The Intra-European Egoism Index Dataset

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Dataset overview

The Intra-European Egoism Index Dataset (2021) (IEEID) is a dataset containing the data of the variables of the Intra-European Egoism Index. The Intra-European Egoism Index is a composite index which measures the levels of egoism of the 28 Member States of the EU (including the United Kingdom) for the 2000-2019 period by aggregating 4 different variables. These variables are Trade Egoism, Immigration Egoism, Financial Egoism and Ecological Egoism. Furthermore, the dataset contains the data on the unweighted Intra-European Egoism index, the weighted Intra-European Egoism Index and the weights used according to the share of each Member State in the EU's GDP. The data for each of the 4 variables is a transformation of input data coming from several sources including the Eurostat, the UNCTAD, the Global Footrpint Network. This input data is also featured in the present dataset along with the statistical transformations that we have performed.

Dimensions of the index and operationalization

The elaboration of composite indicators has gained momentum in the last decade. The creation of a synthetic tool to analyse the evolution of long-term trends is an informative mechanism to deal with significant levels of data. Recently, the Joint Research Centre (JRC) of the European Commission along with the OECD developed a Handbook on Composite Indicators with the goal of establishing common rules/recommendations (OECD, 2008).

The European Commission has recently used this methodology with the creation of the European Social Progress Index. Its goal is to combine traditional benchmarks to analyse social progress (i.e., GDP) and new approaches of social progress (e.g., Welfare State, Security, Rule of law…). This index considers recent theoretical and empirical contributions concerning this topic. Our proposed composite index tries to capture four dimensions of intra-European egoism: (1) Trade egoism, (2) Financial egoism, (3) Immigration egoism and (4) Ecological egoism. These four dimensions are key areas for the functioning of economic activity in the EU's single market and their rationale will be explained later.

Aims of the index

The main aim of the Intra-European Egoism Index is to quantify intra-European egoism with a few figures that reflect an objective tool for measurement of a variety of phenomena within the single market. The index also aims to be intuitive and easy to explain. Hence, the index's potential for pedagogical as well as policy-relevant purposes is one of its main objectives. Besides the intuitiveness of the index, the data comes from widely accepted sources like the Eurostat, the World Bank, the

OECD, the UNCTAD and the Global Footprint Network. Moreover, the data is readily available and collected according to these organizations' standards.

The construction of the composite index involves several stages in which the authors have to make decisions. For example, the selection of the input variables, the treatment of missing values (imputation technique) and the choice of weighting factors require a number of decisions which are made in a transparent manner. Moreover, the index is robust since the datasets used for a given variable could have been swapped with others, but we expect that results would not be significantly different. For instance, one could use the data on volumes of greenhouse gas (GHG) emissions per capita instead of the ecological footprint per capita to measure ecological egoism. Alternatively, one could use the Corporate Tax Haven Index elaborated by the Tax Justice Network instead of the inward Foreign Direct Investment (FDI) stocks estimated by the UNCTAD. However, the results and the relative position of Member States would not be significantly different.

Admittedly, no index can reflect all the manifestations of egoism that take place in the EU and among MS. We decided to concentrate on the egoism of MS within the framework of the single market because we consider this to be the most important aspect of the EU since its creation due to its significant influence in economic, social and environmental terms.

Dependent variable

The dependent variable is the Intra-European Egoism of Member States. We are interested in measuring the egoistic practices of MS in the common market. Hence, we provide a simple and workable definition of egoism as an intentional pursuit of a country's own benefit regardless of others and which generates negative externalities to other Member States. We define negative externalities as actions which result in positive gains for an individual Member State but detract from other MS and the overall EU economy. Following the view of economists like Akerlof and Shiller, we consider negative externalities to be market failures (Akerlof & Shiller, 2016), and to be more precise for the matter at hand, as failures of the EU single market which MS exploit.

The intentions of MS can be aggravated or mitigated depending on the power a country holds in its relationship with others. We consider that egoism consists not just of the intention to increase one's own gains at the expense of others; it also depends on the relative weight of actors. This is especially relevant in a common market where members are nominally equal in terms of rights and obligations but can differ greatly in terms of relative economic weight. Furthermore, our definition of egoism refers to the "everyday" egoism of MS.

Admittedly, the concept of Member States as a definition of the actors we're interested in is quite broad. In its broadest meaning, Member States comprehend many different actors such as national governments and their different levels, other public institutions, civil society organizations, companies, households, etc. We argue that the egoism of a Member State is not exerted just by its government or by just some category of domestic actors. Rather, it is usually exerted by different actors. What we are interested in is the aggregated egoism of Member States; the "macro-egoism" to call it somehow. To measure this macro-egoism, we select several variables (trade egoism, financial egoism, immigration egoism and ecological egoism) and we explain their rationale. In each variable, the responsible domestic actors are manyfold. Nonetheless, we attempt to measure the observable egoism at a macro level.

Independent variables

Trade egoism

The common market provides its members the freedom of exchanging goods and services without tariffs and with only limited and justified non-tariff restrictions - like safety and environmental non-tariff restrictions. For this not to generate macroeconomic stability problems, it is necessary for the countries to maintain, in the long term, a certain external balance equilibrium between countries. If this equilibrium is not maintained, this can generate a balance of payments crisis as it happened during the Eurozone Crisis (2011-2015).

This was one of the reasons why the European Commission created the Macroeconomic Imbalances Procedure (MIP) in 2011. One of the goals of this framework - among others - was the correction of harmful approaches to trade reflected via excessive and persistent current account surpluses. To measure this type of egoism (trade egoism onwards) we use the Current Account Balance percentage to GDP on a 3-year-average basis, as recommended in the MIP Scoreboard of the European Commission. Then, we subtract the net contributions each Member State makes to the common EU budget as a percentage to GDP given its indirect redistribution character within the EU, and its compensating effect on egoistic trading orientations. The statistical data for this variable are gathered from the Eurostat, the OECD and the World Bank and cover the 2000-2019 period. Each Member State is included as of the year of accession into the EU.

From our perspective, it is adequate for a country to derive high gains from the single market as long as its current account surplus is within a reasonable bracket. The problem lies in excessive current account surpluses. Such surpluses signal an aggressive export-led growth model in which domestic demand is kept artificially low through persistent wage containment agreed upon by the social partners and crucially facilitated by government containment of public sector wages. This rationale is supported by the comparative political economy literature (Baccaro & Pontusson, 2018; Johnston et al., 2014) that examines the relationship between external imbalances and the growth differentials between nominal wages per hour worked and productivity. This literature provides evidence that countries that are institutionally capable of containing wages below productivity tend to produce a sustained divergence in the real exchange rate (Johnston et al., 2014). Such a model seeks national GDP growth at the expense of other countries by keeping wages artificially low over long periods of time and, hence, boosting exports and minimizing imports from trade partners. If there is a critical mass of countries in the EU that engage in this egoistic practice, the rest of Member States have to resort to the same artificial containment of salaries and/or engage in competitive devaluations of their currencies - which is not a possibility for the Eurozone countries. Otherwise, there would eventually be a balance of payments crisis. In conclusion, it is an egoistic national trade practice that ultimately undermines macroeconomic stability and reduces the growth of the European Union's economy by dragging the other Member States into a race to keep wages low.

Financial egoism

Since 1990, the freedom of capital movement appears unhinged, with capital permitted to flow within the EU and from the EU to third countries without the requirement of passing controls apart from

a few warranted extraordinary situations (Directive 88/361/EEC, 1990). As a result, financial competition and aggressive fiscal planning have become more feasible for some MS as a way to attract the activity of financial institutions, multinationals and wealthy individuals seeking the lowest tax rates and/or secrecy to hide and launder money from dubious sources. According to the IMF's estimates 40% of the world's annual Foreign Direct Investment flows are phantom investments which serve no real economic purpose other than avoiding paying taxes in the countries of origin and regulatory scrutiny (IMF, 2019). Moreover, there have been multiple studies by international organizations such as the OECD, but also by the Tax Justice Network which have identified the ways in which EU Member States like Ireland, the Netherlands, Luxembourg or Cyprus have committed unfair practices to attract financial capital to the detriment of other EU Member States' economies and public finances. To measure this financial egoism, we use the stocks of inward FDI per capita accumulated in each EU Member State. Atypically high volumes of FDI reflect - whether due to financial secrecy privileges and/or extremely low taxation - that a Member State has taken advantage of the free movement of capitals within the EU to adopt selfish financial practices which distort FDI figures and reduce the fiscal revenues of their EU colleagues. The data on inward FDI stocks per capita comes from the UNCTAD's database, it is denominated in annual US dollars at current prices and covers all Member States from 2000 to 2019.

Immigration egoism

Following the logic of intra-European egoism, immigration egoism refers to how reluctant societies are to integrate citizens of other nationalities of the European Union. One of the fundamental freedoms of the common market refers to the free movement of people, that is, the ability to move freely, and settle down permanently in other MS. When countries are predisposed to benefit from the common market but not to assume the integration of immigrants of other EU countries, they are behaving egotistically.

Hence, we decided in favour of using as a proxy variable the differential of material deprivation between national and immigrated European citizens. Material deprivation is an indicator produced annually by the EU-SILC and published annually in Eurostat. The data availability ranges from 2003 to 2019 for most EU countries, with some missing observations for new Member States[1].

The proxy variable is operationalized as follows:

Immigration egoism = Severe material deprivation rate by EU citizens (excluding reporting country) - Severe material deprivation rate (reporting country citizens)

[1] Several alternatives have been contemplated to measure this type of egoism (Migration selfishness onwards). One alternative was to use the Migration Acceptance Index elaborated by Gallup, which is an index constructed from subjective opinions of random citizens. However, data availability was limited ranging from 2017 to 2020. Other alternatives include using data from the Eurobarometer, for example regarding priority concerns of the citizens (one of which was immigration). However, the link between subjective opinions from citizens and factual integration of migrants was not clear or strong enough to confidently justify its use. An objective dataset regarding the integration of immigrants would be much preferable.

We also considered using the differential in poverty rates between national and European citizens. However, given that the poverty rate is a variable built on statistical convention and defined by the 60% of the median national income we observed high levels of volatility from one year to the next when it came to the differentials between nationals and EU immigrants. In some cases, some years indicated that EU immigrants were better off and other years nationals were doing much better in the same country without any clear logic as to why that was happening. Hence its explanatory power was not clear. The data on severe material deprivation exhibited less year-to-year volatility and - potentially - a better representation of a country's efforts to deal with what is arguably the most urgent issue when it comes to immigration: Providing adequate minimum living standards for vulnerable and low-skill immigrants either through employment opportunities and/or through social services.

When material deprivation is unequally distributed among foreign EU citizens and nationals of the reporting country this can be due to two main factors. The first one is a reluctance of the reporting Member State to have an effective commitment to the integration of EU immigrants that exert their free movement within the EU. The second one, is an institutional inability to promote equal treatment among citizens. Although the former is a clear consequence of intra-European egotism, we also consider the latter to be a form of egoism because this institutional dysfunctionality would still be to the benefit of national citizens and to the detriment of the citizens of EU peers. Whether it is due to the first or the second reason, an unequal distribution is arguably the result of a lack of encompassing employment and social policies that ensure inclusion of EU immigrants and/or due to a closed labour market to foreigners in which nationals are reluctant to hire and work with immigrants.

In legal terms, the EU institutions have consolidated a formal EU citizenship which recognises an ample equalization of the rights of EU citizens in each Member State to the rights of its own nationals. Nonetheless, the existence of a sustained heterogeneous distribution of severe poverty in some EU countries - for whatever of the aforementioned reasons - means a factual limitation to the freedom of movement of people in the EU's single market. This represents a clear negative externality for the workers of the EU that want to search for better opportunities in other countries.

Admittedly, EU immigrants in a given Member State may have an educational background and a set of skills which is on average lower to the nationals of the reporting country. Consequently, it may be harder for these EU immigrants to get a job and a source of income. This could also be a potential reason for EU immigrants having higher figures of severe material deprivation. Nonetheless, we argue that the proxy variable that we select to measure immigration egoism (the differential in severe material deprivation) is a de minimis measure. Even if EU immigrants were to have a lower set of skills on average than the nationals of the reporting country and higher unemployment figures, there shouldn't be a differential in severe material deprivation given that this problem can be solved through universal social policies aimed at reducing poverty.

Ecological egoism

We measure ecological egoism as the national ecological footprint per capita. Besides sharing a single market with four fundamental freedoms, EU Member States also share natural resources which make life and human activity possible on the planet - and hence economic activities in the single market. A very high ecological footprint per capita means that the citizens, businesses and governments of a MS are consuming an excessive amount of the ecological capacity of the planet, deepening the current

biodiversity and climate crisis. Currently all EU MS have an ecological footprint per capita beyond global sustainability levels. However, huge discrepancies exist with regard to this ecological egoism among MS. For instance, if everyone had the same ecological impact as an average Luxembourgish citizen, humanity would need 8 planet Earths whereas it would only need 2 Earths if everyone had the same impact as an average Romanian national. This type of egoistic consumption of natural resources represents a negative externality for the development and consumption of other MS and it is ultimately harmful for the EU and for the world at large if a critical mass of countries act as egotistically as possible. The data used is obtained from the Global Footprint Network for all EU MS from the year 2000 to 2019, the most recent year for which data is available.

An alternative measure for the ecological egoism are the volumes of GHG per Member State. However, we leaned towards using the ecological footprint because it includes more factors of ecological sustainability beyond GHG emissions. It is a more comprehensive index which includes the use of land, oceans, energy and natural resources more broadly in addition to greenhouse gas emissions.

Methodological guidelines

As is expressed in the OECD JRC Handbook, the elaboration of a composite indicator requires deliberation on which processes of normalization and aggregation are needed (OECD, 2008). We have decided to employ a Modified Z-score in the process of normalization of the data. The modified z-score is statistically more robust than the standard z-score as it uses the median for calculating the z-score instead of the mean. This reduces the distortion generated by atypical observations in the distribution. Once the normalization phase is completed, we apply a linear and equal weights aggregation process of the four different variables to create a preliminary index of intra-European egoism for each Member State. Finally, we multiply the scores of the preliminary index by the share of each Member State in the EU's economy measured by GDP to obtain the definitive index.

$$\text{Modified Z} - \text{Score} = \frac{\text{X} - \text{Median}}{1.486 * \text{Median absolute deviation(MAD)}}$$

$$\textit{Median absolute deviation } (\textit{MAD}) = \textit{Median } (|\text{x} - \text{Median}|)$$

Citation

The IEED dataset is free for academic use conditional on citation only. If you use IEED data please include the following citation: Monge, B., Medina, A., Arregui, J.. 2021. Intra-European Egoism Index Dataset (IEED). Version November 2021.

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