

METHODS, MEASURES AND POLICIES FOR A GENERATIVE AND RESILIENT RECOVERY

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1. Introduction

An important lesson to be learned from the emergence of the COVID-19 pandemics is that the idea that a laissez-faire world where atomistic agents and companies maximise their own utility and profit functions without concern for negative social and environmental externalities, and with a minimal role of public authorities, is enough to achieve social optimum, cannot work.

The pandemics has dramatically shown the complexity and depth of interdependences among individuals and the strong negative impact of externalities on our life in presence of a global public bad. The fight to COVID-19 has been proven to be impossible to win without complementing existing market mechanisms with: i) a strong government intervention in the definition of optimal contracts of public-private partnership with pharmaceutical companies for research, investment and distribution of vaccines; ii) responsibility of pharmaceutical companies in providing vaccines at subsidised prices in the poorest countries in order to ensure global coverage of vaccine distribution; iii) active cooperation of citizen life styles (use of face masks, respect of minimum distance and no agglomeration discipline) without which the defeat of the pandemics is impossible.

The lesson to be learned is that the same four-hand approach has to be used to tackle other three global problems of our society. The first is the “race to the bottom” feature of global competition where companies look for the production place where it is possible to minimize (labor, environmental, tax) production costs in order to maximise profits. Within this race to the bottom scenario different countries or regions compete with each other in a Bertrand-like model by undercutting corporate tax levels of institutional competitors so that the final equilibrium of this model risks to be a world of “wealth without nations and nations without wealth”. The race to the bottom has the effect of deepening within country (skill) wage differentials and inequality (Desjonquieres *et al.*, 1999; Haskel, 1999; Burstein and Vogel, 2017; Acemoglu and Autor, 2010). Workers at the top of the “talent ladder” have skills and absorptive capacity that enables them to increase their productivity in presence of new technologies, and, for this reason, are

hardly replaceable and have bargaining power to defend themselves. This is not the case of workers at the bottom of the talent ladder that are easily replaceable and have no bargaining power. Policy solutions to tackle the race to the bottom are therefore urgently needed to promote decent wages for low skilled workers and to avoid that regions or countries are devoid of financial resources for their public policies.

The second challenge is ecological transition. As is well known, an overly ambitious goal has been established at international level in order to avoid an increase of the average earth temperature (above 1.5 C) that can trigger irreversible negative climatic effects. There is not much time left since the 2021 IPCC report registers that we are already 1.1 C above pre-industrial levels. The European Union has set the ambitious goal of net zero emissions by 2050 from the around 50 billion tons of equivalent Co2 emitted today. The goal of reaching net zero emissions by 2050 requires a thorough transformation of lifestyles and productive processes in five crucial areas such as energy production, manufacturing (especially in the hard-to-abate industries), house energy efficiency, agriculture and livestock, mobility and transportation, accompanied by the necessary pre-requisite of a strong increase in renewable energy production capacity. This is possible only through a system of regulation and tax incentives that help millions of households and firms to move toward the ecological transition path. The net zero emission challenge could be achieved only by innovating and changing deeply existing production processes and especially replacing the existing productive capital stock with more energy efficient means of production. An essential precondition to achieve this goal is also the definition of a set of green indicators that can measure simply and efficiently changes toward ecological transition and a regulatory system that enforces transparent disclosure of this information.

The third challenge is the poverty of sense problem that has led into the US to the insurgence of a “despair death crisis” determined by a sudden upsurge of deaths by opioid overdoses ultimately leading to an increase in the mortality rate of the white non-Hispanic population in the 45-55 age cohort (Case and Deaton, 2015a; Case and Deaton, 2015b; Case and Deaton, 2017). The empirical literature investigating the despair death crisis clearly shows that human beings are sense searchers before being utility maximisers and that the poverty of sense trap can be avoided only by investing on a mix of monetary and non-monetary factors.

In order to tackle the three challenges, we need to create socially and environmentally sustainable economic value. The balanced equilibrium of powers that can allow us to do so is a “four hand system” where market mechanisms (not leading per se to the goal of creation of socially and environmentally sustainable economic value) are complemented in their action by the “visible hands” of active

citizenship, responsible business and enlightened institutions that can leverage the best energies of the civil society and the productive system.

In order to do so some methodological challenges related to statistical indicators are of crucial importance.

First, we must make further progress along the path of “beyond GDP” wellbeing indicators introducing in the multidimensional approach of SDGs (and in Italy BES) indicators that can measure generativity (defined as the combination of generativity and care for others wellbeing), that is the principal component of what makes a life rich of sense and worth living.

Second, we must make progress in participatory mechanisms by which indicators are jointly defined by experts, stakeholders and companies become a benchmark in a dynamic process of learning and progress in sustainability.

Third, we need simple and easily implementable environmental indicators that can create proper incentives for household and firms along the ecological transition path.

The rest of the paper will discuss these three challenges in terms of methodologies and indicators. The paper is divided into five sections including introduction and conclusions. In the second section we go further in depth on the relatively less explored poverty of sense problem by discussing the COVID-19 Easterlin paradox. In section three we explain in detail what we intend for generativity, while in section four we present and discuss the three methodological challenges. Section five concludes.

2. The COVID-19 Easterlin paradox

The COVID-19 pandemics has also revealed another paradox in the relationship between monetary and non-monetary factors affecting subjective wellbeing. As is well known the Easterlin paradox showed a decoupling between per capita GDP and the share of very happy people in the US that opened the way to the literature investigating drivers of subjective wellbeing and combining traditional economic factors (such as income, inflation, unemployment) and non-monetary factors (such as relational goods, the gap between expectations and realisations) (Easterlin and Angelescu, 2009). The psychological and sociological angle also helped us to understand how monetary and non-monetary factors can mix when comparing life outcomes with those of the reference group (Ferrer-i-Carbonell, 2005; Clark, 2008) or with one’s own achievement of the past in hedonic adaptation mechanisms.

The novel “income-life satisfaction” paradox of the pandemics lies in the relationship between the economic shock that it generated and the contemporary dynamics of subjective wellbeing. In the year of COVID-19 BES-ISTAT data

show that, in spite of the severe drop in GDP occurred in Italy (-7.8 percent), the share of the very happy people in the same country (those reporting a level of life satisfaction between 8 and 10 on a 0-10 scale) grew by slightly more than one percent (from 43.2 to 44.5 percent). This finding is impressive if compared with the around 10 percent fall of the share of very happy people in Italy in 2013, the year of the BTP-Bund spread crisis. The Italian COVID-19 paradox finds close correspondence in the evidence provided by the World Happiness Report where in a longitudinal estimate on the drivers of life satisfaction the 2020 dummy is positive and significant, or not significant for 77 of the 88 countries (that is we register an increase or a non-decrease in life satisfaction for two third of world countries) (Helliwell et al. 2020). This puzzle has at least three concurring potential explanations. First, lockdown measures have created a massive forced smart work experiment that improved work-life balance of many workers. In addition to it, the COVID-19 pandemics had deep distributive effects hitting some groups while producing even economic benefits on others that can have reported higher nor not lower life satisfaction levels. More specifically, this occurred for public employees and workers in non-face-to-face intensive industries not hit by the distancing measures, who maintained jobs and wages and could save money in transportation meanwhile enjoying higher work-life balance. A second interpretation looks at the re-evaluation of the value of life when surrounded by severe health problems of one's own peers. A last and final interpretation looks at the increased sense of living given that the COVID-19 created a clear life plot where all members of the community had a common goal of fighting the pandemics.

Whatever the relative weight of each of these rationales, the lesson taught concerns the importance of looking at the complex interaction between monetary and non-monetary factors affecting wellbeing. Human beings are sense searcher before being utility maximisers and we should consider with more care this in our positive and normative analyses. Consequently, we should never forget the third challenge (poverty of sense crisis) outlined in the introduction when discussing strategies to tackle the first two (climate warming and race to the bottom led inequality) and its opposite, generativity, that is recently going to be often more acknowledged as one of the main drivers of life satisfaction and as an antidote to the poverty of sense crisis.

3. The value of generality

“Those only are happy, I thought, who have their minds fixed on some object other than their own happiness, on the happiness of others, on the improvement of

mankind, even on some art or pursuit, followed not as a means, but as itself an ideal end. Aiming thus at something else, they find happiness by the way.”

John Stuart Mill, Principles of Political Economy, 1893: p.117

Work hard for your own interest, no man could do otherwise, as he would be less human by not doing so: but do not work for the misery of others and, if possible, work out how to make them happy. The more you are self-interested, the more you must be virtuous if you are not fool. Is a natural law that you cannot make your own happiness without making that of other human beings”

Antonio Genovesi, Autobiografia e lettere, p. 449

“Ask not what your country can do for you – ask what you can do for your country,”

John F. Kennedy’s inaugural address

The concept of generativity was first introduced in social sciences by the social psychologist Erikson identifying it as one of the fundamental steps of development in personal growth (Erikson, 1993; Erikson and Erikson, 1998). Generativity can be defined as the extent to which one’s own life and deeds affect positively lives of other human beings (Magatti *et al.*, 2019). Following Erikson generativity dynamics is articulated across four verbs: to desire, to give birth, to accompany, to let it go. Using impact evaluation concepts, we can consider whether individuals are truly generative or not also taking into account problems of deadweight and drop off, that is comparing their actions with the counterfactual

Generativity, intended as the capacity of affecting positively other human lives, has a strong and significant effect on life sense and life satisfaction. The concept of generativity is a key element for eudemonic wellbeing (sense of purpose and meaning life) that in turns has been shown to raise life expectancy (Ryff, 2017).

When discussing the literature of subjective wellbeing we must have in mind and distinguish between three different concepts widely used in the literature: 1) cognitive wellbeing (life satisfaction), 2) hedonic wellbeing (different kinds of feelings) and 3) eudamonic wellbeing (sense of purpose and meaning life). The importance to stress this last aspect of wellbeing is because sense of meaning and purpose in life are in general less investigated while they are strongly linked to longer lifespan and evidence shows that subjective wellbeing is associated with longer survival (Steptoe *et al.*, 2015).

In this direction the concept of generativity is also a relevant driver of life satisfaction and before it is a key element for eudemonic wellbeing, because it represents the act of an individual using his/her available set of doing (capabilities)

and the states of being and doing (functionalities) for doing things that he/she expects may have positive effects on the life of other human beings.

Becchetti and Conzo (2021) show on data of the European Social Survey, with evidence robust across countries and waves, that generativity measured as the product of creativity and care for others wellbeing is a fundamental driver of cognitive subjective wellbeing (life satisfaction), positive affect, while positively contributing as well to social capital, active citizenship and resilience (measured as the capacity to revert to the previous wellbeing/activity level after a shock). Becchetti and Bellucci (2021) find similar results when looking at wellbeing of those aged 50 and above on SHARE data.

Once being aware of the relevance of this concept it is important to wonder what generativity adds to existing multidimensional wellbeing indicators.

In a sense the relationship between one of the most important of them, capabilities, and generativity is akin to that between Aristotelean power and act. In this perspective the importance of generativity for subjective wellbeing can be understood by arguing that individuals can have satisfactory levels of income, health and education (that is, they can be equipped at best with variables used to calculate standard multidimensional wellbeing indicators) but, if they do not have a purpose in life, they cannot be happy. Richness of life sense (eudaimonic wellbeing) and life satisfaction (cognitive wellbeing) have to do not just with one's own endowment (Aristotelean power) but also and fundamentally with effortful engagement or purposeful expression of ones' own action (Aristotelean act).

Generativity is a multidimensional concept requiring three conditions to express itself. The first is the individual potential, that is the need to have good health and sufficient economic resources, apart from education in order to enhance the individual potential for generativity

The second is the local potential that relates to the political environment in which individual lives. In this second case, the relevant political conditions to enable generativity are equal opportunities, absence of corruption, and freedom of initiative and access to sources of external financing.

The third condition involves the enactment of individual actions that may have a positive effect on lives of other human beings. In this sense, generativity concerns not only leisure activities, such as voluntary work or participation to social or political groups but also working activities covering the whole spectrum of social, political and economic generativity.

The first and the second dimension of generativity are similar to that of Amartya Sen's concept of capabilities while the third one relates to the capacity of transforming the generativity potential into actions that positively affect other human beings.

Becchetti and Conzo (2021) show that strategies that can enhance creativity and care for others wellbeing can play a crucial role to increase social capital, active citizenship, subjective wellbeing and resilience. Generativity policies that reinforce the sense of purpose and meaning life of the elder raising their life expectancy should be an important target for active ageing.

Therefore, we deem important to refine and develop a new set of indicators measuring wellbeing as generativity. This can be done also at local level since cities, regions can be generative if they have rich economic and business environment, social environment and if generations living in those areas win the generativity challenges (active ageing for the elders, escape from the NEET trap for the young).

4. Three issues on methods and indicators to face the three challenges and related methodological problems

4.1 The development of Generativity indicators

Evidence on the importance of generativity, intended as a product of creativity and care for others wellbeing, for life satisfaction, richness of life sense, resilience and active citizenship suggests that it would be important to devise statistical measures of generativity at individual and local level.

In order to do so we perform an experiment by selecting some local variables that can be correlated to generativity (AA.VV, 2020). More specifically we identify four domains. The first is economic generativity that can be measured with number of start-ups, patents and is generally related to productivity and innovation. A second domain relates to social generativity and aims to measure the capacity of the local community to produce social impact outcomes. It can be measured with institutional indicators (ie. number of social organisations) or in terms of individuals or hours dedicated to social outcomes (ie. number of volunteers, of blood donors, hours of volunteer work). A third and fourth domain refer to generational generativity challenges. More specifically we think that the share of Neet (young that neither work, nor study) could be a good measure of the lack of generativity of the younger generation, while active ageing is definitely a measure of generativity of the elders. As it is clear from the selection of these potential indicators, generativity measures have a straightforward predictive capacity of social and economic outcomes.

In addition to it, the measurement of generativity indicator helps practitioners and policymakers to focus on strategies that, by increasing generativity, can

significantly contribute to enhance active citizenship, resilience, subjective wellbeing, social and economic local outcomes. Just to suggest some directions for policy action we know about the importance of the role of education given that schooling years correlate with social capital and lifelong learning contributes to active ageing. Looking at the young, the main suggestion for generativity policy is to create paths and strategies (such as school-work experiences, civic experiences and discernment moments) aimed to stimulate desires that are the first fundamental step for a generativity path. A strong professional desire can in fact motivate work and effort in stepping up the talent ladder and reduces the risk of ending up in the NEET trap.

4.2 Indicators for ecological transition

Ecological transition is the heart-breaking challenge of the mankind in the next future. In order to avoid overcoming the threshold of 1.5/2 Celsius degree increase in the world temperature we must achieve the target of net zero emissions by 2050 from the actual level above 45 billion tonnes of Co2 equivalent emissions. If we want to attain this goal, we need to modify thoroughly our lifestyles and methods of production in five crucial fields: manufacturing (especially in the hard-to-abate sectors), agriculture and animal farming, ecological efficiency of buildings, mobility and transport and production of energy, provided that we have enough energy production capacity in renewables.

As it is clear by its definition, ecological transition is an inherently dynamic goal that is, it is compatible with a set of admissible transition paths all implying a given negative rate of change in carbon dioxide emissions.

The environmental sustainability challenge is however not limited to the global warming problem (that can be tackled by adaptation and mitigation strategies), while it extends to the other relevant fields of air pollution, biodiversity threat, development of circular economy and availability of water for the world population. To make this multidimensional goal clearer the EU has defined the Do Not Substantially Harm (DNSH) standard by which all Next Generation projects must meet a “green Pareto improvement” criterion that is, they must not cause a negative change in none of these six domains.

The EU Taxonomy strategy in definition of standards helping us to achieve this dynamic goal is however static and difficult to be completed. The “Linnean” classificatory approach of creating full-fledged taxonomies defining for each industrial sectors investment, activities and production processes that are or aren’t compatible with ecological transition is indeed a daunting task. The risk is that the taxonomy will never be completed for problems related to the complexity of the

task itself and the political controversies that can arise between EU members about including/not including activities that can be strategic for some and not for others. A third problem is that, even assuming that the task will be completed one day, the possibility that it becomes soon obsolete is not remote given the tremendous pace of technological innovation in environmental sustainability. This is why the suggestion we propose in this paper is the use of a much simpler “DNSH consistent” dynamic approach consisting of the creation of a few synthetic indicators measuring the change produced by corporate investment versus the counterfactual for a given investment (see on this point the GIFT approach developed by Becchetti, Cordella and Morone, 2021). This is because, on the corporate side, the goal of net zero emissions can be achieved only through investment, that is the replacement of the current capital stock with new production process more efficient in the use of energy.

The approach of DNSH consistent measures of the change generated by a given investment in each of the six DNSH domains is much simpler and pragmatic, it is open to the creation of new technologies that meet the target without requiring new classifications. It also allows policymakers to decide ambitious thresholds for admissible investment (ie. 20 or 30% reduction of emissions) compatible with the overall ecological transition path. The use of this indicators can and should be accompanied by incentives for ecological transition compatible investments (ie. subsidised loans, access to loan guarantees, accelerated depreciation, etc.).

4.3 The Next system of living indicators (up to SME rating approaches)

The growing importance of corporate social responsibility and ecological transition is pushing companies to measure and communicate their environmental and social effort. However, most metrics, ratings, certification standards and regulation are tailored for large firms, while fixed costs of CSR compliance are too high for small and medium sized firms. Small and medium firms are nonetheless forced to participate to CSR information release and practices. This is because large firms are often evaluated in terms of their behaviour on the entire value chain (and therefore also on the selection of suppliers). This is why the CSR requirement for large firms turns into requirement also for their small and medium run suppliers along the value chain. An open issue is therefore that of devising measures allowing also small and medium business to participate to the process of ecological transition without setting prohibitively high fixed costs of access.

In this respect a plausible solution is the creation of mechanisms of “participated self-evaluation” such as those incorporated in the Next index (Becchetti and Bellucci, 2021) The process starts with the creation of a

questionnaire with six domains and a total of 30 questions on the different sides of corporate social responsibility (workers, customers, environment, suppliers, relationships with local stakeholders and governance) by a group of statistical and economic experts. The original questionnaire is then discussed and validated with relevant stakeholders (ie. environmental organisations, trade unions, customer associations) having specific expertise in the different areas. The questionnaire is therefore tested on small and medium sized companies and timely revised by the joint work of the team of experts, relevant stakeholders and end users. The “self-evaluation” side of the process starts from the point of view of corporate end-users that give a score on the different items to evaluate themselves. The scores are in most cases bounded by ranges defined in the same questionnaire structure (ie. maximum point of five for a given minimum range of distance between minimum and maximum wage within the organisations). Corporate end users have the burden of proof for provided scores as they have to support them with relevant documentation where possible. In any case stakeholders have the right to revise the score and reject it asking for a further round of analysis if they deem it not consistent with the actual end users sustainability position.

The advantage of this participative approach is both cognitive and relational. On the first side, complementary skills arising from different point of views and experiences of experts, stakeholders and end users can be combined to create a better final product. On the second side, the participatory approach creates as well a process useful for learning and improving strategies of end users along the sustainability and ecological transition path.

The Next Index can be easily transformed into a rating system when adding some ingredients to the process. The first is weighting the different items and domains in order to have a final single score. As is well known in the literature weighting can be value based or determined with purely statistical approaches basically eliminating redundancy and taking into account correlations among different items. However, even beyond the so-called statistical approaches, the final outcome of the process inevitably conceals value judgements about the relative importance of different items and domains. It is therefore more transparent and explicit to follow a Delphi approach where, after taking out all redundancy effects suggested by statistical analysis, a panel of relevant stakeholders defines weights making explicit their ranking of values.

The rating index defined so far has however the limit of providing a static picture of the situation of the company, regardless of its exposure to ESG risk and controversies. In this respect the index can be usefully integrated by an evaluation of such exposure, using weights for the different controversy types and a final weight between the relative importance of the static score and the score of exposure to ESG risk and controversies.

The overall approach ends up reducing significantly costs of ESG evaluation and rating for small and medium sized companies (no external certification and rating costs). The lack of external certification and rating costs is not in principle a limit to the external validity and use of the above described scoring system. To make just an example in green and social procurement bidders can provide evidence in Italy that they meet minimum environmental and social standards even using the “equivalence principle”, that is, by providing an evaluation mechanism alternative to those officially considered. The validity of the mechanism will be evaluated by the commission in charge of the tender. Our argument is that the Next “living” index is a valid though well methodologically standardised alternative reducing costs of access to environmental and social sustainability rating for small and medium companies.

5. Conclusions

The tragedy of the COVID-19 pandemics made salient the role of global public goods, the importance of coordinated action among civil society, responsible business and enlightened institutions to tackle global problems in a “blended” public-private perspective and made clear that externalities matter and market failures prevent laissez-faire economics from being a possible solution.

In our work we outline the four main global challenges that we will face in the future (pandemics, ecological transition, race to the bottom competition and (poverty of sense related) despair death crises as that occurred in the US).

We argue that, in the light of the civil economics paradigm, the desirable solution lies in a coordinated action of four hands (market, civil society, responsible business, enlightened institutions) in a broadened economic paradigm where the direction of progress lies in the exploration of the potential of non-myopically self-interested consumer preferences, responsible business looking jointly at impact with profits, multidimensional wellbeing indicators addressing the poverty of sense problem and enlightened institutions devising smart responses that enhance energies and generativity of household and productive organisations.

Within this perspective we identify three main directions for future development in the field of methodologies and measures for civil progress.

The first is the development of new multidimensional wellbeing indicators more able to capture generativity and richness of sense of life with respect to currently adopted indicators.

The second is the development of a simple set of indicators capturing the dynamic effect of corporate investment on ecological transition in the six domains of the DNSH approach.

The third is the development of forms of stakeholder participated self-evaluation mechanisms helping small and medium sized firms to overcome high fixed costs of CSR ratings and certifications and creating participated transition paths toward sustainability

We believe that these three approaches can help us to tackle challenges on methodologies and indicators for ecological transition creating new directions for civil progress.

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SUMMARY

Methods, measures and policies for a generative and resilient recovery

A main lesson of the COVID-19 pandemics is that global public bad problems, such as the pandemics and global warming, can be properly addressed only with the concurring action of four “hands” (market mechanisms, responsible business, active citizenship and enlightened institutions leveraging the best energies of companies and the civil society) in order to address jointly market and institutional failures. In the paper we explain how this approach can be applied and what are its challenges in terms of methodological approaches and indicators. More specifically we envisage three main frontiers: i) definition of generativity-based wellbeing indicators as a step ahead beyond the traditional multidimensional wellbeing approach; ii) construction of “living” sustainability indexes easing access of SMEs to sustainable development; iii) Do Not Substantially Harm (DNSH) indicators measuring “green Pareto improvement” in investment, consistent with the ecological transition goal of net zero emissions by 2050

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