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INCLUSIVE GROWTH'S VECTORS IN FUNCTIONING OF THE GLOBAL INCLUSIVE CIRCULAR ECONOMY

Abstract: “Steps” of inclusive development (lifting from poverty and inclusive growth) are proposed. Concept of “Inclusive growth” according to the information of OECD, International Policy Center for Inclusive Growth, European Commission, International Monetary Fund are analyzed. To achieve these results, they focus on indicators that consist of three main areas: economic growth, social integration and social security networks, backed up by indicators that define the foundations for effective governance and effective institutions. In addition to the factors of inclusive growth, in the process of forming the paradigm of the global inclusive circular economy, one should focus on circular growth. Model of sustainable growth by accelerating structural transformations in five key economic systems (clean energy systems, smart urban development, sustainable land use, water resources management, the circular industrial economy) is developed. Basic pillars of inclusive development are considered. Indicators in the “Beyond GDP” (Better Life Index (BLI), Ecological Footprint, Environmental Pressure Index (EPI), European Environment Agency Core Set of Indicators (EEA CSI), Genuine Progress Indicator (GPI), Gross National Happiness Index (GNHI), Happy Planet Index (HPI), Human Development

Index (HDI), Index of Sustainable Economic Welfare (ISEW), Sustainable Development Indicators (SDI) are characterized. In this article Better Life Index (BLI): Housing, Income and Jobs are calculated.

Key words: inclusive growth, global inclusive circular economy, Beyond GDP (Housing, Income and Jobs).

JEL classification: F 01, F 43, I 32, J 23.

Introduction

Inclusive growth is economic growth that is distributed fairly across society and creates opportunities for all. Inequality puts our world at risk. In many OECD countries, inequalities are at their highest levels in 30 years and are widening. The top 10% of income earners take home over ten times more pay than the bottom 10%. Children whose parents did not complete secondary school have four times less chances of making it to university than children who have at least one parent with a university education. Definition “Beyond GDP” is too important in development of our idea about global inclusive circular economy. The 2008 financial crisis was a dramatic wake-up call. Growth as we know it doesn’t work for all and is putting everyone’s wellbeing at risk. We need to develop new and improved models and focus on ensuring growth actually improves lives. Giving everyone a stake in growth would feel more motivated and involved if the benefits of economic growth were not allowed to flow into the pockets of a rich minority. There are ways of making this happen, for example, by: making our tax systems fairer and more effective; ensuring people are able to earn the wages they need to thrive; creating a business environment that attracts new firms and boosts communities.

The purpose of the article. The paper aims to research a position of inclusive growth in functioning of the global inclusive circular economy.

Research results. Inclusive growth – is a growth that allows to attract most of the manpower for effective economic activity thus provide much of the population a higher standard of living. Considerable attention is paid to the segregation aspects of well-being and to the allocation of anti-discrimination focus. People can benefit from economic growth as passive participants not taking an

active part in increasing income or GDP, but only through policies of redistribution. This is a fairly widespread practice in most countries, and not only in the poor and developing countries. In fact, the difference between these two perspectives (people like active or passive participants, like producers and consumers, actors or as customers) not as obvious as it may seem, because the inclusive development requires people to be actively included in the process of political, social and economic changes (figure 1). Growth prospects for the poor indicates that growth alone will not benefit this layer because growth strategy must be consciously focused on reducing poverty (Andriy I. Krysovaty, Iryna Ya. Zvarych, Roman Ye. Zvarych, Maksym An. Zhyvko, 2018).

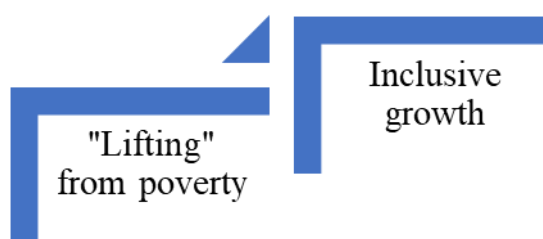


Figure 1: **“Steps” of inclusive development**

Source: Own study

Some social groups and territories, even in rich countries, have been left out for decades and need support. With the right policies and investments in essential public services, we can build more cohesive societies and bridge the divides that threaten our future prosperity.

A particularly interesting method for measuring inclusive growth for these types of structures was to develop an idea of functioning of social opportunities that measures the distribution of population opportunities, with a special focus on educational and medical capabilities (Ali, San, 2007). In general, the definition of inclusive growth coming from structures process oriented, are generally more comprehensive than those that focus on end results (table 1). According to researchers, the emphasis on participation and contribution of all groups takes on different forms. For example, Lancovichina, Lundchrom Lanchovichina and Lundstrom (2009) also include opportunities for investing, while Klasen (2010) focuses on education, health, nutrition and social integration.

Table 1: Concept of “Inclusive growth”

Organizations	The content of the concept
<i>OECD</i>	stable and comprehensive in terms of employment opportunities, and which needs support from public institutions to address labor market problems
<i>International Policy Center for Inclusive Growth</i>	result, and as a process
<i>European Commission (European Commission)</i>	On the one hand, as ensuring the widespread possibility of participation in the growth process both in terms of decision making and in creating the very growth. On the other hand, the result of inclusive growth is a fair distribution of incomes
<i>Europe 2020 Strategy</i>	ensuring a high level of employment, investing in education, combating poverty and modernizing labor markets, social protection systems, and promoting a greater unity of society
<i>International Monetary Fund</i>	full use of labor potential, reduction of poverty and its consequences, development of social inclusion, elimination of regional disproportions

Source: It is made on the basis of information (OECD, International Policy Center for Inclusive Growth, European Commission, International Monetary Fund). EUROSTAT, 2019. [online]. People in the EU - statistics on housing conditions. [viewed 30 April 2019]. Available from: https://ec.europa.eu/eurostat/statistics-explained/index.php/People_in_the_EU_-_statistics_on_housing_conditions#General_overview

Perhaps one of the brightest examples of an initiative with a clear theory of change, built within the indicator infrastructure of the economy, is the work of the Asian Development Bank. In its 2014 Inclusive Incentive Growth Initiative “Key Indicators for Asia and the Pacific”, it focuses on just two simple measures, poverty reduction and inequality, both of which are valued by monetary and non-monetary indicators. To achieve these results, they focus on indicators that consist of three main areas: economic growth, social integration and social security networks, backed up by indicators that define the foundations for effective governance and effective institutions. In addition to the factors of inclusive growth, in the process of forming the paradigm of the global inclusive circular economy, one should focus on circular growth.

Sustainable growth model by accelerating structural transformations in five key economic systems (figure 2):

→ clean energy systems by:

decarbonising energy systems in conjunction with decentralized and digital electrification technologies that can provide access to modern energy services for a billion people who do not have it;

enhancing energy security and reducing the impact of energy on volatility of prices around the world;

→ smart urban development by:

Smart city planning and strategic investment in infrastructure, in particular the expansion of public and non-motorized transport networks, can bridge bottlenecks for economic growth, such as overload and air pollution of viable cities. Smaller, more connected, and coordinated cities can save up to US \$ 17 trillion by 2050 in economic savings and stimulate economic growth by improving access to jobs and housing. This will strengthen the resilience to physical climatic risks and can provide up to 3.7 gigatons per year for reducing CO₂ emissions over the next 15 years.

→ sustainable land use by:

the transition to more sustainable forms of agriculture, combined with powerful forest protection, can provide an economic benefit of over 2 trillion dollars US per year, to create millions of jobs, mainly in developing countries; as well as increased food security, including by reducing food and waste losses (one third of all products produced are lost or consumed in the food chain).

At the moment, 44% of the bread is wasted in vain. In 2015, brewers in Toast But returned this ancient brewing process to solve the problem of consumed bread. Food waste is the third largest source of global greenhouse gas emissions, and industrial bakeries create a lot of redundant bread.

Toast Ale, which expanded from London's home base to brewery in New York, Rio de Janeiro, Cape Town and Reykjavik, works with local bakers to receive bread for their beer. They even made their recipe publicly available so that home brewers could process their stale bread instead of sending it to the landfill.

In line with the reduction in food waste, DoorDash Food Delivery Service debuted its DASH project earlier this year (DoorDASH for Sustainable Development and Famine). The initiative aims not only to reduce food waste, but also to starve in the communities it serves. DoorDash is working with Feeding America to use DoorDash's powerful food and logistics delivery technology to connect restaurants with surplus products to shelters for homeless people and cuisines.

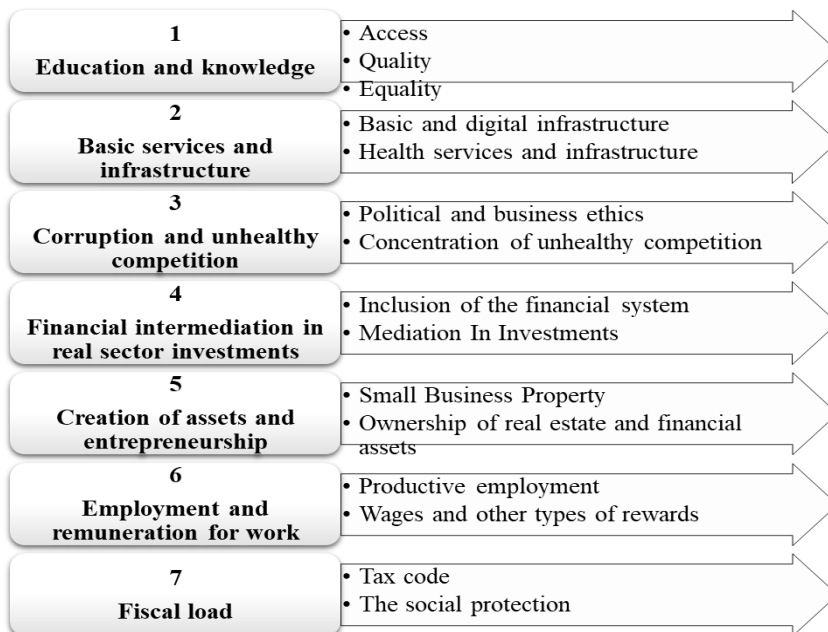


Figure 2: **Basic pillars of inclusive development**

Source: Own study

The average restaurant can spend up to 100,000 pounds a year. Less than 2% of the restaurant is served, and transportation is an obstacle. 1 out of 8 people in

the United States are hungry. They use logistics technology to connect excess food with local nonprofit organizations that serve people who are facing hunger in our communities.

The restoration of natural capital, especially our forests, degraded lands and coastal zones, will strengthen our defense and increase adaptation to climate influences, from extreme weather conditions and rising sea levels.

→ water resources management by:

Today, 2.1 billion live without accessible, safe water resources, and 4.5 billion live without safe sanitation. Regions, especially in the Middle East, the Sahel, Central Africa and East Asia, can see a 6% GDP decline by 2050 as a result of climate change, migration, and conflict. Great opportunities to stop these impacts through better water use, or for introducing advanced technologies (from drip irrigation to remote sensors to crops), planning and managing water pricing with targeted support for the poor or by investing in public infrastructure. Today, poorly managed and often underestimated water leads to excessive use and misallocation of resources in the economy. Solving the problems of water-energy-food interaction is crucial, especially in regions undergoing increasing tensions in water.

→ the circular industrial economy

From 1970 to 2010, the annual global production of materials increased from almost 22 to 70 billion tons. Every year, at least eight million tons of plastic are leaking into the ocean, which "contributes" to the new challenge of the 21st century. Microplastics was detected in 114 water species, many of which were found at our lunches. However, this challenge is not only a social or environmental issue, but also an economic one. Today, 95% of the cost of plastic packaging material - up to 120 billion dollars. US annually - lost after first use. A policy that encourages circular, efficient use of materials (especially metals, petrochemicals and building materials) can increase global economic activity, as well as waste and pollution reduction. The transition to a circular industrial economy can "tear off" economic growth from the use of resources as such and lead to the decarbonisation of industrial activity (Krysovaty, A., Zvarych, I., & Zvarych, R., 2018.)

Moving this low-carbon path to sustainable growth can provide a direct economic return of \$ 26 trillion by 2030 compared with the usual business.

The US produced 6.4 metric tons of electronic waste in 2016, and this number continues to grow, as electronic waste is one of the fastest growing segments of the country's waste streams. The popular business model in life style - eco offers the product as a service, and the Dutch company Gerrard Street applies this model to one source of electronic waste - headphones. Electronic waste is rapidly increasing due to the increased demand for electronics due to the constant updating of technology and the inability to recover many electronics that does not differ in headphones. The founders of Gerrard Street, Dorus Galama and Tom Leenders, admitted that the headphones often fail after one year, and usually for the same reason. To solve this problem, they have developed modular headphones, details of which can be replaced and upgraded.

Like a Spotify or Apple Music subscription, users pay a monthly fee for their headphones. Some headsets, starting at \$ 300, offer a cheaper and more stable version of the music chair. The headphones are somewhat niche, but the Gerrard Street headset's circular design proves that the modular design of the electronics and the product model subscription can work. (Jonathan Reckford. Four Pillars and a Roof. Building cohesive plans for making adequate housing universal. [viewed Apr. 29, 2019]. Available from: <https://www.oecd-forum.org/channels/791-inclusive-growth/posts/48404-four-pillars-and-a-roof-building-cohesive-plans-for-making-adequate-housing-universal>).

Every year more than 1 billion tires are utilized worldwide, with 50% of these tires or going to landfills or waste incinerators, which makes it possible to spend a valuable resource. Since 2007, Lehigh Technologies has rebuilt its valuable cryogenic turbocharger's valuable resources in refined tires. This process freezes the rubber raw material from waste tires and destroys it into micron powder. The obtained micronized rubber powder (MRP) can be used as a raw material in a wide range of industrial and consumer applications, replacing materials derived from fossil fuels. In 2017, Lehigh was acquired by the giant Michelin tire manufacturer to help the company achieve its sustainable development goals, using 80% of its tire materials and recycling 100% of its tires by 2048.

Today Lehigh serves a wide range of global markets with a total value of over \$ 10 billion, including asphalt, building materials, rubber, plastics and polyurethanes and tires.

The estimation of the inclusiveness of economic growth by the methods of international economic institutes in general is a mathematical tool for calculating a consolidated index. For its calculation, groups of indicators that characterize the dynamics of various processes that have an impact on the resulting inclusive growth are used, as well as regressive equations aimed at quantifying the relevant factors (figure 3).

Indicators considered in the "Beyond GDP"	Better Life Index (BLI)
	Ecological Footprint
	Environmental Pressure Index (EPI)
	European Environment Agency Core Set of Indicators (EEA CSI)
	Genuine Progress Indicator (GPI)
	Gross National Happiness Index (GNHI)
	Happy Planet Index (HPI)
	Human Development Index (HDI)
	Index of Sustainable Economic Welfare (ISEW)
	Sustainable Development Indicators (SDI)

Figure 3: **Indicators considered in the “Beyond GDP”**

Source: Own study

Such an integrated approach can help States understand how to maximize potential benefits, prioritize and offer different welfare models that can be obtained in a healthy environment. Ultimately, an inclusive, inclusive, circular economy must provide not only jobs and revenues, but also health, the environment and the future of the whole as a whole.

According to the 2018 World Economic Forum, the most inclusive countries are Norway, Iceland, Luxembourg, Switzerland, Denmark, Sweden, the Netherlands, Ireland, Australia, and Austria.

Final expenditure on housing is an important component of GDP, namely Housing: Dwellings without basic facilities; Housing expenditure; Rooms per person.

Its share of GDP for countries participating in Eurostat and OECD comparisons is usually between 8 and 12 per cent and tends to increase as GDP per ca-

pita rises. Although housing is a part of household consumption expenditure, it is not included in the cycle of price surveys for consumer goods and services (figure 4).

Almost one in six dwellings in the EU was unoccupied in 2011. Approximately one in three Europeans rented their home in 2016, while just over one quarter were owner-occupants with an outstanding mortgage or housing loan. Almost 1 in 20 people across the EU faced severe housing deprivation in 2016.

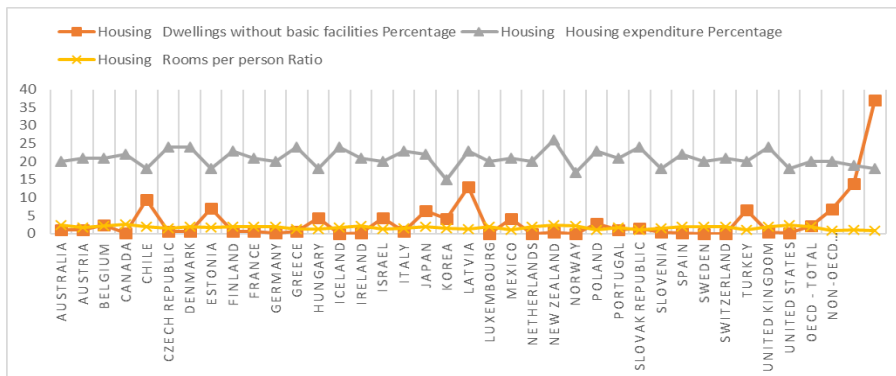


Figure 4: **Better Life Index (BLI): Housing, 2017**

Source: Own study. Data extracted on 30 Apr 2019 12:01 UTC (GMT) from OECD.Stat

Less than 1 in 10 dwellings in Finland, Slovakia, Greece and Cyprus were built before 1946. By contrast, more than one third of the housing stock in Denmark, Belgium and the United Kingdom was constructed prior to 1946. In most of the EU Member States, a considerable share of the total number of dwellings was built during the post-war period, between 1946 and 1980: some 45-50 % of the housing stock in Germany, the Baltic Member States, Greece, Hungary, Finland and Sweden was constructed during this period, a share that rose to 50-60 % in Italy, Slovakia, Bulgaria and Romania. By contrast, a handful of EU Member States experienced a period of high construction rates during the period 1981 to 2008, some of them associated with ‘housing bubbles’. These Member States— for example, Ireland, Greece, Spain, Cyprus and Portugal — are consequently characterised by a higher proportion of relatively new dwellings: at least 42 % of their dwellings were built post-1980.

There are a number of constraints that may delay or prevent the expansion of the EU’s housing stock. For example, some urban areas may already be over-

crowded with a simple lack of space being a major constraint for new developments, while in suburban and rural areas, planning permission (especially for ‘greenfield sites’) may be refused. Property developers are likely to favour new constructions in those regions where they believe demand will be buoyant, while regions characterised by sluggish economic growth and less job opportunities may be characterised by lower levels of new construction. [People in the EU - statistics on housing conditions https://ec.europa.eu/eurostat/statistics-explained/index.php/People_in_the_EU_-_statistics_on_housing_conditions#General_overview]

Income: Household net adjusted disposable income and Household net financial wealth (figure 5).

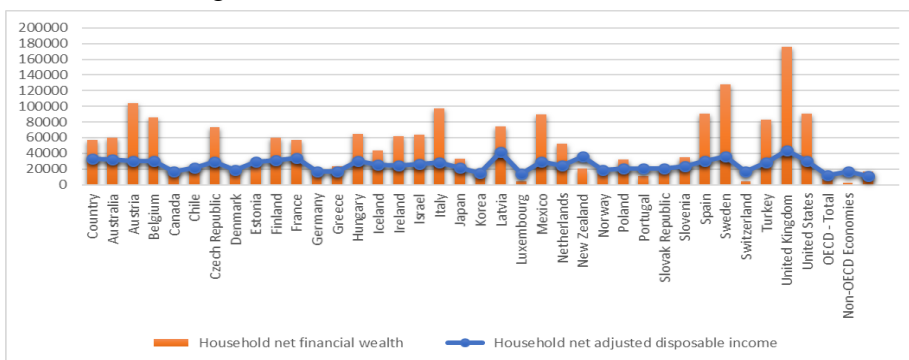


Figure 5: **Better Life Index (BLI): Income, 2017**

Source: Own study. Data extracted on 30 Apr 2019 12:01 UTC (GMT) from OECD.Stat

Household adjusted disposable income includes income from economic activity (wages and salaries; profits of self-employed business owners), property income (dividends, interests and rents), social benefits in cash (retirement pensions, unemployment benefits, family allowances, basic income support, etc.), and social transfers in kind (goods and services such as health care, education and housing, received either free of charge or at reduced prices). Across the OECD, the average household net adjusted disposable income per capita is USD 30 563 a year.

Household net financial wealth is the total value of a household's financial worth, or the sum of their overall financial assets minus liabilities. Financial wealth takes into account: savings, monetary gold, currency and deposits, stocks, securities and loans. These financial assets can provide an important

source of revenue on their own; either through their sale or refinancing, via pensions, via interest and dividend payments, or other property income. Ideally, measures of household wealth should also include non-financial assets (e.g. land and dwellings), but such information is currently available for only a small number of OECD countries, and is not included here.

Financial wealth makes up an important part of a household’s economic resources, and can protect from economic hardship and vulnerability. For example, a low-income household having above-average wealth will be better off than a low-income household with no wealth at all. Across the OECD, the average household net financial wealth per capita is estimated at USD 90 570. [<http://www.oecdbetterlifeindex.org/topics/income/>; OECD (2019), Household disposable income (indicator). doi: 10.1787/dd50eddd-en (Accessed on 01 May 2019)]

Jobs: Labour market insecurity, Employment rate, Long-term unemployment rate, Personal earnings (figure 6).

Despite a steady increase in female employment rates over the past 15 years, women are still less likely than men to have a job. In 2016, on average across OECD countries, 59% of women had jobs, compared with 75% of men. The gender difference is particularly high in Turkey and Mexico, and relatively small in Canada, Iceland and the Nordic countries. The increase in employment rates for women may be explained by structural changes in the economy and society but also by policy factors such as the provision of childcare facilities, which have made it easier for mothers with young children to return to work.

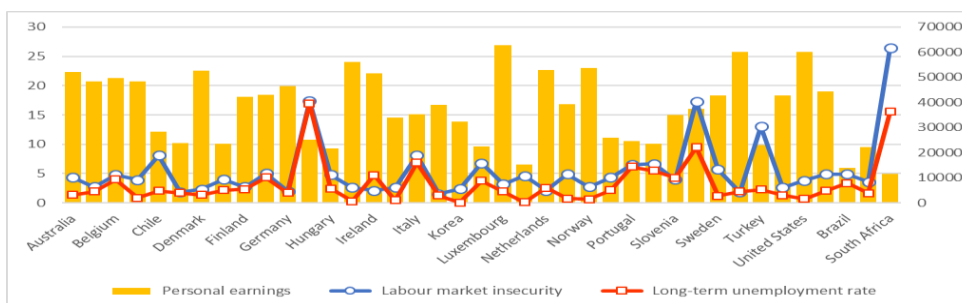


Figure 6: **Better Life Index (BLI): Jobs, 2017**

Source: Own study. Data extracted on 30 Apr 2019 12:01 UTC (GMT) from OECD.Stat

Unemployed persons are defined as those who are currently not working but are willing to do so and actively searching for work. Long-term unemployment can have a large negative effect on feelings of well-being and self-worth, and result in a loss of skills, further reducing employability. Such effects can last a long time, even after a return to work. Across the OECD, the percentage of the labour force that has been unemployed for a year or longer is currently at about 2%.

Creating more and better jobs is a major challenge for governments. There is no difference on average between men and women in the OECD area when it comes to long-term unemployment. Faced with ageing populations and rising social expenditures, facilitating employment for those who can work has become a priority.

The wages and other monetary benefits that come with employment are an important aspect of job quality. Earnings represent the main source of income for most households. Analysing earnings may also suggest how fairly work is remunerated.

In the OECD on average, people earn USD 44 290 per year, but average earnings differ significantly across OECD countries. In the United States, Luxembourg and Switzerland, average earnings are more than twice as high as in the Eastern European countries, Chile, Greece, Hungary, Mexico and Portugal.

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