Estonia - 77,3; Czech Rep. - 75,1 Belarus - 58,4; Azerbaijan - 56,3	77,6	Estonia - 86,2; Czech Rep. - 85,2 Belarus - 71,5; Azerbaijan - 63,3	2,8	Moldova - 1,0; Ukraine - 1,3 Latvia - 5,1; Estonia - 5,4
Western Europe	18	79,8	Denmark - 84,6; Sweden - 83,7 Malta - 74,4; Italy - 73,0	87,8	Norway - 90,7; Finland - 90,5 Portugal - 84,8; Malta - 84,5	3,4	Iceland - 2,2; UK - 2,4 Denmark - 4,8; Luxembourg - 7,3

Source: Own calculations based on Legatum Institute Foundation (2023), Social Progress Imperative (2022) and York University EFI & GFN (2023) data

remain closer to the Eastern rather than Western average), while the Western Balkans and Turkey are among the least developed parts of Europe. Also, the forerunner and lagger countries in the different groups are often the same (in both LPI and SPI).

As indices for overall well-being LPI and SPI include in their algorithms different indicators related to natural security and environmental quality. Yet, for a more precise assessment of national perspectives through the prism of sustainable development, we compare the results from the composite indices against the limitations imposed by physical capacities of the ecological systems. Doing so can allow us to ascertain the gap to the 'desired state' of sustainable development. At a country level, the latter is defined here as being in the so-called Global Sustainable Development Quadrant (Figure 1 and Figure 2), where the 'number of Earths required' is less than one, while the level of prosperity is very high (we have depicted certain limits generally associated with high development – 70 for the LPI and 80 for the SPI).

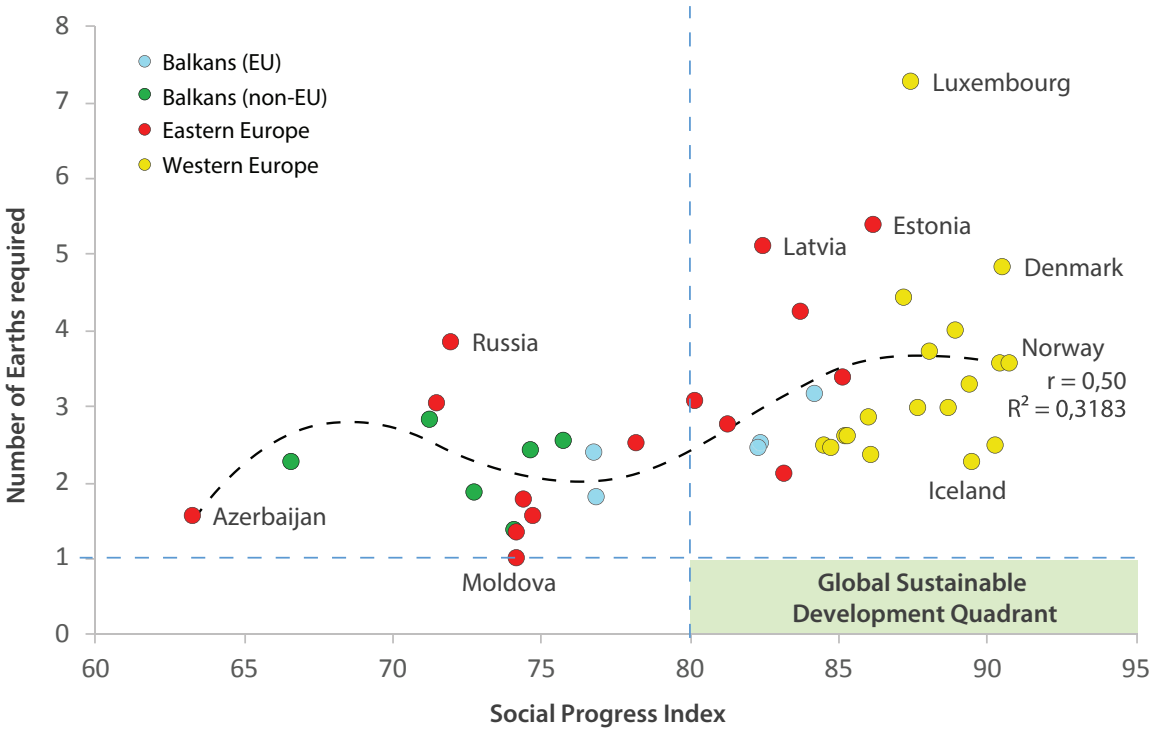
Figure 1 : Comparison between development (LPI) and ecological footprint (Earths required) achievements (2022)



Source: Own calculations based on Legatum Institute Foundation (2023) and York University EFI & GFN (2023) data

The results show that no country in any of the groups studied is even close to achieving this goal. The observed trends suggest significant positive correlation between both variables ($r > 0,5$), meaning that, generally, the more developed a country is, the higher its ecological footprint is likely to be (see also Table 1). This finding holds for all the groups except the non-EU Balkan countries (no meaningful correlation is observed for that group). The only country whose development model requires close to one planet is Moldova, however, its well-being is far from the 'desired state'. Furthermore, some countries deviate considerably even from this otherwise unfortunate general trend, with their development models showing very low levels of ecological effectiveness. Such examples include Russia, Latvia, Estonia, and Luxembourg. On the other hand, Iceland and Switzerland emerge as the closest to the 'sustainability quadrant" (yet they are not very close as Iceland's prosperity model, for example, requires more than two planets). Overall, both figures illustrate the vital challenge of fostering a globally replicable model that can produce high levels of prosperity without overtaxing the planet's ecological resource base.

Figure 2: Comparison between development (SPI) and ecological footprint (Earths required) achievements (2022)



Source: Own calculations based on Social Progress Imperative (2022) and York University EFI & GFN (2023) data

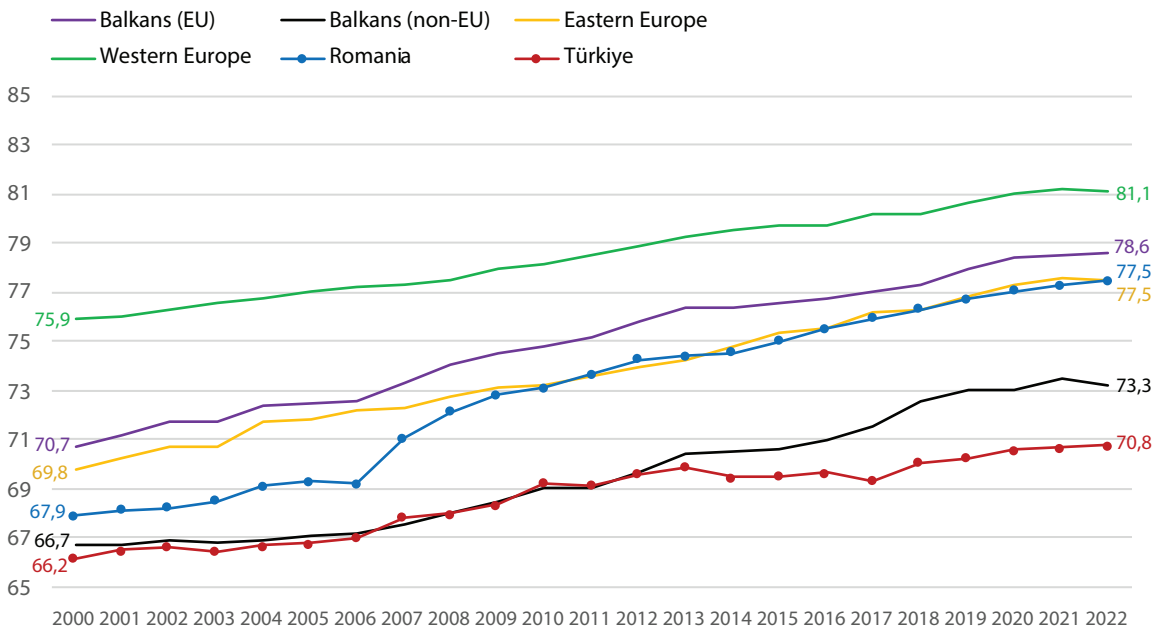
Analyses based on the SDGs framework

Most modern analyses and debates in the field of sustainable development are related to the SDGs. While showing that at the midpoint of the 2030 Agenda all the SDGs are seriously off track, the SDGI reveals that Europe fares the best. Out of the top 24 countries, 23 are European, with only Japan (19th place) representing a different continent. The highest results are again associated with the Scandinavian countries, i.e. Finland – 86,5; Denmark – 85,6; Sweden – 85,2; and Norway – 82,3. Montenegro has the lowest score out of all European countries – 68,6. The inequalities between different groups are also visible here (Figure 3), with Western European countries (81,1 for 2022) performing, on average, better than the others, while non-EU Balkan countries (73,3) are again lagging behind.

A retrospective analysis suggests that all the groups are slowly progressing, with no significant signs of convergence trends between them. Among the Balkan countries, Turkey has registered the slowest progress during the past 20 years. In contrast, Romania increased its SDGI result from 67,9 (for 2000) to 77,5 (for 2022). Interestingly, Bulgaria was well on track with its SDGI before joining the EU, moving from 68,8 to 74,0 in the period 2000-2008, and then entered a longstanding stagnation (in 2022 its result stood at 74,6). While progress in some of the SDGs continued, its scores for quality education and (especially) reduced inequalities dropped significantly.

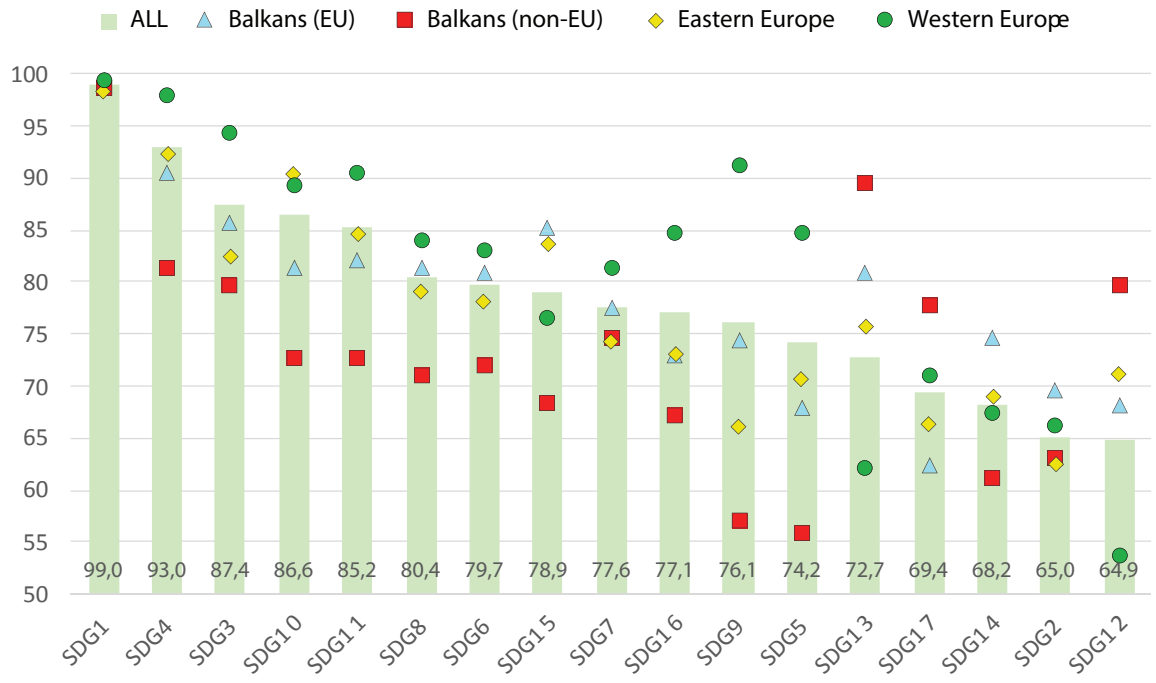
Looking into the countries' assessments for each SDG used to calculate the SDGI (Figure 4) offers further interesting insights. For example, it reveals Europe's nuanced record on the different objectives set in the 2030 Agenda. A score of 99,0 suggests that Europe has almost reached the SDG1 (No poverty) and is doing pretty well also in terms of education, health and well-being standards, reducing inequalities, and ensuring sustainable cities and communities (i.e. SDGs 4, 3, 10, and 11). In contrast, data show that Europe needs to step up its efforts to reach the objectives under SDG12 (Responsible consumption and production) and SDG2 (Zero hunger). While the latter might come as a surprise, it should be noted that SDG2 aims to achieve not only food security but also improved nutrition and sustainable agriculture. Still, the fact that the SDG2 scores of well-developed European countries are comparable to those of Asian and African

Figure 3: Average SDGI scores (not weighted) (2000-2022)



Source: Own calculations based on Sachs et al. (2023) data

Figure 4: Average SDGI scores by goals (not weighted) (2022)



Source: Own calculations based on Sachs et al. (2023) data

countries which face significant food-related problems casts doubt upon the methodology and indicators used to assess progress for this goal.

All groups studied perform well in SDG1 but they display significant differences with respect to almost every other SDG, with Western Europe leading the way in most cases. For example, on SDG9 (Industry, Innovation and Infrastructure) and SDG5 (Gender equality), Eastern Europe and especially the non-EU Balkan countries are

severely lagging behind. This pattern is also visible in the goal related to economic growth (SDG8). However, in a few instances, the situation is reversed. The Western European countries not only have very low scores on SDG12 (Responsible consumption and production) and SDG13 (Climate action) but also underperform when compared to their European counterparts. These findings prompt wider questions like: Isn't the well-known sustainability dilemma, i.e. 'economic growth versus ecological footprint' laying beneath the SDGI and its results? They also invite pondering on the possibility for a society to reach the 'state of sustainability' without making trade-offs.

In fact, the SDGs interactions are often described as synergies and trade-offs. To empirically test the hypothesis that there are significant relationships between the different goals and indicators, we calculate the Pearson correlation coefficient for every couple of the SDGs using the most recent data (i.e. the SDGI scores for 2022) (Table 2). To grasp the full picture, we use the data for all countries included in the SDGI calculations (not just Europe).

The results suggest that, while there are moderate positive correlations between most of the SDGs (i.e. they generally reinforce each other), a few significant exceptions emerge. Most notably, SDG12 (Responsible consumption and production) and SDG13 (Climate action) are characterised by moderate to highly negative correlations with almost all the other SDGs, including SDG8 (Decent work and economic growth). For example, a coefficient of -0,83 means that a country which advances its Industry, Innovation and Infrastructure (SDG9) is unlikely to secure Responsible Consumption and Production (SDG12). Such outcomes support the hypothesis and reinforce the importance of the question regarding sustainability and trade-offs.

Finally, to have a closer look at the Balkan countries, the Eurostat SDGs-related database is used. However, since complete data are only available for the EU Member States, the analysis focuses on these countries. The set of countries is divided into two groups: Bulgaria, Greece, and Romania, which have lower goal and progress scores, and Slovenia and Croatia, whose achievements are much closer to the EU average (Figure 5 and Figure 6). The status of each SDG in a country is the aggregation of its scores on all the indicators of the specific goal, in relation to the EU average. It is a relative measure, which also

Table 2: Pearson correlation coefficient based on SDGI scores for the separate SDGs (2022)

	SDG1	SDG2	SDG3	SDG4	SDG5	SDG6	SDG7	SDG8	SDG9	SDG10	SDG11	SDG12	SDG13	SDG14	SDG15	SDG16	SDG17	Average
SDG1		0,54	0,86	0,78	0,43	0,63	0,84	0,68	0,87	0,47	0,80	-0,78	-0,61	-0,07	0,07	0,80	0,54	0,45
SDG2	0,54		0,55	0,55	0,45	0,55	0,47	0,58	0,56	0,24	0,50	-0,32	-0,25	0,05	0,07	0,44	0,26	0,33
SDG3	0,86	0,55		0,83	0,60	0,76	0,84	0,68	0,87	0,47	0,80	-0,78	-0,61	-0,07	0,07	0,80	0,54	0,45
SDG4	0,78	0,55	0,83		0,61	0,72	0,79	0,61	0,75	0,33	0,76	-0,62	-0,48	-0,06	0,04	0,67	0,48	0,42
SDG5	0,43	0,45	0,60	0,61		0,63	0,57	0,55	0,58	0,10	0,67	-0,58	-0,36	0,04	0,20	0,59	0,43	0,34
SDG6	0,74	0,55	0,76	0,72	0,63		0,73	0,67	0,74	0,38	0,70	-0,61	-0,37	0,03	0,21	0,68	0,55	0,45
SDG7	0,79	0,47	0,84	0,79	0,57	0,73		0,57	0,73	0,35	0,78	-0,63	-0,42	-0,01	0,05	0,68	0,53	0,43
SDG8	0,62	0,58	0,68	0,61	0,55	0,67	0,57		0,68	0,38	0,57	-0,58	-0,45	0,05	0,19	0,59	0,42	0,38
SDG9	0,77	0,56	0,87	0,75	0,58	0,74	0,73	0,68		0,46	0,72	-0,83	-0,66	-0,01	0,10	0,80	0,47	0,42
SDG10	0,51	0,24	0,47	0,33	0,10	0,38	0,35	0,38	0,46		0,31	-0,50	-0,47	-0,02	0,19	0,52	0,22	0,22
SDG11	0,72	0,50	0,80	0,76	0,67	0,70	0,78	0,57	0,72	0,31		-0,66	-0,47	-0,07	0,04	0,71	0,52	0,41
SDG12	-0,64	-0,32	-0,78	-0,62	-0,58	-0,61	-0,63	-0,58	-0,83	-0,50	-0,66		0,80	0,02	-0,17	-0,79	-0,40	-0,46
SDG13	-0,55	-0,25	-0,61	-0,48	-0,36	-0,37	-0,42	-0,45	-0,66	-0,47	-0,47	0,80		0,05	-0,03	-0,58	-0,24	-0,32
SDG14	-0,10	0,05	-0,07	-0,06	0,04	0,03	-0,01	0,05	-0,01	-0,02	-0,07	0,02	0,05		0,37	0,06	0,04	0,02
SDG15	0,06	0,07	0,07	0,04	0,20	0,21	0,05	0,19	0,10	0,19	0,04	-0,17	-0,03	0,37		0,24	0,19	0,11
SDG16	0,69	0,44	0,80	0,67	0,59	0,68	0,68	0,59	0,80	0,52	0,71	-0,79	-0,58	0,06	0,24		0,56	0,42
SDG17	0,55	0,26	0,54	0,48	0,43	0,55	0,53	0,42	0,47	0,22	0,52	-0,40	-0,24	0,04	0,19	0,56		0,32
Average	0,42	0,33	0,45	0,42	0,34	0,45	0,43	0,38	0,42	0,22	0,41	-0,46	-0,32	0,02	0,11	0,42	0,32	

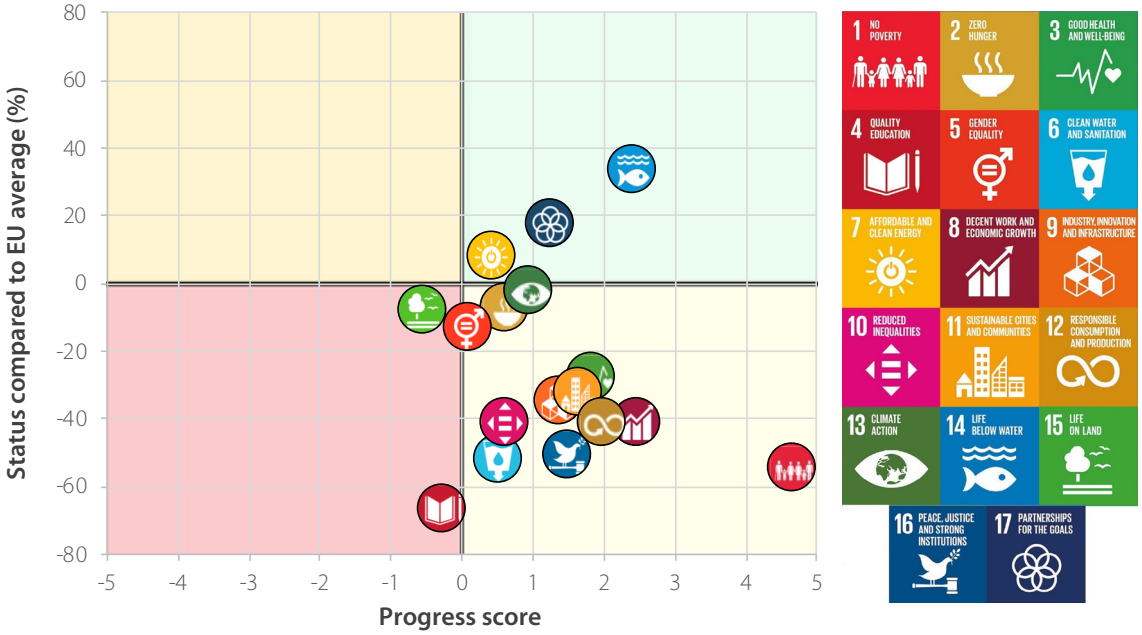
Source: Own calculations based on Sachs et al. (2023) data

depends on the natural conditions and historical developments of each country. It should be noted that a high status does not mean that a country is close to reaching a specific SDG. Instead, it signals that on average it fares better than the EU. The progress score of each SDG in a country is based on the average annual growth rates of all assessed indicators in the specific goal over the past five years. Hence, it is an absolute measure

not influenced by the progress achieved by other countries (Eurostat, 2023).

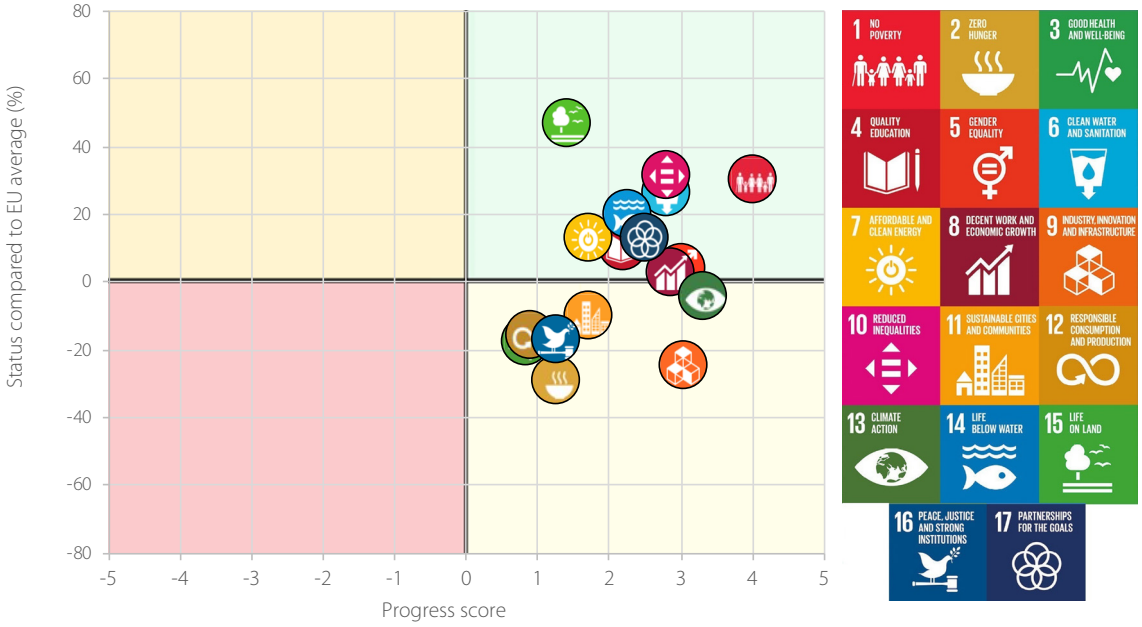
As shown in Figures 5 and 6, all five countries are doing relatively well in terms of progress. However, the scores for the majority of SDGs (i.e. the status) for Croatia and Slovenia are above the EU average. In contrast, Bulgaria, Greece, and Romania struggle with the quality of education, poverty issues (despite the recent progress), providing clean water and sanitation, ensuring peace, justice, and strong institutions (SDG 4, 1, 6, and 16).

Figure 5: Average SDG's status and progress scores for Bulgaria, Greece and Romania (2022)



Source: Own calculations based on Eurostat data

Figure 6: Average SDG's status and progress scores for Croatia and Slovenia (2022)



Source: Own calculations based on Eurostat data

Discussion

Based on this paper's theoretical considerations and empirical analysis, five key challenges can be highlighted:

1) **Finding and mainstreaming 'the right' measures of development.** A great deal of useful work invested in finding alternatives to GDP has resulted in a multitude of indices and indicators, but no irrefutable and universally acceptable measures. This shortcoming is especially relevant for the policy realm. Decision-makers need helpful tools to guide policies and evaluate progress, based on measures of sustainable development that offer a deeper understanding of the concept's multifaceted nature (i.e. which recognise that long-term well-being can be affected by multiple factors, such as productivity patterns, institutional capacities, social and environmental dependencies, territorial cohesion, regional resilience, and related vulnerabilities). Existing gaps in methodological approaches to measure development can be overcome by putting a greater focus on interlinkages, synergies, and trade-offs between the diverse aspects of well-being (and related indicators).

2) **Addressing persistent spatial inequalities.** The significant disparities at country level in Europe are practically captured by all composite indices used in this analysis, irrespective of their approach, methodology and set of indicators. In a longer-term perspective, the difference between Western Europe and Eastern Europe, and especially the wide development gap between certain countries in Europe can pose a real threat for the integrity, stability, and prosperity of the continent. While certain signs of convergence are noticeable in recent years (e.g. some Eastern European countries registered faster progress towards the SDGs than Western Europe), the process is too slow to produce radical changes. EU integration has the potential to foster this convergence. However, to turn the tide, EU institutions and member states need to conceptualise and implement tailor-made territorial solutions, moving away from 'one-size-fits-all' prescriptions.

3) **Understanding that sustainable development is not a luxury good for the wealthy or a proxy of economic growth.** When underdeveloped regions or countries face serious issues (e.g., demographic collapse, political instability, economic crises, income inequalities – all common features of many Balkan countries), they are often tempted to search for short-term solutions to pressing problems, ignoring any sustainability considerations and depletion of natural resources. The view that 'we will go for sustainable development only when we can afford it' is misguided and results in missed opportunities to ensure prosperity in the long-term. Furthermore, relying on the environmental Kuznets curve (EKC) hypothesis is equally ill-advised. This theory postulates that the use of resources increases, while the environmental impact worsens only during the early stages of development but improves later on (Rothman 1988). In other words, the EKC hypothesis suggests that the relationship between economic growth and its environmental impacts is not linear; rather, it may be represented by an inverted U-shaped curve (das Neves Almeida et al., 2017). However, this hypothesis has already been refuted, meaning that catching up in terms of economic development (and GDP-related values) will not guarantee the Balkan countries a sustainable model of well-being.

4) **Controlling the risk of quasi - compliance and/or addressing only what is measured.** Indicators are not simply passive tools that describe social realities, but also performative in nature (Kim, 2023). The so-called Goodhart's law suggests that "any observed statistical regularity will tend to break down when pressure is applied to it for control purposes" (Goodhart, 1975). Thus, actors often adjust strategically to appear compliant by simply focusing on what is being measured, in an effort to deliver results, even if doing so has adverse effects on other (not measured) aspects. Political elites interested in maintaining the status quo are often prone to simulate expected actions, seeking to provide results on paper but not in praxis. This is typical for countries with low quality of governance and prevailing political populism.

5) **Addressing implications for domestic policymaking beyond GDP.** Considering that many international and European policies still build to a large extent on growth ideas, domestic policies need to be developed based on constructive critics of external influences.

Shaping societal and economic development within the environment's carrying capacity requires new ways of thinking, acting, and measuring development beyond GDP in a national context. In this respect, more efforts must be put in transitioning towards a system that operates within the ecological constraints by improving the quality of goods and services and reaching the potential of the domestic system to foster human well-being without further quantitative increase in throughput. This process should be supported by integration of relevant indicators into national statistics to set an ecological framework that guides development strategies and policies.

Conclusion

The quest for sustainable development has challenged how countries define and measure progress. There is growing recognition among scholars and policymakers that relying on GDP as the main indicator for national performance and prosperity should be reconsidered. This paper reviewed some of the major points of criticism against GDP and economic growth, suggesting that both should be treated as inadequate measures of 'what really counts' for society and the planet. A special focus was laid on presenting alternative indicators and composite indices that are based on a wider perspective and the understanding of development as a complex and multidimensional construct, including diverse economic, social, demographic, political, and environmental aspects.

Based on a quantitative approach and pragmatically selected indices and indicator suites – i.e. LPI, SPI, SDGI, ecological footprint, and EU/Eurostat SDG Indicator set – the current trends of development in Europe and more specifically in the Balkan region were analysed. The study was conducted by compiling and processing the most recent data (predominantly for 2022) for 44 European countries (i.e. all statistical units for which plausible and complete data were available). Given the scope and goals of the study, the countries were divided into four groups: Balkans (EU), Balkans (non-EU), Eastern Europe, and Western Europe. The results revealed striking inequalities between these categories in terms of overall well-being and sustainable development and outlined some of the major challenges for them. The study also provided evidence that the different sub-regions and Europe, as a whole, are far from reaching 'the desired state' of sustainable development.

While the findings from composite indices generally offer a sound base for capturing the main development patterns and conducting further qualitative analyses, they should be used carefully given the inability of composite indices to reflect some key (hard-to-measure) factors and variables some methodological flaws in their algorithms and logics. Notwithstanding these limitations, composite indices remain for now an indispensable tool to measure countries' overall prosperity and progress towards sustainable development. Their ability to convert complex processes into simple measures could prove useful in designing supranational and national development strategies and policies.

Further cross-national research should look into finding new ways to optimise the methodologies and algorithms of composite indices for measuring progress towards sustainable development. It should also explore the challenges and opportunities to mainstream the usage of alternative indicators and indices in decision-making at EU and national levels and eradicate GDP flawed reasoning. That will also stimulate critical thinking and innovative approaches to formulating and developing domestic policies.

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Notes

[1] Throughput is defined as "the flow of raw materials and energy from the global ecosystem, through the economy, and back to the global ecosystem as waste" (Daly and Farley 2004, p. 6)

[2] Carrying capacity is understood here as "the population of humans that can be sustained by a given ecosystem at a given level of consumption, with a given technology" (ibid.)

[3] This is a purposeful generalisation, meaning that these points/critical evaluations do not apply to all indices

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