

Transformative doughnut economics model

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The doughnut economics model is increasingly being imposed as an alternative human development measure, meeting needs and crossing the boundaries of environmental degradation. In the last ten years, the model has been further developed, and more and more, cities are giving up measuring their development through GDP and deciding to switch to the doughnut model, which should ensure that human needs are met in accordance with natural boundaries.

In their paper published in 2009, Rockström et al. defined nine planetary boundaries whose crossing would disrupt global cycles. Out of the nine limits, it is estimated that humanity has already crossed three, namely those related to climate change, the rate of biodiversity loss and changes in the nitrogen cycle. These planetary boundaries are interdependent, because crossing one can change the position of other boundaries and lead to their crossing. The social impacts of crossing borders are reflected in the reduction of social and environmental resilience of affected societies.

The doughnut economics model arose from the need to maintain humanity on a global, regional and local level within these boundaries, but also to measure the extent of meeting social needs such as housing, education, social justice, democracy and others. In order to create a different society, we also need new tools that will not reduce progress exclusively to GDP growth.

Problems with GDP

Gross domestic product (GDP) has been used for decades as the main measure of economic development. Based on the growth or decline of GDP, it is estimated how an economy works, how rich a country or a region is, but also how individual countries fight against various problems. Even at the time of the global COVID-19 pandemic, during which many people have died – and the number constantly growing – GDP and its decline is the main topic of most leading government officials. Nevertheless, the global COVID-19 pandemic has shifted its focus from GDP to the economics of care, at least for a moment, but it remains questionable how long that moment will last after the end of the pandemic. Many governments use GDP as an indicator of economic growth and the success of their own work; although, in reality, there is often a deterioration in the quality of life for a large part of the population.

And what exactly does this often-mentioned GDP represent, and what can we learn from it? In economics, GDP represents the total production of goods and services, realized at the level of the economy of a certain region or country, regardless of ownership. GDP is most often presented in absolute numbers or derived from

Predrag Momčilović



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GDP per capita. Despite the fact that GDP is conceived and constructed as a strictly economic indicator – the function of which is made not to measure the level of well-being or quality of life – GDP growth is prescribed as a universal remedy for all socio-economic problems.

In the first decades after the World War II, the use of GDP as an indicator may have made sense because GDP growth was accompanied by an improvement in the quality of life of the majority of the population. Since the mid-1970s, GDP has been increasingly separated from the real quality of life, and this has been particularly influenced by market liberalization and the growing influence of the financial sector. So today, when GDP growth occurs, it does not mean that living conditions for the majority of the population have improved, but it generally means even greater stratification between the small number of the rich and the growing number of the poor.

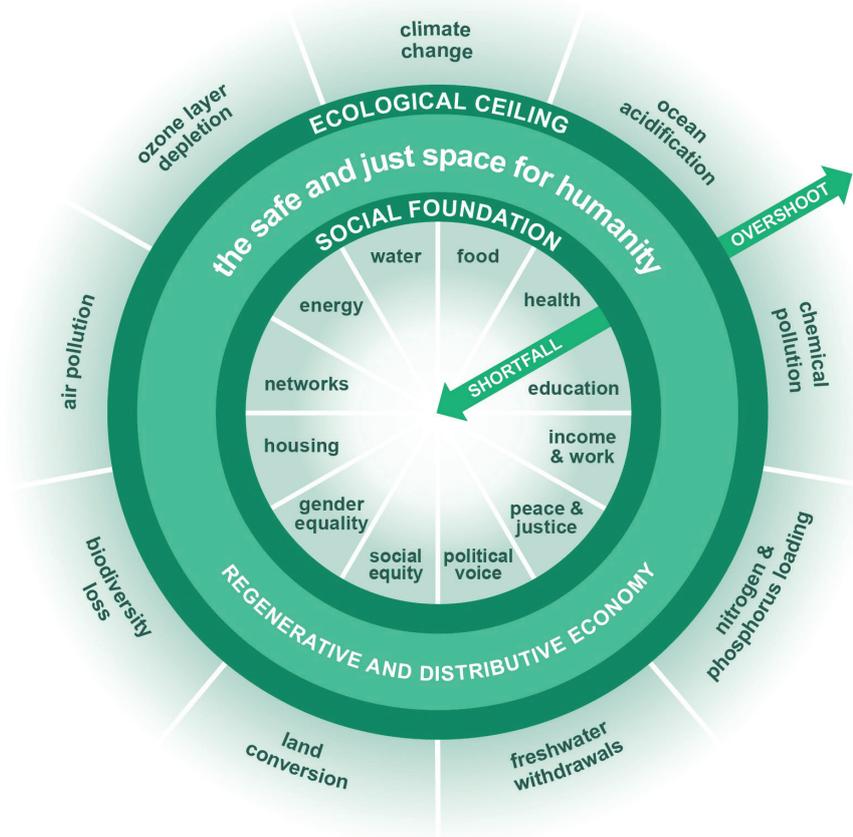
Conceived as an exclusively economic indicator, GDP does not show many important things for society that happen outside the market, while some harmful things can lead to GDP growth. Thus, each cost is seen as a positive thing that raises GDP. So, for example, funds invested in cleaning up

pre-existing pollution can increase GDP growth, while different, productive things do not count (for example: different views of labour performance in both the profit and non-profit sectors). It is not possible to see unrecognised and unpaid labour, such as housework or childcare, through GDP, which is one of the bases of social reproduction.

Increased levels of pollution of various environmental media, exploitation of natural resources, climate change and other processes that occur on a daily basis are not part of GDP calculation, even though the constant race for GDP growth contributes to environmental destruction, which, from an economic point of view, is seen only as a resource that should be used as efficiently as possible.

From all of the above, it is clear that it is necessary to reject GDP as a measure of development and focus on other criteria. The focus of economies and their performance criteria must be on meeting the needs of the entire population while remaining within the limits of sustainability. A model of an economy based on a hollow doughnut could be one of the ways to have a contented and happy society that lives in harmony with nature.

Doughnut model



Source: Raworth, Kate (2017): Doughnut Economics. Seven Ways to Think Like a 21st-Century Economist. London: Random House Business Books. Page 44.



Economist Kate Raworth is responsible for the development of the 'doughnut economics' model. She published the book, "Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist" in 2017. Kate has developed an economic model that aims to meet social needs while staying within ecological boundaries. The model, called a doughnut, is most reminiscent of the look of an American doughnut or lifebelt. Between the ecological boundaries represented by the outer edge of the doughnut and the social needs found on the inside, there is a safe and socially just space for people. In order to remain in this area, it is necessary to transform linear economic activities to become regenerative and redistributive.

The doughnut model is based on the outside of the nine planetary boundaries – as defined by Rockström – and on the inside with the United Nations' Sustainable Development Goals (SDGs). Ecological boundaries that we should not cross are processed through air pollution, biodiversity loss, land-use change, loss of fresh water, nitrogen and phosphorus cycles, chemical pollution, ocean acidification, climate change and ozone depletion. The social needs to be met are represented through the availability of water, food, energy, housing, internet, education and health care, while also ensuring decent work, social justice and social equality, peace, and freedom of choice.

After the initial presentation of the model, a large number of autonomous and decentralized groups and individuals started working on its further development and modification. Indicators have changed – their number has been decreasing or increasing – but the basic premise has remained that it is necessary to stay in an ecologically safe space in which social needs will be met.

The Zagreb Institute for Political Ecology (IPE) has developed its own version of the doughnut model. Their model has thirty-three indicators and is divided into three related units: biophysical, cultural and socio-economic. The introduction of the cultural aspect makes it easier to monitor social well-being, satisfaction with the current situation, as well as readiness for change. The model developed by the IPE can easily compare two or more countries on the basis of standardized data and show their main problems and shortcomings. Another advantage of this model is that it can be further modified and lowered to the local level to examine the sustainability of individual regions or cities.

Doughnut in the cities

Today, more than half of the world's population lives in urban areas and according to UN estimates, by 2050, as many as

two thirds of the global population will live in cities. Europe is even more urbanized and over 70% of its population lives in cities. Cities occupy about 3% of total land area, consuming 60 - 80% of the energy produced, and participate in 75% of total carbon dioxide emissions. Without a big change in the way cities are planned, built, and how they function, it is almost impossible to achieve any sustainability.

Cities represent a progressive testing ground for various social innovations. That is why the doughnut model is often focused on urban areas that need to be redesigned to consume as few resources as possible and to represent a dignified and safe place for all its inhabitants.

Some cities, realizing the problems and the impossibility of continuing the previous trends of development, are moving to make strides towards different development models, and the doughnut economics model is completely changing the paradigm of a linear economy based on growth.

The first city that decided to plan its development in accordance with the doughnut economics model is Amsterdam. The doughnut model in Amsterdam is used not only to analyze current situations, but also to plan a sustainable path into the future. Amsterdam leaders called on Kate Raworth for help and so the Amsterdam doughnut became part of the city's strategy to achieve its goal of transitioning to a circular economy: Amsterdam plans to halve its use of raw materials by 2030 and become fully circular by 2050.

In addition to Amsterdam, a pilot doughnut project was conducted for the American cities of Portland and Philadelphia, and Brussels has also announced a transition to the doughnut model. The doughnut economics model, as a radically different model of urban development, is becoming increasingly popular, especially as a model of urban renewal for after the COVID-19 pandemic, which only further confirmed the unsustainability of modern cities.

With the help of the doughnut model, policies and ideas based on meeting the needs of people within biophysical boundaries can be communicated in an easier and visually more receptive way. It is clear to everyone that we must not allow jam to leak out of our doughnut because such a situation would lead to a disaster.

The hollow doughnut model is not perfect and there is still a lot of work to be done to refine this model. Although the hollow doughnut model does not offer solutions to all of our problems, the importance of such a model is necessary to take steps to place our states, regions and cities within social and planetary boundaries.



Green European Foundation
Rue du Fossé 3, L-1536 Luxembourg
Brussels Office: Mundo Madou
Avenue des Arts 7-8
1210 Brussels - Belgium



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Tel.: +32 (0) 2 329 00 50
Email: info@gef.eu

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