

CO₂ OF INEQUALITIES: ENHANCING DIVERSITY, AVOIDING INEQUALITIES

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ABSTRACT

The name of our village within The Economy of Francesco, “CO₂ of Inequalities”, showcases a tension: as much as it is meaningless to conceptualize nature (or the creation thereof) without carbon dioxide, thus it is unrealistic to conceptualize humanity without diversity, the great wealth of humanity. In this paper, we showcase some of the activities and reflections made within our village. First, we offer a theoretical reflection on the issue of inequalities by looking at Pope Francis’ magisterium and Nobel prize-winner Amartya Sen’s capabilities approach. Second, we reflect on the issue of meritocracy and its relationship with inequalities. Third, we present the state of the art on inequalities across the globe by resorting to an innovative statistical tool, a self-organizing map. Fourth, we reflect on diversity (equity) and inequality in the business world.

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INTRODUCTION

Talking about inequalities is not easy. On the one hand, we live in a world familiar with inequalities and the need to fight against them. On the other hand – and the

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COVID-19 pandemic has shown this clearly – different and interconnected forms of inequalities have now become stratified in our societies, to such an extent that they have been accepted as “endemic” (Ahmed et al., 2020).

By putting at the centre of the discussion an element that in the contemporary societal debate is often associated with inequalities (CO₂, pollution, ecological footprint), the name of our village, “CO₂ of Inequalities”, is intended to showcase this tension. It states a guiding principle that has informed our work within The Economy of Francesco (EoF) community: as much as it is meaningless to conceptualize nature (or the creation thereof) without carbon dioxide, thus it is unrealistic to conceptualize humanity without diversity. Carbon dioxide is an integral part of life on earth. It is a natural component of photosynthesis and a by-product of our breathing and combustion. Carbon dioxide is not harmful in itself. As long as the ecosystem can manage it, we are safe. On the other hand, when carbon dioxide exceeds a given threshold, i.e. when it turns into waste, it becomes unsustainable and represents a real threat to the planet. Similarly, the diversity coming from structural differences in relational, symbolic and biological capital constitutes the great wealth of humanity. However, when this diversity becomes the object on which social evaluation is based, humanity abandons the universe of diversity and falls into the hell of inequalities. When inequalities exceed a certain threshold, social mobility becomes a chimera – an impossible dream – and the functioning of the social and economic system is in danger (Piketty and Saez, 2014).

Although economic inequality has grown steadily along the long course of human history, galloping undisturbed for over 467 years (Alfani, 2021), we should not get used to it. From a purely academic perspective, scholars have long debated whether economic inequality is good or bad. Much of this debate has focused on the relationship between economic inequality and intergenerational mobility, with the declared aim of understanding whether inequality endangers social justice and social cohesion or, instead, reflects individual efforts. Among the opponents of inequality, the greater consensus is that economic inequality inhibits economic growth and impairs democracy and social justice (see, for instance, Piketty, 2014; Putnam, 2016; Stiglitz, 2013; and Deaton, 2015). As such, it should not be reduced through redistributive policies that potentially curb individual incentives. However, we believe that one of the central answers to why we should not get used to inequality comes – even if we would not expect it – from the purported founding father of capitalism, Adam Smith, and was recently brought into the debate by Rasmussen (2016). On the one hand, Smith did not believe that the economic inequality of commercial society was intrinsically unjust, that it prevented social mobility or that it was a force for corruption (and this could be debated). On the other, he devoted an entire chapter of *The Theory of Moral Sentiments* to showing¹ that people are, by natural inclination,

¹ As correctly pinpointed by Rasmussen (2016), Smith does not make the connection between economic inequality and people’s distorted sympathies explicit. However, it is plausible to assume that without any economic inequality there would be no rich and poor to sympathize with to differing degrees.

more likely to approve, admire and emulate the rich than the poor, ultimately undermining both morality and happiness.

The three parts composing this paper represent, although imperfectly, the structure of our village, which was organized with the specific aim of addressing the issue of inequality both from a theoretical and a practical point of view. The four pillars that constitute the backbone of our village (i.e. research and publications, startups and business, webinars and fishbowls, and community projects) all shared an objective: to look at inequality as a multidisciplinary and complex phenomenon that requires the contribution of different and complementary skills, without ever forgetting to address the issue of inequality among the people participating in the village. For this purpose, the village meetings were offered in four languages (Italian, English, Spanish and French) and at different times in order to accommodate the needs of as many participants as possible. In addition to the main pillars, the organization of the village consisted of four groups of “guardians”, or “custodians”, who shared the goal of making the village (however virtual) a welcoming place, making sure that there was enough space for listening and for the “search” for the common good. These activities aimed to transform the village into a laboratory in which inequalities were the object of study, while inclusion and collaboration were experienced by design.

The remainder of this paper is structured as follows. In Section 1, we dig deeper into the topic of inequality, offering a theoretical reflection on the issue by looking at Pope Francis’ magisterium and at Nobel prizewinner Amartya Sen’s capabilities approach, the two primary sources of inspiration on which the charter of principles on inequality, produced by the participants in our village, was built. We then extend the reflection on inequality by tackling a topic that is gaining momentum in the public debate: the issue of meritocracy. In Section 2, we describe the state of the art regarding multidimensional inequality by presenting a simplified version of a research project born within our village. We use an innovative statistical tool, namely a self-organizing map, to depict inequalities across the globe. In Section 3, we reflect on diversity (equity) and inequality in the business world.

1. A THEORETICAL APPROACH TO THE ISSUE OF INEQUALITY. WHAT IS RIGHT ABOUT DIVERSITY AND WHAT IS WRONG ABOUT INEQUALITY?

1.1. *Pope Francis’ magisterium on inequality and diversity*

Diversity and inequality are two words that form an essential part of the magisterium of Pope Francis, especially in the encyclical letters *Laudato Si’* (LS) and *Fratelli Tutti* (FT). Along with the *Laudato Si’*, one can see how inequality was conceptualized as a complex social issue from the very beginning. While reducing inequality and poverty is the new social issue that challenges all consciences, it also asks for an urgent, profound, complex and global response. The public debate almost always assumes that inequality is primarily an economic problem. This perspective risks obscuring the complexity of the phenomenon, which necessitates a wide range

of reactions. The pope, in fact, clearly recognizes that there are a variety of forms at different levels. Inequality of treatment presents itself in the absence of equal access to justice, in the interaction between genders and generations, in the lack of rights for immigrants, in insufficient tax-evasion control and in the disparities in pay between men and women. The closure of professional orders and the difficulty of accessing the labour market and of obtaining financing for a new business are examples of inequality of opportunity. In contrast, the inequality of status is evident in the different treatment that states reserve for their citizens, who should be treated equally. Consider the many welfare systems in our countries, each of which provides dramatically varied services in terms of quality in different regions (LS, 48). As a result, extending and strengthening social and welfare policies will not be enough to alleviate inequality; we must act on multiple fronts. The issue of reducing inequality affects all nations precisely because it is increasing exponentially within individual countries.

We are brothers and sisters who have the same human dignity, regardless of race, language, nation, culture or religion. This is the challenge Pope Francis put forward to the contemporary world – to consider universal brotherhood, which has the dignity of the human person as its anthropological basis and is the cornerstone for building a dialogue for peace within all the diversities that constitute us: “Certainly, all this calls for an alternative way of thinking. Without an attempt to enter into that way of thinking, what I am saying here will sound wildly unrealistic. On the other hand, if we accept the great principle that there are rights born of our inalienable human dignity, we can rise to the challenge of envisaging a new humanity. We can aspire to a world that provides land, housing and work for all. This is the true path of peace, not the senseless and myopic strategy of sowing fear and mistrust in the face of outside threats”. For a real and lasting peace will only be possible ‘on the basis of a global ethic of solidarity and cooperation in the service of a future shaped by interdependence and shared responsibility in the whole human family”. (FT 127)

Even if someone is different, the other is not a threat; precisely because of his uniqueness, the other is an enriching gift since life is identified as a gift, and thus each of us is unrepeatable gift for humanity. The geometric figure of the polyhedron offered by Pope Francis “represents a society where differences coexist, complementing, enriching, and reciprocally illuminating one another, even amid disagreements and reservations. Each of us can learn something from others. No one is useless, and no one is expendable”. (FT 215) The coexistence of human diversity, animated by mutual charity, allows a man of any age and race to see in the other not a stranger, not a different one, but a sibling who enjoys the exact same origins. Therefore, diversity will become both a source of enrichment and mutual illumination in conducting the history of human life wisely and equally.

Genuine compassion will thus transform diversity into the beauty of essential relationships, allowing for a healthy and genuine human coexistence to emerge. We were created for the fullness that can only be found in love. Pope Francis says that his words are a modest contribution “for a new way and vision of fraternity and social friendship that will not remain in the level of words” (FT 6). The term

“vision”, here, is understood not in the sense of a dream or an evasion that causes one to lose contact with reality, or the consolatory utopia concerning a harsh reality, but rather – and typical of Pope Francis – a vision capable of orienting, of indicating the direction of travel, of motivating change. This dream is a project, and it is the true heart, or rather the actual engine, of the entire encyclical: every statement made by Pope Francis must be understood in relation to this longing (Costa and Fogliozzo, 2020).

All of this calls for the ability to recognize other people’s right to be themselves and to be different. This recognition, as it becomes a culture, makes possible the creation of a social covenant. Diversity is an opportunity, a strength, a solution: “To speak of a culture of encounter means that we, as a people, should be passionate about meeting others, seeking points of contact, building bridges, planning a project that includes everyone. This becomes an aspiration and a style of life”. (FT 216)

Ultimately, Pope Francis’ thought calls for the need to build a community capable of embracing differences, a “we” living in a common home. In this sense, embracing everyone’s culture and living diversity can be a generating perspective.

1.2. *Amartya Sen and the capabilities approach*

Before defining the principles intended to guide our journey within the EoF, we went through some works in political philosophy. We started with John Rawls’ *A Theory of Justice* (1970). In this work, the political philosopher established a model of justice as fairness based on moral universalism and strongly rooted in the work of Locke, Hume, Rousseau and Kant. Rawls used the expressions “original position” and “veil of ignorance” to describe a thought experiment (initially developed in Vickery, 1945, and Harsanyi, 1980) in which people are asked to establish the principles of justice that would be universally valid, without knowing what position they have in society or their personal, social and cultural characteristics, or the resources, opportunities, freedoms and rights they have access to. In Rawls’ view, inequalities are only justified if they favour the most disadvantaged people within a society (Rawls, 2005).

Starting from Rawls and entering into a dialogue with economic theory, Amartya Sen proposed a human development model based on the so-called capabilities approach (Sen, 1995). Sen’s capabilities approach, founded on Aristotelian anthropology and rooted in a hermeneutic reflection on human diversity, is an ethical-economic system of social justice entailing two normative claims: first, people’s freedom to achieve well-being is of primary moral importance, and second, people’s well-being should be understood in terms of functionings and capabilities (Sen, 1999). Functionings are “beings and doings” (Sen, 1995), i.e. things a person can do, value or be. Capabilities are, in contrast, those doings and beings that people can achieve if they choose to do so. Capabilities should be understood as the freedom of conversion – or transformation – of means into ends. They are, therefore, fundamental freedoms to achieve different lives, different ideas of good, according to what each person desires and values rationally. In this way, the perspective of freedom is con-

figured as a model of social and economic justice in which the person assumes a central role. Indeed, the person is at the centre of two dimensions: agency (or autonomy) and wellbeing.

Sen's model has long informed the development policies of organizations such as the United Nations Development Programme (UNDP). Indeed, for the UNDP, human development is about expanding the capabilities of all people to freely choose what they want to be and do so that they can enjoy long, healthy and creative lives, pursue goals they value and actively participate in the sustainable and equitable development of the planet they share (PNUD, 2010). Development, therefore, is freedom – but an actual, possible and guaranteed freedom. It is the guarantee of the whole exercise of fundamental rights, but also of material means, income and wealth, opportunities, access to education or health services, the ability to express oneself in democracy and have security and to live in a healthy environment, and it is also confidence and self-esteem in one's life project. Sen's model is not theoretical; it directly affects social and economic policy by putting capabilities theory into practice when assessing unjust inequalities as a lack of freedoms (Sen, 1999).

1.3. *Moving beyond equality of opportunity and meritocracy*

Once we defined the conceptual limits within which our theoretical reflection on inequality moves (the magisterium of Pope Francis and Sen's capabilities approach), our reflection on inequality had to address a theme that is gaining momentum in the contemporary debate: the relationship between equality of opportunity and meritocracy and their link to inequality.

The term meritocracy is generally used to describe a system in which rewards are impartially distributed according to personal effort and performance (Wiederkehr et al., 2015), irrespective of other less measurable attributes such as socioeconomic background or personal relationships. Although the belief that people's advancement within institutions should only be based on their abilities is one of history's most revolutionary ideas (one on which the so-called American dream was built), the term meritocracy initially had a negative connotation. First introduced by the British sociologist Michael Young in his satirical book entitled *The Rise of Meritocracy* (Young, 1958), the term was used to criticize a system that was designed with the explicit aim of remunerating only effort but that, in the end, was instead remunerating participants' backgrounds. By focusing on merit only, the champions of meritocracy were, according to their critics (e.g. Frank, 2017), forgetting the widespread and preponderant influence of chance (or luck) in defining individual destinies. To understand this critique, one should conceptualize merit as the intersection between an individual's skills and effort. While effort can be assumed to be solely dependent on the individuals themselves, skills are not. As highlighted by Roemer (1985), life is a lottery that assigns individuals to genes and families, and individual skills are the result of a plurality of variables and contextual factors that have little to do with the effort

(and merit) of individuals and that, at the same time, largely determine how wealthy, healthy and educated they are (Roemer and Trannoy 2016). In these terms, meritocracy risks putting a strain on equality of opportunity – ironically, one of the building blocks on which meritocratic beliefs are built and justified.

The basic idea at the core of the principle of equality of opportunity is that differences in outcomes due to predetermined circumstances, such as race, parental background or gender, should not be accepted as legitimate. At the same time, there should be no compensation for differences in outcomes due to controllable elements or the deliberate choices of individuals. Conversely, inequalities in outcomes should be “accepted” when they derive from the responsibility with which individuals have managed their resources. Therefore, one should avoid there being differences, before the competition, between individuals attributable to circumstance, i.e. to all of those variables that are not under their control. However, once the competition has started or once the match is over, no action should be taken.

Although this principle can be justified theoretically, it is only partially achievable. Tony Atkinson explained why: “Inequality of outcome among today’s generation is the source of the unfair advantage received by the next generation. If we are concerned about equality of opportunity tomorrow, we need to be concerned about inequality of outcome today” (Atkinson, 2015: 11). Indeed, many countries show a striking empirical regularity: there is a clear correlation, usually known as the Great Gatsby Curve, between the concentration of wealth in one generation and the ability of those in the next generation to move up the economic ladder, compared to their parents (i.e. intergenerational elasticity). At the same time, roughly half of the variance in personal income across the globe is explained by country of residence and by the income distribution within that country (Milanovic 2015).

One of the main risks of meritocracy is to confuse success with merit and failure with demerit, which, as such, must be blamed. This happens when one forgets that much of what we have today derives partially from the past and partially from circumstances that have nothing to do with merit but are primarily due to chance or luck. The drift lies in justifying the increasing inequality one witnesses in society by attributing this to the hard work of successful people and to the incompetence or shortcomings of unsuccessful others (Bruni and Santori, 2021), to the extreme where those who are most affected by those socioeconomic inequalities are also those who justify them more.

The equality effort = success is not, however, corroborated by any empirical evidence. The simple fact that, for instance, intelligence exhibits a Gaussian distribution among the population while wealth, a (somewhat incomplete) proxy for success, usually follows a Pareto law, with a large majority of poor people and a tiny minority of extra rich, already explains that a variable is missing in the equation (Pluchino, Biondo and Rapisarda, 2018). This variable is luck, randomness, fortune. The academic literature now includes examples pointing in this direction. Indeed, the literature shows that, for instance, those with surnames starting with letters earlier in the alphabet are significantly more likely to receive tenure at top departments (Einav and Yariv, 2006) or access to oversubscribed public services (Jurajda and München, 2010).

Summing up, two aspects entirely independent of merit and personal effort (the place where one is born and the parents who gave him birth) determine much of the success a person can enjoy and, therefore, also the existing inequalities. Therefore, it can be highly misleading to think that we can level the playing field today and care only about inequalities of opportunity if these derive from outcome inequalities of the past that have been passed down from generation to generation for centuries and that, ultimately, are mainly attributable to randomness.

Principles of CO₂ of Inequalities

Based on the abovementioned theoretical framework, the participants in the village agreed on the following theoretical principles guiding the empirical and business work of the village.

Guiding principle. The economy exists for the person, not the person for the economy: economic outcomes should not be judged by the number of goods produced. Instead, they should be judged by how the economy supports the dignity of every human person, the environment and the common good.

Other principles

1. A fundamental measure of economic success should be how the poor, marginalized and vulnerable are treated (the duty to tackle poverty).
2. All people have the right to life and to access the basic necessities of life: food, water, clothing, shelter, education, health care, safety, social inclusion and economic security (the right to basic necessities).
3. All people have the right to economic initiative, productive and decent work, fair wages, fair compensation for their investments, fair working conditions and financial well-being, and to join unions and other associations (the right to decent jobs).
4. Governments, civil society, businesses and people, with their individual and collective actions, have the moral obligation to preserve the environment and to proactively tackle climate change and its adverse effects, especially on the most vulnerable within our societies (safeguarding the environment).
5. Global economic decisions and policies should protect human life, especially for those most in need. The role of the government is essential to promote human rights (the promotion of human rights).
6. Diversity is a crucial value of every society. Because of this, societies, businesses and governments should undertake measures to tackle any economic inequality and injustice, promoting the right to self-realization and actively protecting the rights of the most discriminated individuals (diversity as social value).
7. Governments and international organizations should actively promote international solidarity and fraternity: global challenges must be managed in a way that

distributes costs and burdens fairly following the basic principles of equity and social justice. Those who suffer or benefit the least deserve help from those who benefit the most (the duty of international solidarity/fraternity).

2. AN EMPIRICAL APPROACH TO THE ISSUE OF INEQUALITY: RECOGNIZING THE MULTIDIMENSIONALITY OF WELL-BEING AND INEQUALITY AND MAPPING THESE WITH A SELF-ORGANIZING MAP

From the theoretical reflection reported above, it is clear that inequality is a multidimensional and highly complex process that is, therefore, challenging to operationalize, both because it refers to multiple dimensions and because those dimensions are often difficult to measure. In this study, we propose an innovative methodological framework that encompasses some crucial dimensions of socioeconomic wellbeing. In the existing literature, the multidimensionality of inequalities has usually been represented by simply implementing a synthetic index to aggregate the various dimensions of inequality within a single vector, therefore failing to preserve the multidimensionality of the concept. To overcome this issue, we propose an innovative clustering algorithm, the self-organizing map (SOM), which allows us to classify countries and to better interpret the structure of well-being in the contemporary world. More specifically, a SOM is an unsupervised neural network able to conduct an exploratory analysis of high-dimensional data and illustrate relations between the data items, preserving their topology. That is to say, when a SOM is adequately developed, clusters that are close in the output space are also close in the multidimensional input space of the data.

The dataset on which the analysis is implemented consists of the following indicators, measured in 91 countries: GDP per capita, percentage of income held by the richest (10%) and the poorest (50%) in the population, life expectancy (at birth), infant mortality (measured as infant deaths before one year of age per thousand born), the number of children per woman, the number of homicides (in relation to the population), the number of years of education, the gender gap between boys and girls in terms of years of education, and per capita CO₂ emissions (measured in tons). These variables are proxies of some fundamental dimensions of well-being on a global level, namely wealth, health, education and environmental quality. These indicators were collected at five-year intervals from 1990 to 2015.

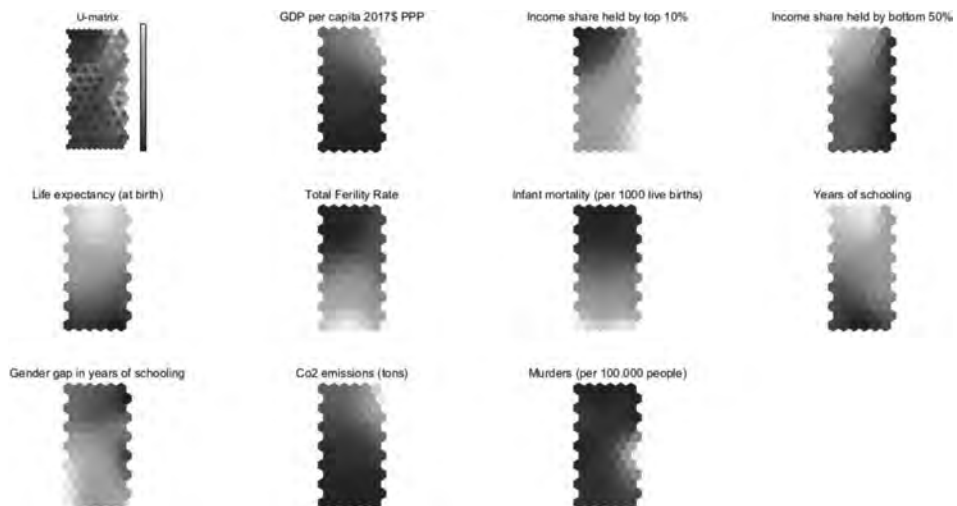
When looking at the individual indicators, it turns out that GDP per capita is growing in almost all countries, albeit at different speeds. This is consistent with the fact that the pace of economic growth in countries such as China and India leads to a gradual levelling of inequalities between nations, or to dynamics of convergence, as already shown in Milanovic (2007), among others. Inequality within countries, measured as the percentage of income held by the wealthiest 10%, is growing in North America, India and China, while it remains almost stable in Europe. However, inequality remains virtually unchanged in Africa and Russia, remaining at high (sometimes extremely high) levels. As far as health is concerned, all countries in the

analysis show a clear improvement in life expectancy. Although life expectancy (and infant mortality) are higher (lower) in Europe and the Americas, Africa and Asia have been closing the gap since the second half of the 20th century, a finding consistent with Deaton (2015). Except for some African countries, the number of children per woman has decreased dramatically in recent decades, following infant mortality trends. In particular, from 1965 to 2017 there was a decrease from about 5 to 2.5 children per woman, consistent with the second demographic transition (Les-thaeghe, 2010). The European Union stands out for being the area with the lowest number of children per woman, consistent with the findings in Billari and Kohler (2002). The number of homicides has also decreased, due to several factors including the consolidation of the nation-state and the role of the judiciary system (Pinker, 2011). Moving on to the years of education, we observe a generalized increase in this indicator. If in 1950 people studied 3.7 years, on average, today this indicator is up to 8.5 years. In terms of CO₂ emissions we find that in 2017 Asia was responsible for 53% of total emissions, followed by North America (the United States, in particular) with 18% and Europe with 17%, while the rest of the world contributed the residual emissions.

2.1. Results

The SOM comprises 78 nodes (i.e. units or micro-clusters), each characterized by a certain level of wellbeing/deprivation or by a combination of values concerning the chosen indicators. Figure 1 presents the component planes showing the value taken by a given indicator on each SOM unit. In particular, the yellow hexagons indicate areas

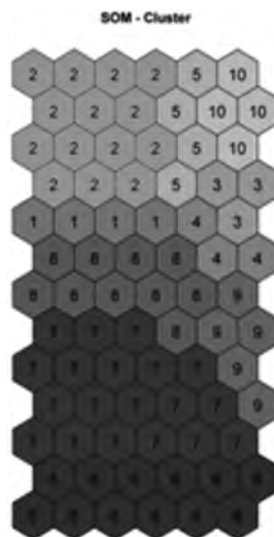
FIGURE 1 – *Component planes*



characterized by high values compared to a given indicator. Conversely, the blue hexagons indicate areas characterized by low values. Shades between yellow and blue indicate areas that have intermediate values. When graphically inspecting the component plans, it becomes clear that the lower part of the map brings together countries characterized by low GDP, low life expectancy, a high number of births per woman, high infant mortality and low levels of education. As we move towards the higher part of the map, per capita GDP grows. This indicator reaches its highest values in the upper-right corner. As expected, high GDP per capita correlates with higher CO₂ emissions. Economic inequality shows a different pattern, correlating to the units positioned along the right side. This means that economic inequality (unlike health or education) characterizes both developed and developing countries. The map area with the least inequality is the upper left, which brings together the European countries. Gender inequality in education appears to be more relevant for countries located in the lower-left area of the map, while a high homicide rate is apparent for a small group of countries located in the central right area.

The 78 nodes or units were subsequently re-aggregated into ten prototype areas in order to simplify their description. The map in Figure 2 shows the areas to which each micro-cluster belongs. The areas that could be called “the well-being areas” correspond to macro-cluster 2 and macro-cluster 5. In the first area, we mainly find European countries; in the second is the United States, Luxembourg, Estonia (in 2015) and Germany (in 2015). Both areas have positive values for all dimensions considered. What distinguishes them is that while area 5 is characterized by a high GDP per capita (i.e. the second-highest value among the macro-clusters considered), area 2 has a lower GDP per capita, but this is more evenly distributed. Area 10 and

FIGURE 2 – *Multidimensional map of well-being in 91 countries*



area 3 are essentially made up of the countries of the Arabian Peninsula. The main characteristic of these macro-clusters is a very high GDP per capita coupled with an extremely high level of inequality. These areas cannot be considered areas of well-being in multidimensional terms, as a high GDP is not accompanied by equally high education and health indicator values.

The central areas of the map, i.e. macro-clusters 1, 8 and 4, constitute an intermediate area. Here we find China, India, Russia, Iran and some North African countries. Area 9, which brings together countries such as the Central African Republic, Lesotho and Namibia, is characterized by several homicides per 100,000 inhabitants. Finally, macro-clusters 6 and 7 are characterized by the poorest conditions in terms of the set of indicators considered. A low level of wealth is coupled with a high degree of inequality, low schooling, poor health and high infant mortality. Countries such as Cameroon, Togo, Congo and Ghana belong to this cluster.

2.1.1. The shift of selected countries within the map

The next step needed to visualize the evolution of inequality and well-being in the contemporary world is to describe the paths taken by the countries. Figures 3 and 4 should be interpreted as follows: within each node is reported the identifier of

FIGURE 3 – *Multidimensional path of movement for selected countries*

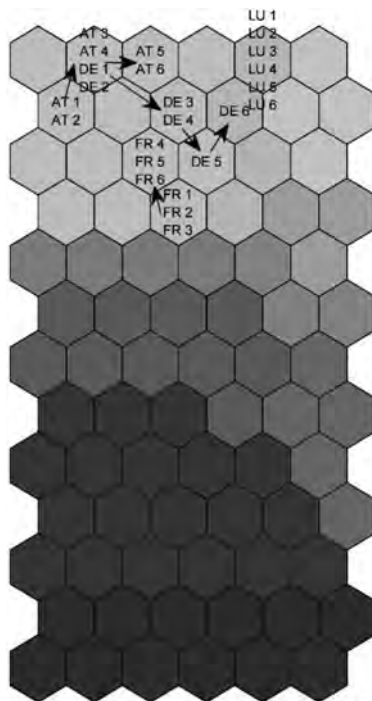
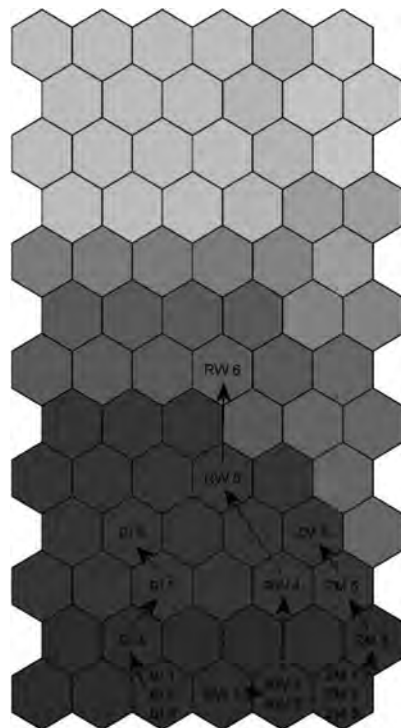


FIGURE 4 – *Multidimensional path of movement for selected countries*

the country and a number indicating the reference year (with 1 = 1990 and 5 = 2015). The arrow indicates the path for each country. Figure 3 and Figure 4 show only some of the 91 countries considered, so they offer a partial view of the observed patterns and, therefore, should be interpreted with caution. Starting from area 3 in Figure 2 (i.e. the European macro-cluster), some interesting aspects can be highlighted. First, Germany, Austria and the countries of Northern Europe have seen a horizontal shift along the map. Starting from high values for the health and education dimensions, these countries have approached the area of the map depicting countries with the highest per capita GDP. Worthy of note is the shift by Germany, which in 2015 finds itself in macro-cluster 5, together with Luxembourg and the United States. On the other hand, France, Italy, Spain and Greece experience a vertical shift, approaching the areas of the map occupied by the countries of Northern Europe and characterized by high values for health and education.

Figure 4 shows the paths of the countries with the lowest values with respect to the variables considered. All countries belonging to areas 6 and 7 have seen an upward shift, with the exception of the Central African Republic, which remains stuck in the poorest macro-cluster. In general, the countries that were in area 6 in 1990 moved to area 7, while those that were in area 7 in 1990 embarked on a path in the direction of area 8. The above is made clearer by Table 1, which depicts

TABLE 1 – *Probability of moving from one area to another every 5 years*

<i>Cluster</i>	1	2	3	4	5	6	7	8	9	10	<i>Total</i>
1	55.56	44.44	0	0	0	0	0	0	0	0	100.00
2	0.75	96.24	0	0	1.50	0	0	0	1.50	0	100.00
3	0	0	92.31	0	0	0	0	0	0	7.69	100.00
4	33.33	0	0	66.67	0	0	0	0	0	0	100.00
5	0	0	0	0	100	0	0	0	0	0	100.00
6	0	0	0	0	0	69.7	30.30	0	0	0	100.00
7	0	0	1.79	0	0	1.79	78.57	16.96	0.89	0	100.00
8	7.50	0	0	7.50	0	0	0	85.0	0	0	100.00
9	0	4.55	0	9.09	0		0	0	86.36	0	100.00
10	0	0	0	0	0	0	0	0	0	100	100.00

the probability that a country will move from one area to another every 5 years. Countries belonging to macro-cluster 6 have a 30% probability of moving into macro-cluster 7, while countries belonging to areas 2, 5, 3 and 10 show strong viscosity. Finally, the countries of macro-cluster 8, despite showing a low level of mobility, have not stopped improving their condition. The dynamics of displacement follow the rule that a short-range displacement is more likely than a large-range displacement. In other words, countries are more likely to move within adjacent areas, confirming that the improvement of well-being is a gradual process that takes time.

It is now interesting to look at the factors that allowed countries to move in the direction of areas with greater prosperity. In general, shifts from the poorest to the richest areas of the map do not appear to be driven by GDP per capita but, rather, by the reduction of infant mortality. In fact, every five years macro-clusters 6 and 7 show a reduction in infant mortality that is not found in any other area of the map, coupled with an increase in life expectancy. For example, Rwanda experienced only a slight increase in GDP per capita, while experiencing a remarkable reduction in infant mortality, the number of children per woman and an increase in life expectancy at birth. The analysis of the displacement of 91 countries over 25 years confirms the hypothesis of an improvement in living conditions in most of the countries examined. Table 2 shows the number of countries belonging to each macro-cluster from 1990 to 2015. Macro-cluster 6, which shows the lowest values for the chosen indicators, has gradually emptied as the countries that composed it moved to cluster 7.

In conclusion, this method of analysis allows us to capture the features of the geography of contemporary well-being and inequality and to analyse the movements of countries in a multidimensional space, taking into account various indicators of well-being and inequality, in order to have a more complete and articulated view of the dynamics of convergence or divergence.

TABLE 2 – *Number of countries per macro-cluster*

<i>Cluster</i>	<i>1990</i>	<i>1995</i>	<i>2000</i>	<i>2005</i>	<i>2010</i>	<i>2015</i>
1	3	2	1	1	2	4
2	26	25	27	27	28	26
3	2	2	3	3	3	3
4	0	0	0	0	3	4
5	2	2	2	2	2	4
6	29	26	22	15	7	1
7	20	20	19	24	29	26
8	4	6	9	11	10	17
9	3	5	5	5	4	3
10	2	3	3	3	3	3
Total	91	91	91	91	91	91

3. DIVERSITY AND INEQUALITY IN THE BUSINESS WORLD

One of the spaces where existing inequality can be remedied (by design) and where the abovementioned theories of inequality can be embodied is certainly business. Inspired by Franciscan economic thought (Bruni and Smerilli, 2020), within the EoF and within our village we believe that the market and merchants play a crucial role in the well-being and well-living of the societies in which they operate.

Business, in particular, has a natural tendency and ability to spot risks and build appropriate frameworks and interventions to avoid inequality. The recent emergence of several environmental, societal and governance (ESG) risk management models has also helped create a common language to measure and manage such issues inside companies. “We treasure what we measure” is always a hard truth for business. When it comes to inequality, the acronym DEI (diversity, equity and inclusion) has been adopted and metrics have been introduced to measure progress in this area. Diversity is mainly measured in terms of gender and ethnicity, and companies have rushed to balance their new hires at every level in recent years, starting with their boards, executive teams down to manufacturing and frontline employees. The driver has not necessarily been a firm belief or a set of values rooted in the companies, but rather compliance or risk management, primarily. This is not new for business. The good news is that such interventions bring tangible value to organizations and increase engagement and a sense of belonging, which is how inclusion is mainly measured. Data on diversity and inclusion are showing clear albeit slow progress. Bizarrely, the middle E (equity) of DEI seems to have gone missing, however. Very often, DEI has simply become diversity and inclusion in business jargon.

What happened to equity? A recent report by Deloitte (2021) defined equity as “the outcome of diversity, inclusion, and anti-oppression wherein all people have fair access, opportunity, resources, and power to thrive with consideration for and elimination of historical and systemic barriers and privileges that cause oppression.”

Working towards equity is what would bring real change to business and the future of work. Equity starts when we recognize that merit and success are not merely the result of ability and effort but, rather, equal opportunities for access to education, resources and power (see also Part 1.3 of this paper). For leaders to work on equity, they need to question how they became successful in the first instance and recognize the unjust barriers many of their peers have faced and still face. For leaders to work on equity, they need to unlock empathy. Women, minorities and a diverse workforce will be a fundamental resource for the manufacturing sector, as long as they are provided with the right equity measures to bridge current gaps in education, time availability, the location of work, etc.

Equity applied in business organizations can help solve a significant amount of social inequality, not only socially but also financially. According to Mishel and Kandra (2010), in 2020 CEOs were paid 351 times as much as a typical worker, compared to 307 to 1 in 2019, 61 to 1 in 1989 and 21 to 1 in 1965. What is most striking about these numbers is that 80% of this pay gap is due to payment in the form of stocks (access to equity) and not real productivity. Equity, in this case, may mean that access to stocks becomes less attractive (higher taxes) or access is facilitated for lower-rank employees through innovative, fair and equity-based solutions.

CONCLUSIONS

The result of our work within the village was certainly more than an intellectual exercise aimed at producing a deep analysis of the issue of inequality using a multidisciplinary approach. It was at the same time a personal and communitarian experience, which was exposed to the risks inherent in any experiment of this kind: cooperation and collaboration between different groups has often proven to be difficult, and in our case, required extensive management of the skills and resources embedded within the village. Much work is still needed to integrate the body of results obtained within the different pillars of the village and to make operational those entrepreneurial projects that are now incubated within the village. Furthermore, as the EoF process proceeded, the village boundaries became increasingly weak and the activities became multidisciplinary, multi-village and multi-approach. Therefore, it is tricky today to sum up the work done so far. If one wants to disregard (assuming this is the case) the flourishing human process, which has been genuinely noteworthy, the work inside the village forced participants to learn to take care of each member and, therefore, to live there (i.e. within the village) the experience of inequalities. Likewise, although valuing individual skills within a collective intelligence process has often proven to be difficult, we still believe that there was no better process to allow the village to create an integral economic experience in which philosophy, business, thoughts and practice had the same dignity and the same importance, as we hope it will be in the economy of the near future.

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